Final Design Concept Report

INTERSTATE 10 (I-10)
BASELINE ROAD TRAFFIC INTERCHANGE (TI)

ADOT CONTRACT NO. 2023-004
PROJECT NO. 010 MA 44 F0523 01L
FEDERAL AID ID NO. 010-C(229)T

Prepared for:

Arizona Department of Transportation

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December 2024

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ADOT
Infrastructure Delivery and Operations

PROJECT DETERMINATION FORM

Project Number	County and ADOT District	Project Name and Highway	Final Project Assessment Date
10 MA 44 F0523 01C	Maricopa	Baseline Road TI	December, 2024
RARF 10-B(229)T	Central	I-10	

Project Description:	Intersection Improvement by adding on/off ramps lanes.

Existing Program	
Yes	No
	✓

Program Year	Programmed Budget
2027	N/A
	PA Construction Cost Estimate
	$16,244,000

Operating Partnership Category					
S	F	T	D	Z	N/A
		X			

Public Hearing: In the Highway Development Process, at least one public hearing or the opportunity for a hearing will be offered for any project that:

	Requires a significant amount of new right-of-way:
	Substantially changes the layout or function of connecting roadway or the facility being improved;
X	Has a significant adverse impact on abutting real property;

	Otherwise has a significant social, economic, environmental or other effect
	Is controversial on environmental grounds;
	Or has significant floodplain encroachment
	None of the above conditions apply

Recommends:

Yes:	No:	Public Forum	Environmental Category		
X					
	X	Offer a combined Location / Design Hearing	Class 1	Class II	Class III
	X	Offer Separate Location/Design Hearing			
	X	Hold a Design Public Hearing			

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Comments:

Two public meetings were held before finalizing the DCR.

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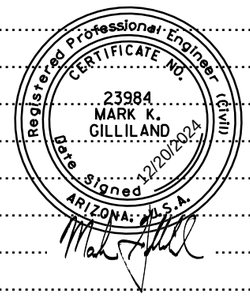

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EXCUTIVE SUMMARY

This Design Concept Report (DCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both directions from the TI and negatively impacts traffic operations at multiple adjacent intersections, east and west of I-10. The queueing results in poor progression of traffic during peak hours, excessive delays during peak hours and a high number of crashes. The impacted intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

The existing I-10/Baseline Road TI is in Tempe, AZ. Baseline Road serves approximately 55,000 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments.

The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten signalized intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 Eastbound (I-10 EB) Ramps
- I-10 Westbound (I-10 WB) Ramps
- Arizona Mills
- Priest Drive
- Darrow Drive
- Hardy Drive

These intersections were analyzed for traffic operations for existing (2023) and future no-build (2050) conditions. The number of traffic signals and their close spacing amplifies queueing issues during peak hours. As peak hour traffic accumulates on Baseline Road, drivers experience extended wait times, spanning multiple signal cycles, as they attempt to travel on or enter Baseline Road.

The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and promote better pedestrian/bicyclist connectivity.

The DCR evaluates three interchange design configurations: a No Build Alternative, a Modified Diamond Interchange (MDI) and a Diverging Diamond Interchange (DDI).

The No Build alternative would not make any improvements to the existing interchange or to Baseline Road. This alternative would not reduce congestion along Baseline Road. The existing roadway and traffic signals would remain unaltered and there would not be any property impacts.

The MDI alternative would keep the interchange and ramp configuration as they are, while adding some modifications to improve traffic operations, including adding a new right turn lane and extending an existing right turn lane on Baseline Road at I-10, and additional lanes on the exit and entrance ramps. This alternative also includes the removal of the traffic signal at Wendler Drive and revising the access to be right-in, right-out. This will improve the flow of traffic on Baseline Road by reducing conflict points and extending the available queue area approaching I-10. This alternative would have a smaller footprint than the DDI alternative, would require the acquisition of approximately 0.45 acres of right-of-way and has a total estimated cost of $16,224,000.

The DDI is a relatively new type of interchange that provides efficient traffic movements and reduces conflict points between traffic movements to improve safety. A DDI increases traffic flow by temporarily transitioning traffic to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left-turn. DDIs are particularly effective at locations that have high volumes of left-turn traffic on and off of freeway ramps and left-turn related safety challenges. Of the three alternatives, the DDI alternative would require the most right-of-way acquisition at approximately 2.29 acres. This alternative also includes the removal of the traffic signal at Wendler Drive and revising the access to be right-in, right-out. The DDI would be more expensive than the MDI with a total estimated cost of $41,699,000.

The study team, comprised of ADOT, City of Tempe, Town of Guadalupe, City of Phoenix, Federal Highway Administration, and Maricopa Association of Governments has collaborated extensively through multiple meetings, brainstorming activities, development of alternatives, the initial evaluation process and the selection of a preferred alternative. Public outreach has included two public meetings, a project website, and media releases to solicit input that was used in the development of the alternatives and evaluation of the three interchange configurations included in the DCR.

Evaluated alternatives are presented in **Appendix G**.

Available reports in the Appendices include an AASHTO Controlling Design Criteria Report, Americans with Disabilities Act (ADA) Report and the Traffic Report.

Additional reports being prepared as part of the study include a Safety Report and Evaluation and Environmental Clearance.

1.0 INTRODUCTION

1.1 FORWARD

This Design Concept Report (DCR) describes the development, evaluation, and establishment of level of service improvement alternatives on Baseline Road from Calle Los Cerros Drive to Priest Drive, including the Interstate 10 (I-10) Traffic Interchange. This project is in Arizona Department of Transportation's (ADOT) Central District within Maricopa County in south-central Arizona, within the cities of Phoenix, Tempe, and the Town of Guadalupe. The study limits are from 48th Street to Hardy Drive. Project location and vicinity maps are provided in **Figures 1 and 2**.

The study section of Baseline Road is a critical section of infrastructure that has continued to strain the local transportation network from sustained commercial and residential development, as well as recreationalists enjoying South Mountain Park. ADOT and Maricopa Association of Governments (MAG) have a vision to solve these operational challenges at I-10/ Baseline Road through the development of a Design Concept Report (DCR) and National Environmental Policy Act (NEPA) document.

The goal of this study is to develop and evaluate alternatives for level of service improvements and select a Preferred Alternative that meets the goals of I-10/I-17 "Spine" Corridor Master Plan, satisfies the requirements of the NEPA, and obtains public support. This study will seek to optimize traffic operations and active transportation movements within the corridor for the projected design year of 2050. Related environmental technical reports have been prepared in concert with this DCR and an Individual Categorical Exclusion (CE) will be prepared as part of the final design.

1.2 NEED FOR THE PROJECT

Baseline Road at I-10 is a major arterial road serving approximately 55,000 vehicles per day. Due to the South Mountain Park and Preserve, Baseline Road is the only east-west arterial south of US Highway 60 to extend west and serve the west valley communities of Laveen and Tolleson. It also provides access to the many trails within the South Mountain Park and has recently experienced large growth in both commercial and residential uses. In this project area, there are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development. Along with the heavy volumes of traffic, these access points contribute to congestion and crashes.

This study section contains two of MAG's Top 100 Intersections, (#31 – I-10 Eastbound ramps/Baseline Road, #59 – 48th Street/Baseline Road) ranked by crash risk, between 2017 and 2021 and experienced 1,499 crashes during that time. That corresponds to an average of nearly one crash every day. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and a lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The development and evaluation of alternatives to address these concerns was deemed necessary. These documents will advance the previous I-10 and Baseline Road Service Traffic Interchange Feasibility Analysis (MAG, 2020) (Feasibility Analysis) and the I-10/I-17 "Spine" Corridor Master Plan (MAG, 2018) (Spine Study) by developing, evaluating and/or refining these viable alternatives to determine a Preferred Improvement Alternative.

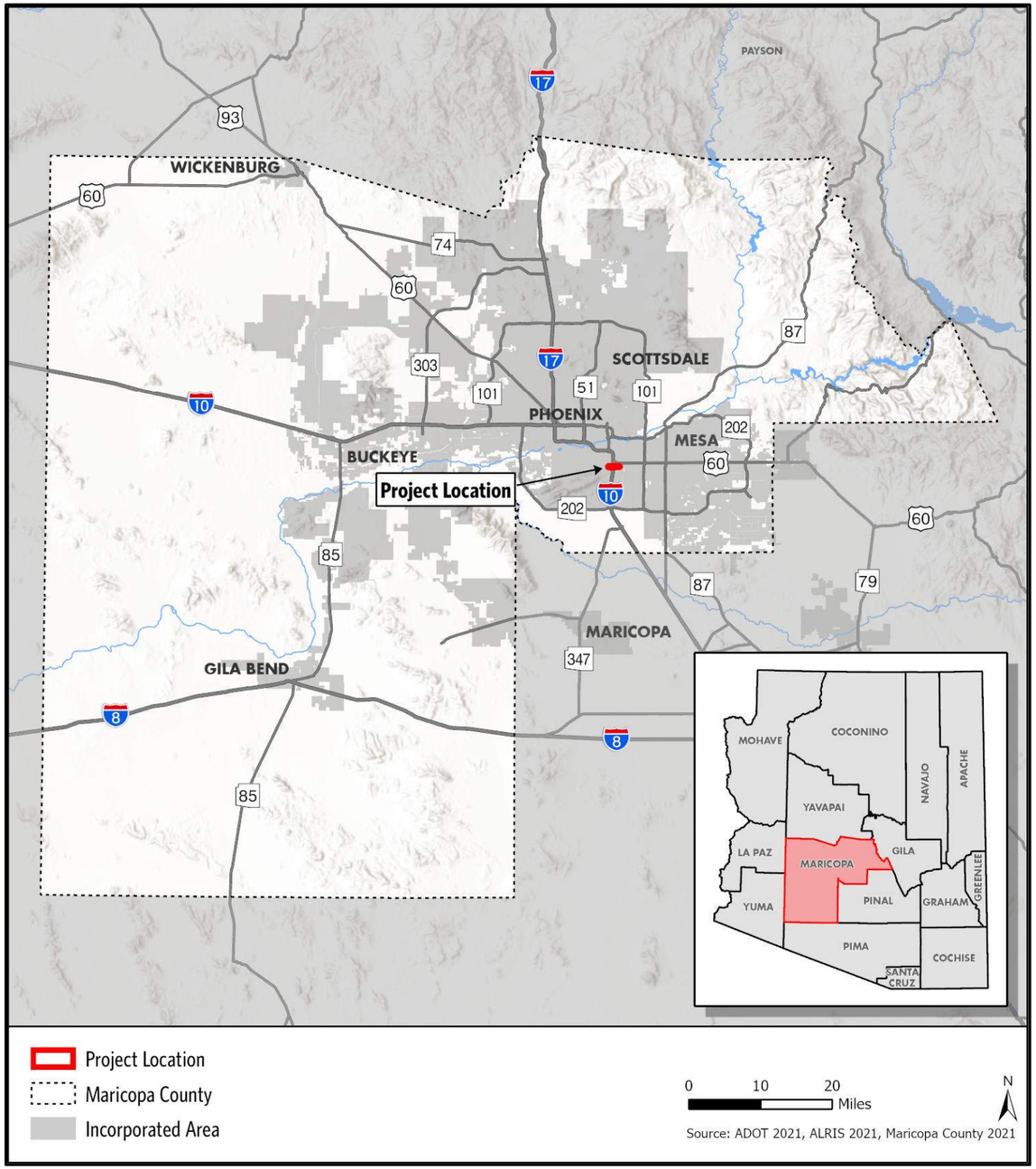

Figure 1. Project Location Map

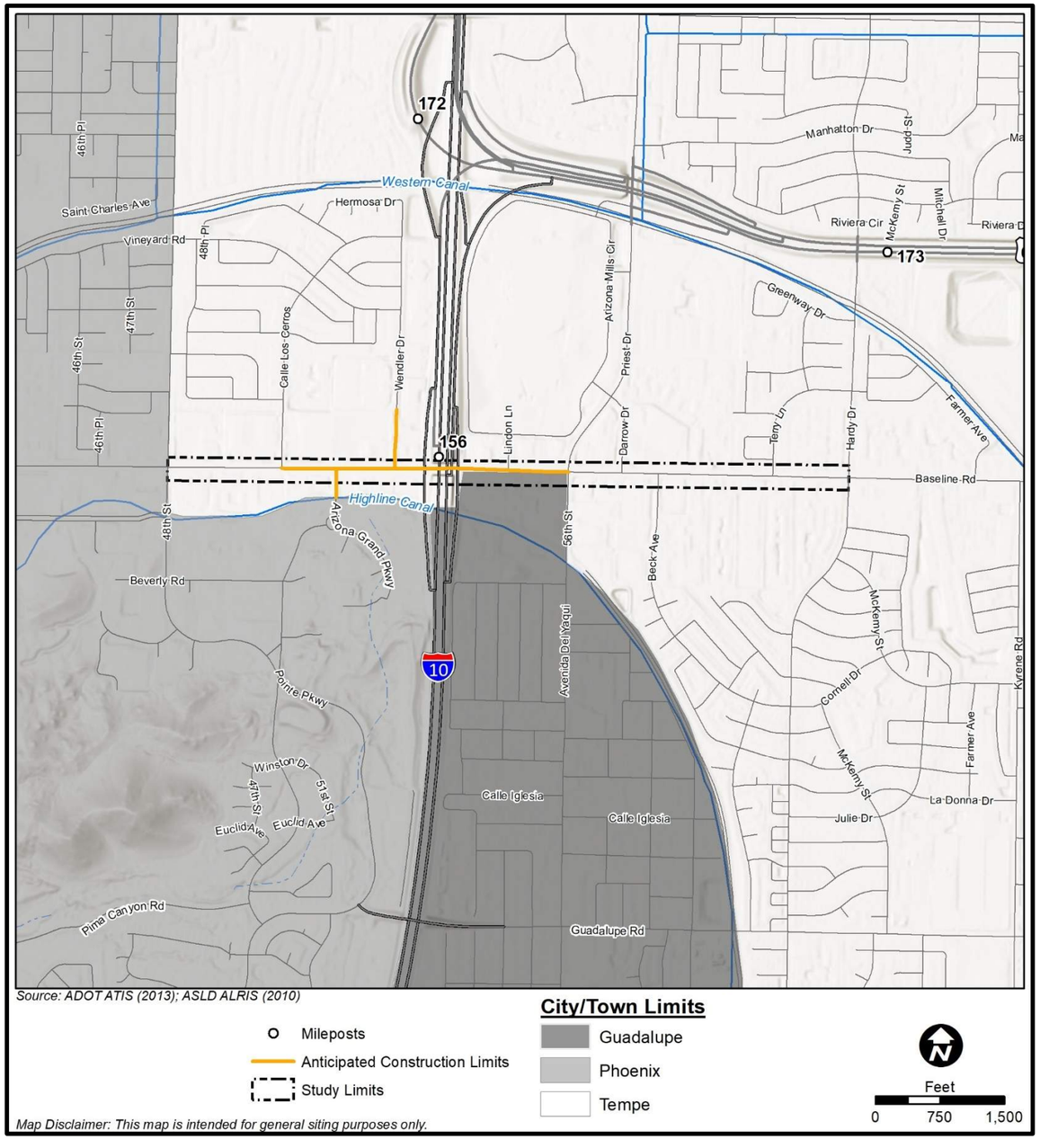

Figure 2. Vicinity Map

1.3 PROJECT OBJECTIVES

The purpose of this report is to evaluate the traffic operations and safety of Baseline Road at I-10, and to evaluate alternatives to alleviate the existing significant delays and traffic backups and to promote pedestrian/ bicyclist connectivity. Alternatives will also need to address commercial access, ROW needs, neighborhood cut through traffic and future development.

1.4 ALTERNATIVE SELECTION PROCESS

In order to meet the primary objective of this study, including determining the nature of the corridor and the concerns, the extent of the improvements needed to improve the safety of the corridor for all users, and narrowing down the alternatives to be further evaluated, there was a lengthy stakeholder involvement process. This involvement is detailed in the following sections.

1.4.1 Agency Scoping

This study section spans multiple jurisdictions. The City of Phoenix owns and maintains the intersection of Baseline Road and 48th Street, as well as Arizona Grand Parkway south of Baseline Road. The City of Tempe owns and maintains Baseline Road east of 48th Street to Hardy Street, apart from the TI, which is owned by ADOT and operated by The City of Tempe. The Town of Guadalupe is on the south side of Baseline Road east of I-10 and has several commercial and residential parcels with direct access onto Baseline Road. For this reason, several meetings were held with these stakeholders to address the unique needs and concerns of each, and to build a consensus on two alternatives, along with a no build alternative, to study further.

1.4.2 Public Involvement

To ensure that the rest of the community was given ample opportunity to provide comments and influence the development and evaluation of alternatives, this study scope contains a public involvement process that includes community and public meetings, as well as creating and maintaining a project web site.

1.4.2.1 Public Information Meetings

A virtual public scoping meeting was held on May 9, 2023. In total, seventy-seven (77) people were recorded as attending the meetings and 215 people completed the online survey/comment form during the survey period. The purpose of the meeting was to share information about the project and the potential improvements to be considered. It also was intended to allow for public input on the scope of the study as well as gather input on concerns and desires related to the project area before the team presents potential improvement alternatives. A second public meeting was held on August 8, 2024 to provide an update to the public on the project recommendations as well as elicit further feedback on the recommended alternative. The Public Summary Reports are included in **Appendix D and E**.

1.4.2.2 Project Web Site

A project web site was created to provide up-to-date study information and to collect additional feedback from the public. The project website can be accessed at https://azdot.gov/i10baseline.

1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10 (I-10)

Interstate 10 (I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project; I-10 Broadway Curve Improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to I-17 near Phoenix Sky Harbor International Airport. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp (Ramp D) from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp (Ramp B) will be configured as a parallel exit and transitions from single lane at the gore to four lanes at the intersection. The new Collector-Distributor Road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp (Ramp A) will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp (Ramp C) will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant east/west arterial that serves traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the last continuous east/west route north of South Mountain to connect the east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the study corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicular demand during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. Traffic often backs up, spilling into upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles.

48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of South Mountain Park Reserve, almost all of the north-south roads end at Baseline Road, with a few exceptions that extend into residential communities at the base of South-Mountain. Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and -westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane.

The intersection of Baseline Road/Calle Los Cerros Drive provides access to local traffic from the residential area north of Baseline Road and east of 48th Street. The south leg of the intersection ends at In-N-Out Burger. Baseline Road/Calle Los Cerros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to commercial development on the north side of Baseline Road and to Arizona Grand Resort, 48th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing and with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to multiple commercial properties north of Baseline Road. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with adaptive signal control.

The intersection of Baseline Road /I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (I-10 Ramp B) has dual left turn lanes, a single shared through-right- left turn lane and a single dedicated right turn lane. Baseline Road/I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the eastbound approach. The westbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (I-10 Ramp C) has dual left turn lanes, a single shared left-through-right turn lane and a single dedicated right turn lane. Currently both intersections operate as one with single controller using adaptive signal control.

The intersection of Baseline Road/Arizona Mills South provides access to the Arizona Mills Mall, a large regional mall located on the northeast corner of I-10 and Baseline Road and to a hotel to the south. The intersection of Baseline Road/Arizona Mills South is a is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound approach whereas a single dedicated left turn lane, three through lanes and a right turn lane on the westbound approach. The southbound approach has a shared left- through turn lane and a dual right turn lanes whereas northbound approach has a single shared through lane. Currently this intersection operates with adaptive signal control.

The intersection of Baseline Road/Priest Drive is the first north-south connector east of I-10 connecting communities of South Tempe with North Tempe and connecting communities from City of Tempe with the Town of Guadalupe. Priest Drive is named Avenida Del Yaqui within Town of Guadalupe. Baseline Road/Priest Drive is a four-legged signalized intersection with three through lanes and dual left turn lanes on the eastbound approach whereas a dedicated single left turn lane, three through lanes on the westbound approach. The northbound and southbound approaches have two through lanes, dual left turn lanes and a single dedicated right turn lane. In addition, the southbound approach has a bike lane which terminates at the intersection. Currently this intersection operates with adaptive signal control.

The intersection of Baseline Road/Darrow Drive provides access to commercial space on the Northeast corner, apartments on northwest corner, and commercial properties south of the intersection. Darrow Drive terminates at Arizona Mills Circle at the north end providing an alternate route to Arizona Mills Mall. Baseline Road/Darrow Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and Westbound approaches. The southbound approach has a single dedicated left turn lane, a shared through-left turn lane, a bike lane and a single dedicated right turn lane. The northbound approach has a single dedicated left turn lane and a single shared through-right lane. Currently this intersection operates with adaptive signal control.

The intersection of Baseline Road/Hardy Drive provides access to single family residential homes and apartments north and south of the intersection. Hardy Drive ends at Rio Salado Parkway at the north end and turns into residential street south of Guadalupe Road at the south end. Baseline Road/Hardy Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and westbound approaches. The northbound and southbound approaches have a single through lane, a single dedicated left turn lane and a single dedicated right turn lane. Currently this intersection operates with adaptive signal control.

1.5.2 Active Transportation Facilities

Active transportation is defined as walking, bicycling, using a small-wheeled vehicle, or utilizing a mobility device. A connected active transportation network provides access to a variety of destinations for people who are walking, bicycling or using transit. The study area for the evaluation of existing pedestrian and bicycle facilities includes Baseline Road from 48th Street to Hardy Drive, a length of approximately 1.5 miles. There are a total of ten signalized intersections along the study corridor, as listed below shown in **Figure 3**.

1. 48th Street
2. Calle Los Cerros Drive
3. Arizona Grand Parkway
4. Wendler Drive
5. I-10 EB Ramp
6. I-10 WB Ramp
7. Arizona Mills South
8. Priest Drive
9. Darrow Drive
10. Hardy Drive

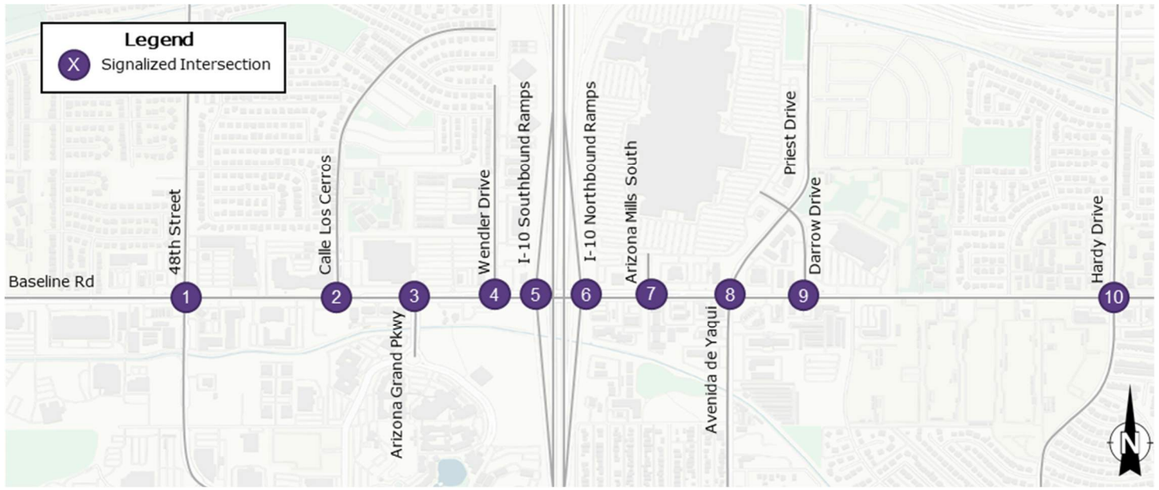

Figure 3. Signalized Intersections on the Study Corridor

1.5.3 Transit Facilities

Several transit facilities are provided along the Baseline Road corridor. Local bus routes are provided on Baseline Road throughout the entire corridor. An express/rapid bus route is provided on the I-10 freeway. The bus routes within the study area are shown in **Figure 4**. Bus routes are provided at the following roadways within the study corridor:

- Baseline Road (Route 77) – Provides service from 75th Avenue to Dobson Road with arrivals every 30 minutes.
- 48th Street (Route 48) – Provides service from Baseline Road/Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Priest Drive (Route 56) – Provides service from Ray Road to the Desert Botanical Gardens on Galvin Parkway every 15 minutes.
- Hardy Drive (Route 62) – Provides service from IKEA near Warner Road and Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Interstate 10 (I-10) – (Express 542, Express 522, and I-10 East RAPID) – Provides RAPID/Express bus service from Downtown Phoenix to Chandler, Tempe, and Ahwatukee. Access to these routes is provided only at the transit line endpoints, not within the vicinity of the study area.

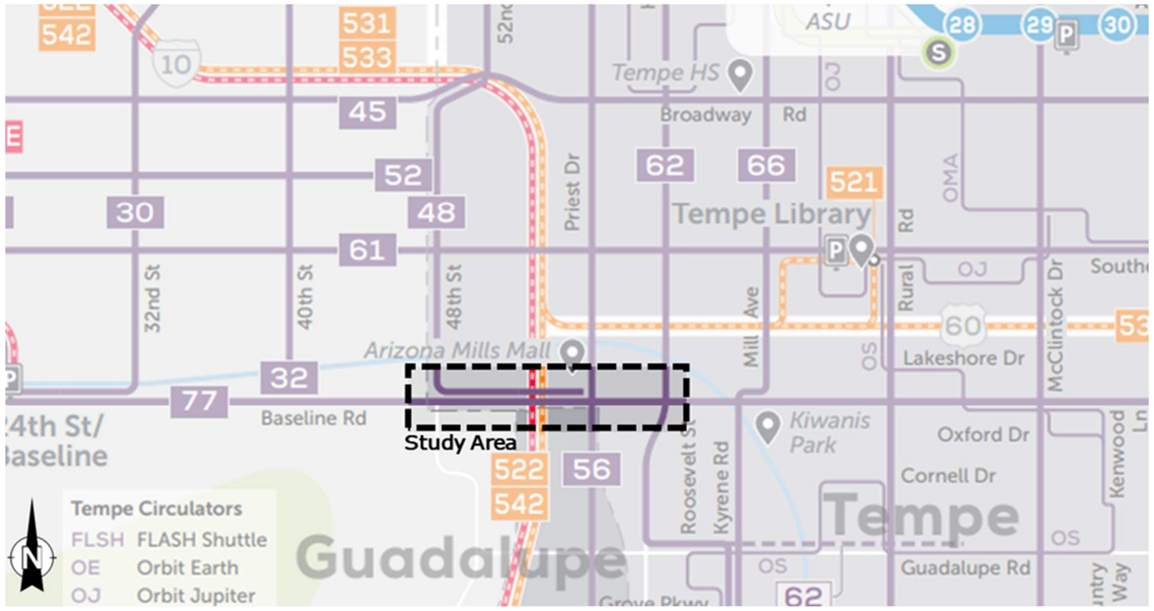

Figure 4. Transit Routes within the Study Area

Transit stops are present on the north and south sides of Baseline Road throughout the corridor. The location of each transit stop located on Baseline Road within the study area is shown in **Figure 6**. Most transit stops on Baseline Road feature a bench, waste bin, and bus sign, while others have a shade structure, bus route and bike racks. Only one transit stop within the study corridor does not feature any seating for waiting users, which is near the southeast corner of Arizona Mills and Baseline Road.

1.5.4 Shared-Use Paths

Two shared-use paths are present within the vicinity of the study corridor, the Western Canal and the Highline Canal. The Western Canal is located north of the study corridor, with an east-west orientation. The north side of the canal is paved while the south side is unpaved. The shared-use path along the Western Canal provides access to 48th Street, Priest Drive and Hardy Drive; A connection across the I-10 does via a pedestrian overpass was recently constructed along with the ADOT I-10 Broadway Curve improvements.

The Highline Lateral Canal is located south of Baseline Road and features an adjacent shared use path; with some segments paved and others unpaved. West of the I-10, the path has a meandering layout with an east-west orientation. East of I-10, the pathway transitions to a north-south orientation as it moves further east. The pathway terminates on both sides of I-10; there is not currently convenient access across the freeway, and the existing fencing does not permit users to travel north to Baseline Road. If users do desire to continue across the freeway, they must turn around and connect to Baseline Road through either Arizona Grand Parkway or Avenida del Yaqui (Priest Drive).

1.5.5 Bike Lanes

Bike lanes are not present along Baseline Road; however, bike lanes are available on Calle Los Cerros, the northbound direction on Arizona Mills South, on Priest Drive north of Baseline Road, Darrow Drive, and Hardy Drive. The shared-use path along the Western Canal connects to both Priest Drive and Hardy Drive on which bike lanes are present. The shared-use paths and bicycle lanes present within the vicinity of the project are shown in **Figure 5**.

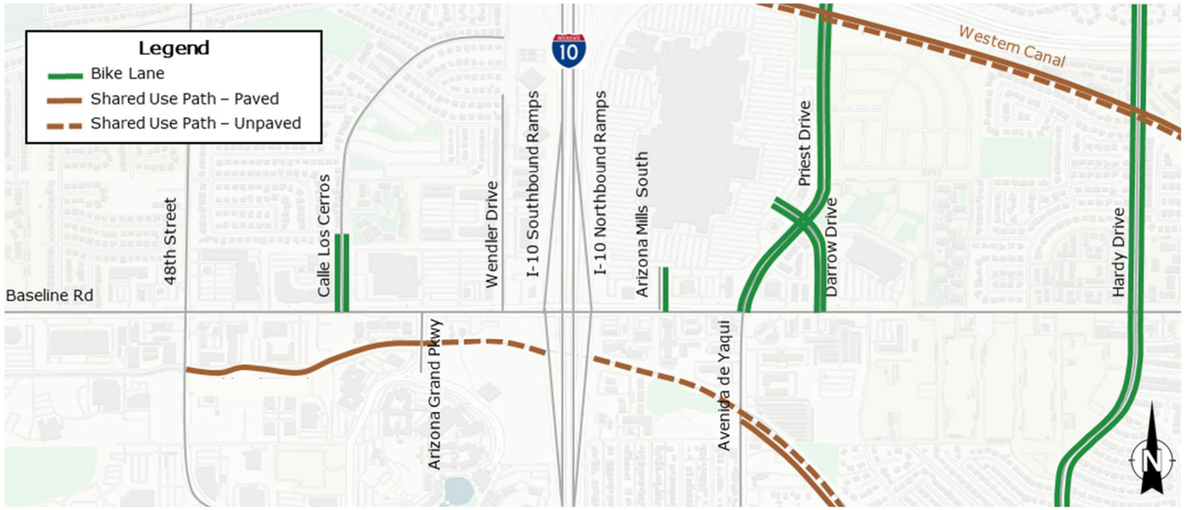

Figure 5. Existing Bicycle Facilities

1.5.6 Sidewalks

Continuous sidewalks exist on both sides of Baseline Road within the study corridor, with a typical width of approximately 8 feet. Sidewalks are present on every intersecting street within the study corridor apart from Arizona Grand Parkway.

1.5.7 Pedestrian Crosswalks and Potential Conflict Areas

Pedestrian crossings across Baseline Road are permitted at all intersections except for Wendler Drive. In addition to the signalized intersections, there are 2 unsignalized intersections and a total of 43 driveways along the corridor. All pedestrian crossings, whether at signalized intersections, unsignalized intersections, or crossings at driveways introduce pedestrian exposure to potential conflicts with vehicles. While pedestrians have the right-of-way at driveways, unsignalized intersections, and when provided a WALK indication at signalized intersections, the number of conflict areas does have an impact on the level of pedestrian exposure and safety. The existing active transportation network is shown in **Figure 6**. The driveways along Baseline Road are categorized by the level of access provided, either full access, right-in/right-out/left-out access, or right-in, right-out access. Full access driveways introduce greater pedestrian exposure and potential conflict compared to right-in, right-out driveways.

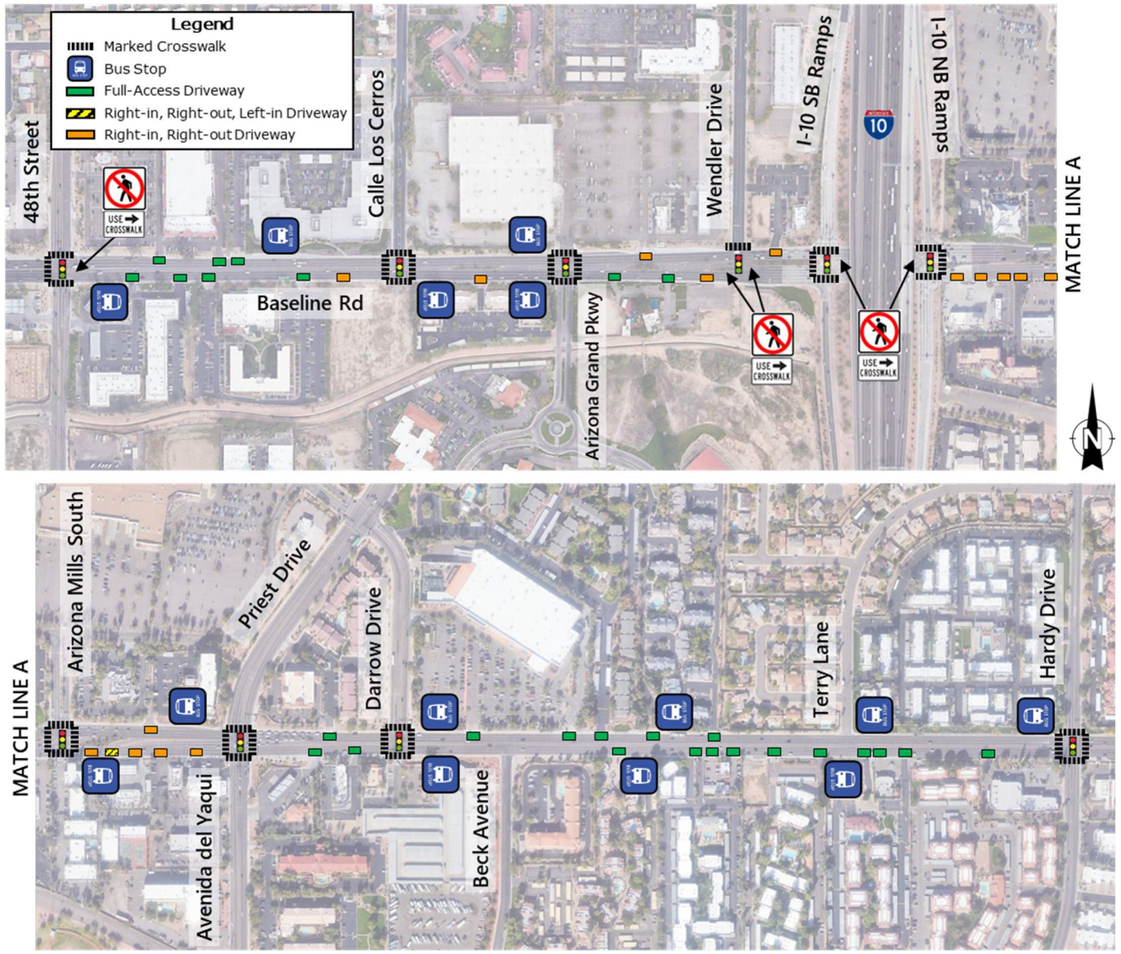

Figure 6. Existing Active Transportation Network

1.5.8 Existing Pedestrian and Bicyclist Volumes

Pedestrian and bicyclist counts were collected at the study intersections on Tuesday, March 7, 2023. The volumes were collected at select hours of the day, from 7:00 to 10:00 AM, 12:00 to 2:00 PM, and 3:00 to 6:00 PM. The pedestrian volumes are shown in **Figure 7** and the bicyclist volumes are shown in **Figure 8**. The bicyclist counts captured bicyclists traveling on the sidewalk and crossing within the crosswalk and excluded bikes travelling in the roadway. The intersection with the greatest volume of on-road bicyclist on Baseline Road is I-10 South/Baseline with 23 eastbound and 23 westbound bicyclists.

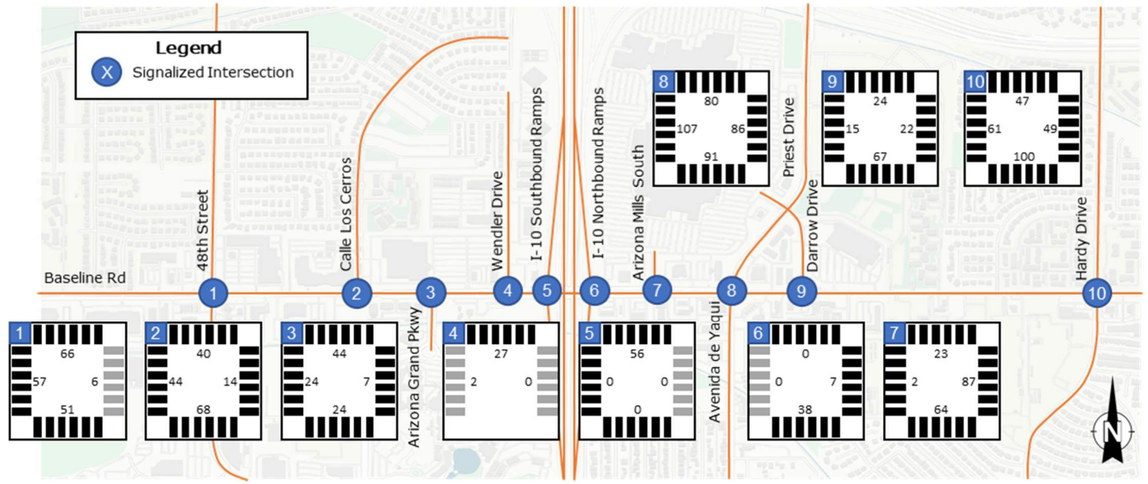

Figure 7. Pedestrian Crossing Volumes at Study Intersections for Select Hours of the Day

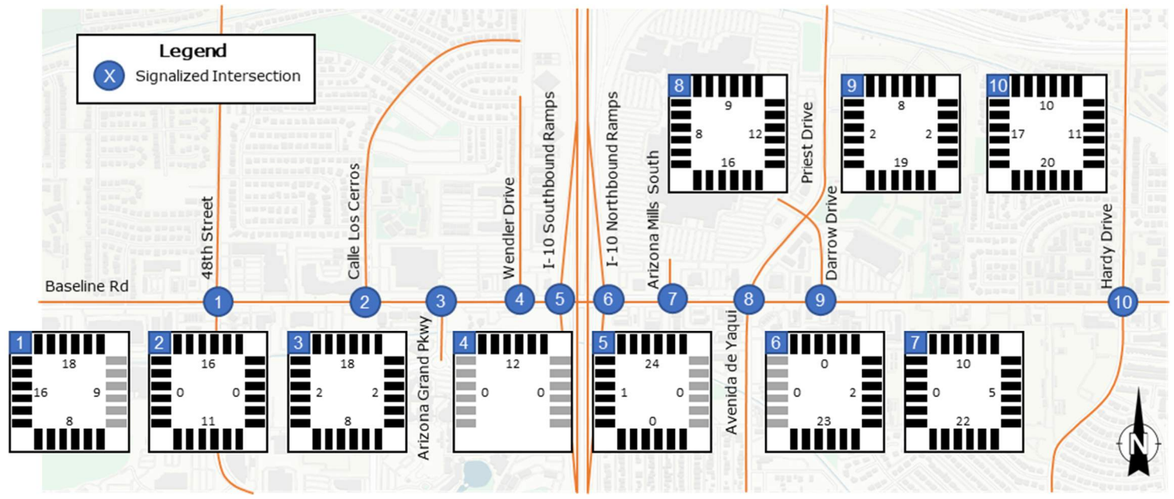

Figure 8. Bicyclist Crossing Volumes at Study Intersections for Select Hours of the Day

The intersections with the greatest pedestrian volumes within the 8-hour data collection effort include:

1. Priest Drive/Baseline Road – 364 pedestrian crossings
2. Hardy Drive/Baseline Road – 257 pedestrian crossings
3. 48th Street/Baseline Road – 180 pedestrian crossings

The intersections with the greatest number of bicyclist crossings within the 8-hour data collection effort include:

1. Hardy Drive/Baseline Road – 58 bicyclist crossings
2. 48th Street/Baseline Road – 51 bicyclist crossings
3. Priest Drive/Baseline Road – 45 bicyclist crossings

These intersections have the greatest overall crossing activity, considering both pedestrians and bicyclists. Of the morning, midday, and afternoon hours reviewed, the most active period for bicyclist crossing activity was from 5:00 to 6:00 PM, while pedestrian crossing peaks were identified from 12:00 to 1:00 PM and 3:00 to 5:00 PM. The pedestrian and bicyclist volumes by hour of day, summarized across all study intersections, are shown in **Figure 9**.

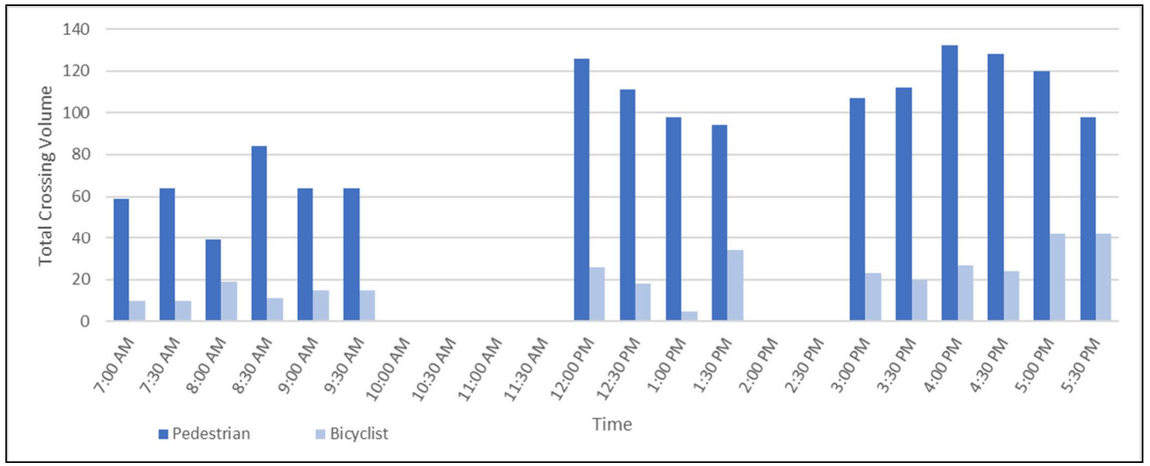

Figure 9. Pedestrian and Bicyclist Volumes by Select Hours of the Day

1.5.9 Land Use and Ownership

The project area is located within portions of the cities of Phoenix and Tempe and the Town of Guadalupe, and ADOT. No tribal or federal lands exist within the project limits. **Figure 10** illustrates the right-of-way limits of each landowner.

Source: Arizona Transportation Information System GIS Coverage (2013); Land Ownership, Maricopa County Assessor Parcel Viewer (2015)

Figure 10. Agency Right-of-Way Limits

Adjacent to the beginning of the project study limits City of Phoenix retains land ownership west of 48th Street. The property is a commercial development.

The Town of Guadalupe's northern boundary is in the southeast quadrant of the I-10 Baseline Road traffic interchange. Parcels 301-10-012, 301-10-175, and 301-10-011 are commercial developments south of Baseline Road.

Table 1 identifies the majority of land uses in the project vicinity are residential, commercial and industrial developments located within City of Tempe right-of-way. West of I-10 the land use is primarily industrial and commercial development with one mixed use parcel. East of I-10 the land use is a mix of commercial, general

industrial, single and multi-family residential. Privately owned parcels located adjacent to Baseline Road operate in a development type.

Table 1. City of Tempe Parcel Zoning

Zoning District	Parcel No
Planned Commercial Center Neighborhood (PCC-1)	123-22-006 123-22-613 123-51-002 301-07-323
Light Industrial District (LID)	123-22-610
General Industrial District (GID)	301-14-020 301-15-139 301-14-065 123-25-002 123-25-064 123-25-065 123-25-023 301-07-005 301-07-352 301-07-452
Mixed Use Med-High (MU-3)	301-14-982
Commercial Shopping and Services (CSS)	301-14-986 301-14-988 301-10-177 301-07-006F 301-07-001B 301-04-001
Regional Commercial Center (RCC)	123-25-031 123-25-049 123-25-050 123-25-051 123-25-052

1.5.10 Right-of-Way

The existing right-of-way within the corridor is owned by two separate agencies, the City of Tempe and ADOT. ADOT's right-of-way extends from approximately 380 feet west of the I-10 centerline to approximately 360 feet east of the I-10 centerline. The existing right-of-way width varies throughout the corridor from approximately 110 to 167 feet. At the intersections with the I-10 ramps, the right-of-way width increases several hundred feet.

Additional right-of-way and Temporary Construction Easements (TCEs) may be required for the construction of the preferred alternative. The locations of additional right-of-way and TCEs will be determined during the final design stage.

1.5.11 Utilities

A preliminary utility investigation was completed achieving American Society of Civil Engineers (ASCE) 38 Quality Level D (QLD), where existing utilities were depicted according to available utility records. This utility investigation identified 18 different utility owners that have facilities within the project area with the potential to be affected by the proposed improvements. As a part of this investigation, utility owners were contacted, and their facility records were requested. All utility records provided were then reviewed and drafted into a MicroStation .dgn file, which was also converted into a Google Earth .kmz. All utility structures shown within the QLD utility files were provided from the aerial topo. No field services were completed in this phase of the utility investigation. The QLD utility investigation found over 97,478 feet of existing utilities within the vicinity of the project area. The project design team did not conduct a utility coordination meeting for this phase of design. Official notification and utility conflict letters will be sent during final design.

The various utility owners, as well as their respective utility type(s), are listed in **Table 2**.

Table 2. Utility Owners, Types and Contacts

Utility Owner	Utility Type	Primary Contact
ADOT	Electric, Fiberoptics, Irrigation, Storm Drains, Communications, Traffic Signals	Scott Vollrath
AT&T Corp	Fiberoptics, Communication (located within the Cox Conduit)	Joseph Forkert (Forkert), Colin Danna (AT&T)
Century Link-Lumen	Telephone and Fiberoptics	Jason Jenson
Lumen (Century Link, Acquired Level 3) National	Fiberoptics	Carlos Muniz
City of Phoenix	Fiberoptics	Scott Davis
City of Phoenix Water Services Dept.	Reclaimed Water, Sewer, Water	Jami Erickson
City of Tempe	Streetlights, Traffic Signals, Sewer, Water	Mark Weber
Cox Communications	Cable TV, Fiberoptics	Jose Aguirre
El Paso Natural Gas (Kínder Morgan)	Natural Gas, Petroleum Pipelines	Brett Berry
Crown Castle Solutions Corporation	Fiberoptics	Tyler Stein
Flood Control District of Maricopa County (FCDMC)	Electric, Storm Drains, Water	Isaac Flores
Salt River Project Communication	Communications, Fiberoptics	Troy Damron

Table 2. Utility Owners, Types and Contacts (continued)

Utility Owner	Utility Type	Primary Contact
Salt River Project Distribution	Electric	Jason Hughes
Salt River Project Irrigation	Irrigation	Jorge Garcia
Salt River Transmission	Electric	Clifton Rains
Southwest Gas	Gas, High Pressure	N/A
Verizon (MCI)	Fiberoptics	Jesus Arrieta
Sprint Communications Company	Fiberoptics	David Jeter
Zayo Group (formerly AGL)	Communication, Fiberoptics	Matt Burke

1.5.12 Drainage

Existing on-site drainage throughout the limits of this project is collected and conveyed through a system of catch basins, lateral pipes, and trunklines discharging into the freeway trunkline system that is conveyed to a series of retention basins and ultimately outfalls into the Tempe Drain. Final drainage records prepared for the original freeway projects were reviewed along with the Tempe Area Drainage Master Study (2016).

Baseline Road features a “normal crown” pavement cross section in its existing condition, runoff flows away from the inside travel lanes to curb opening inlets on the outside edge of the roadway. Existing medians are landscaped, and its runoff is not collected by existing storm drain networks.

I-10 freeway entrance and exit ramps, in the existing condition, feature one-way crowns that drain roadway runoff to either the inside or outside edge of the ramp. Runoff is collected by freeway catch basins and conveyed into the existing trunkline system.

Runoff collected within the limits of this project is routed through trunklines and a series of retention basins, where it is ultimately conveyed into the Tempe Drain. Tempe Drain Intergovernmental Service Agreement (IGA) (276-66-I) between the City of Tempe, City of Phoenix, Salt River Valley Water Users Association, State of Arizona, and the Flood Control District of Maricopa County adopted in February 1966, governs the allowable discharges to the Tempe Drain.

Adjacent to the limits of this project lies the Guadalupe Floodwater Retarding Structure (FRS)– built in 1973 and maintained and operated by the Flood Control District of Maricopa County. The Guadalupe FRS principal outlet pipe is a 24-inch reinforced concrete pipe that runs across Baseline Road west of I-10 and drains northern flows to the western canal. This structure protects the Town of Guadalupe and portions of the City of Phoenix and City of Tempe from hillside stormwater runoff originating from South Mountain. Proposed improvements will not impact the existing 24-inch pipe in the current design. Final design shall document any impacts to the existing FCDMC easements and the need for new agreements, if any are identified.

Additional regional flood control facilities are located on the east side of I-10. The Guadalupe Drainage Improvement project, Contract PCN Number 035-02-31, provides four retention basins and storm drain improvements within the Town of Guadalupe and the City of Tempe to reduce flooding within the Town of Guadalupe and to a lesser extent, in the City of Tempe. These 10-year storm event facilities were constructed in joint effort between the Flood Control District of Maricopa County (FCDMC), Town of Guadalupe, and City of Tempe. The bleed off pipe from the most northern basin is conveyed into the ADOT Storm drain system along I-10, south of Baseline Road. Final design shall document any impacts to the existing FCDMC easements and the need for new agreements, if any are identified.

The project is located within Zone X floodplain, identified by FEMA as a location of 0.2% annual chance flood hazard and areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Along I-10 Ramp D there is a Zone A floodplain that follows the South Branch Highline Canal, identified by FEMA as a location of special flood hazard without base flood elevation. See **Figure 11** for the FEMA Floodplain Map.

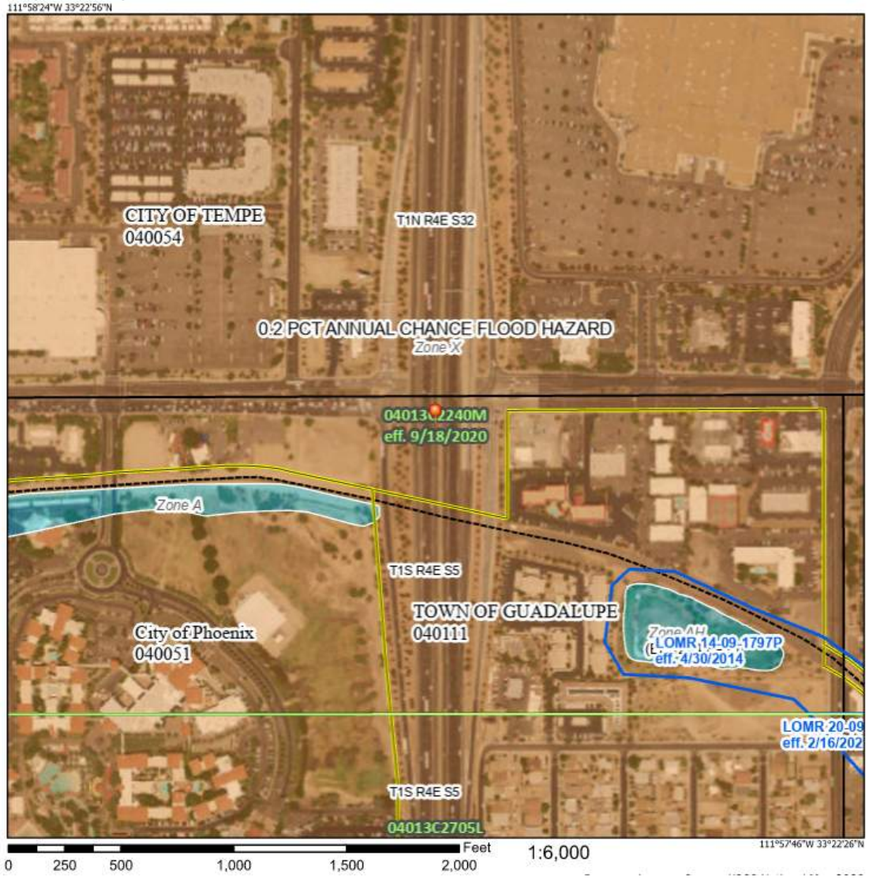

Figure 11. FEMA Floodplain Map

1.5.13 Structures

The project limits include two existing I-10 overpass structures spanning Baseline Road:

- Structure Number (SN) 02349 Baseline Road TI OP
- SN 02348: Baseline Road TI Overpass (OP) Westbound Collector-Distributor (WBC-D)

The existing Baseline Road I-10 Mainline bridge was built in 1994 and consists of parallel EB and WB superstructures separated by a 1-inch joint. The bridges are single-span cast-in-place post-tensioned concrete box girders supported on full-height concrete abutments and founded on spread footings. Total structure length is 152'-4" and span length is 147'-0". Total out-to-out width of the combined structure is 192'-6". Minimum vertical clearance of Baseline Road is 17'-2". Horizontal clearance from gutter pan to faces of abutments is 8'-0". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating of the structure – the sufficiency of the structure to remain in service out of a total score of 100 – was 96.0.

The existing Baseline Road WB C-D structure was built in 1994 and is a single span cast-in-place post-tensioned concrete box girder superstructure supported on full-height abutments founded on spread footings. Structure and span lengths match the mainline structure. Total out-to-out width is 47'-2". Minimum vertical clearance over Baseline Road is 17'-7 ½". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating is also 96.0.

The mainline structures will receive a 1-inch asphalt rubber friction course as part of the final paving for the I-10 Broadway Curve project. The WB C-D structure deck will remain bare concrete with no overlay course.

1.5.14 Retaining Walls

There are existing retaining walls within the project limits centered on the Baseline Road TI. Mechanically Stabilized Earth (MSE) walls were built with the existing structure construction and extend from the overpass abutments north and south parallel to the freeway and extend approximately 840 feet north and 450 feet south. The walls extend above grade up to about 25 feet at the abutments. A new cast-in-place cantilever retaining wall designed in accordance with current ADOT Bridge Group SD 7.01 details was built along I-10 WB Exit Ramp (Ramp C) with the Broadway Curve project to replace an existing wall due to the ramp being widened. The wall has a total length of about 1,085 feet and extends above grade up to 12 feet before connecting back into the section of existing wall to remain.

A combination sound barrier and retaining wall was built along the outside of I-10 EB entrance Ramp (Ramp D) adjacent to the South Mountain Resort with the original construction. It is a cast-in-place concrete cantilever wall with a concrete sound barrier extension. The wall begins just north of the Highline Canal and extends about 600 feet to the top of Ramp D.

1.5.15 Signing and Lighting

The existing overhead freeway guide signs are supported with tapered tube sign structures along Baseline Road. In addition to the existing guide signs, the existing off-ramp lane designation signs are mounted on tapered tubed sign structures on both of the Baseline Road exit-ramps. Based on review of the as-built plans, the majority of existing tapered tube sign structures will not accommodate a future outside widening on Baseline Road and exit-ramps. **Table 3** identifies the existing overhead sign structures that would be required to be modified to support widening of Baseline Road.

Table 3. Existing Sign Structures within the Project Footprint

Roadway	Direction of Travel	Station	Type of Structure
Baseline Rd	Eastbound	37+13	Tapered Tube (87')
Baseline Rd	Westbound	46+72	Tapered Tube (83')
Ramp C	Northbound		Tapered Tube (70')
Ramp B	Southbound		Tapered Tube (75')

Roadway lighting exists throughout the Baseline Road project corridor. This includes arterial street lighting, freeway entrance and exit ramp lighting and underdeck lighting. Baseline Road is illuminated with mixture of City of Tempe (COT) Standard Architectural Street light pole (32') and Streamline Steel Poles (32') with 8' mast arm. Based on review of as built plans, existing lighting on Baseline Road within project corridor will not accommodate a future widening on Baseline Road.

The I-10 freeway entrance and exit ramps are illuminated with Type H (40') light poles with mast arm varying from 6 feet to 15 feet. The existing luminaire is a 118-watt cobrahead light emitting diode (LED) luminaire with Type II light distribution patterns. The ramp lighting is energized with a 480-volt lighting system. An ADOT standard Type IV load center cabinet is located at the northeast corner of Baseline Road and Baseline Road Ramp A.

Underdeck lighting is installed underneath the I-10 overpass to illuminate Baseline Road under the bridge structure. The underdeck is illuminated with 104-watt LED Wallpack style luminaires with Type III distribution.

A list of the load center cabinet location addresses and the limits of the lighting fixtures associated with each cabinet are listed in **Table 4**.

1.5.16 Intelligent Transportation Systems

The City of Tempe uses the Kadence system for its adaptive signal control technology on the Baseline Road corridor and the communication is transmitted via radio. Video detection cameras and Emergency Vehicle Preemption (EVP) devices are installed on the traffic signal mast arms and used by Tempe for vehicle and emergency vehicle detection, respectively. CCTV cameras used for traffic monitoring are present at the Calle Los Cerros Drive, Wendler Drive, both I-10 ramps, Priest Drive, and Hardy Drive intersections.

The existing ADOT ITS facilities along I-10 in the vicinity of Baseline Road include fiber optic trunkline conduit systems, pull boxes, and cabinets. Trunkline ITS conduits (3-count, 3-inch) with fiber exist on both sides of I-10 and are located between the mainline and the Baseline Road ramps.

As part of project F0072 I-10: I-17 (Split) to SR 202L (Santan), which is currently under construction and anticipated to be completed by early 2025, most of the existing trunkline conduits will remain but the fiber is being replaced with new 144 strand Single Mode Fiber Optics (SMFO). The existing conduit and pull boxes will be replaced at locations where they cross the on/off ramps and other minor adjustments due to I-10 and system to system ramps widening will be made. Internally Illuminated Wrong Way Signs (IIWWS) and Wrong Way Detection (WWD) cameras will be installed for Baseline Road Ramps B and C. A new CCTV camera (co-mounted with the WWD camera) will be installed on the northwest corner of Baseline Road and the westbound ramp, and ramp metering will be installed on Baseline Ramp D.

These improvements would be in place before the final design and construction of the Baseline Road TI project.

Table 4. Existing Lighting

Roadway	Direction of Travel	Power Source	No of Light Pole	Type of LP	Station Range
Baseline Rd	Eastbound	Unmetered / Signal Cabinet (SW Quadrant)	6	COT T-651 Streamlined)	16+00 to 30+00
Baseline Rd	Eastbound	Unmetered / Signal Cabinet (SW Quadrant)	12	COT T-652 (Architectural)	30+00 to 56+00
Baseline Rd	Westbound	Unmetered / Signal Cabinet (SW Quadrant	19	COT T-652 (Architectural)	16+00 to 56+00
Ramp B	Southbound	Metered/ ADOT Type IV 240/480 LCC (NE Quadrant	2	ADOT H-POLE	
Ramp C	Northbound	Metered/ ADOT Type IV 240/480 LCC (NE Quadrant	2	ADOT H-POLE	
Ramp D	Southbound	Metered/ ADOT Type IV 240/480 LCC NE Quadrant	3	ADOT H-POLE	
Ramp A	Northbound	Metered/ ADOT Type IV 240/480 LCC NE Quadrant	4	ADOT H-POLE	
Baseline Rd	Eastbound & Westbound	Metered/ ADOT Type IV 240/480 LCC NE Quadrant	10	Underdeck Wallpack	40+50 to 43+50

1.5.17 Landscape

The project area contains existing landscape improvements which are maintained by a combination of ADOT, City of Tempe and private landowners. The character of the existing landscape consists of low water use trees, shrubs, accents, cacti, boulders, concrete header curbing, decorative low rock walls, and granite mulch. There are some instances of existing turf grass in the right-of-way at commercial properties located at the southwest corner of Baseline Road and I-10 EB entrance ramp and the north side of Baseline Road east of I-10. Except for the turf grass, the existing landscape is watered using automatic irrigation drip systems.

1.5.18 Geotechnical Conditions

The Structures Geotechnical Engineering Report for the Broadway Curve Project (Terracon 2022), which included eleven test borings (S3RW71-W1 to S3RW71-W11) drilled for Retaining Wall No. 71 located on the northwest corner of the I-10 and Baseline Road traffic interchange. Several borings encountered fill to depths ranging from 3 to 7 feet consisting medium dense clayey sand when present. Underlying native soils, present to depths of about 9 to 14 feet, consisted of loose to medium dense clayey sand with gravel. This soil would be anticipated at the subgrade along the majority of the proposed Baseline Road alignment. A second stratum indicates soils present to depths of about 24 to 29 feet consisted of loose to medium dense clayey sand and stiff sandy lean clay. The underlying stratum to a depth of 50 feet consisted of medium dense to very dense clayey sand with gravel and very stiff to hard sandy lean clay.

As-built plans for the widening of the original Baseline Road bridges (Hartig and Associates 1991) included test boring logs for six borings (BR-1 through BR-6) completed to depths ranging from 69 to 88 feet. Two borings were drilled through existing embankment fill consisting of very stiff to hard sandy clay to clayey sand. The native soils extending from the original ground surface to a depth of 64 feet consisted of generally dense, strongly lime cemented, low to medium plasticity gravelly clayey sands overlying granodiorite bedrock, extending to the full depths of investigation.

1.5.19 Existing Pavement Structural Sections

The as-builts were obtained from ADOT Repository of Online Archived Documents (ROAD) website. **Table 5** provides a history of the existing pavement based on our review of as-built plans.

Table 5. Pavement History

Project Number / TRACS Number / Location	Milepost	As-built Date	Description
NH-10-3(310)/ 010 MA 154 H0142 04C/ I-10 WB on-ramp	154.0 - 157.9	1992	10.5” PCCP (Plain) over 4” Aggregate Base (AB) Class 2
NH-10-3(317) / 010 MA 154 H2035 01C / Baseline Road within ADOT ROW, Wendler Drive to Priest Drive	154.3 - 156.0	1994	1.5” Asphaltic Concrete (AC) (1/2”.) over 4.5” AC (3/4”.) over 8.5” Aggregate Base (AB) Class 2
NH-10-3(317) / 010 MA 154 H2035 01C / Baseline Road (outside ADOT ROW), Wendler Drive to Priest Drive	154.3 - 156.0	1994	10.5” PCCP (Plain) over 4” Aggregate Base (AB) Class 2
010-C (220)S / 010 MA 149 F0072 01C / I-10 EB off-ramp	149 .0 – 161.0	2021	12” PCCP (Plain) over 3” Asphaltic Concrete Base (ACB)

1.5.20 Land Subsidence and Earth Fissures

Depletion of groundwater resources in deep alluvial basin aquifers in the western United States has and continues to cause land subsidence. Land subsidence can severely and adversely impact infrastructure by changing the ground elevation, ground slope (grade) and through the development of ground cracks, known as earth fissures, can erode into large gullies. Earth fissures have the potential to compromise the foundations of roadways, levees, and other infrastructure, which may ultimately cause failure. The project area has historically experienced less than 50 to 100 feet of groundwater withdrawal (Schumann and Genualdi 1986). While it is possible that some ground subsidence has resulted from that groundwater depletion, significant ground subsidence in the project area has not been reported in scientific or professional literature (Galloway et al 1999).

Interferometric Synthetic Aperture Radar (InSAR) is a satellite-based technology that can detect ground subsidence as low as 0.2 inches. Arizona Department of Water Resources (ADWR) has a program that monitors land subsidence in Arizona utilizing InSAR. InSAR data from 2010 to 2022 (ADWR 2022) indicates that the project site has experienced negligible land subsidence.

There are no reported earth fissures within or near the project corridor. The nearest reported earth fissures to the project site are located about 15 miles to the northeast just north of the 40th Street and Shea Boulevard intersection (AZGS 2019).

1.5.21 Roadway

The clayey sand site soils are generally considered to be well suited for use as pavement subgrade. In accordance with the City of Tempe Standards for an arterial, subgrade preparation should consist of scarification of 6 inches, moisture conditioning to within 2 percent of the optimum moisture content, and compaction to a minimum of 95 percent of the maximum ASTM D698 Standard Proctor density.

From a preliminary standpoint, embankment fill and cut slopes should be made no steeper than 3.0H:1V.

1.5.22 Wall Foundations

Retaining walls may be required to minimize the amount of right-of-way. Based on conditions observed from nearby walls, it appears that foundations for new walls could be supported by either spread-type foundations or as mechanically stabilized earth (MSE) walls at moderate bearing resistance pressures

1.5.23 Previous Projects

The ADOT Milepost Strip Map shows the following projects which were previously constructed as identified in **Table 6.**

Table 6. ADOT Previous Projects

Federal Aid Number and/or TRACS Number	Milepost	As-Built Date	Description
010-C-NFA 010 MA 147 H6956 01C	147.9 - 155.7	2007	Quiet Pavement Phase 8, Van Buren St. to Baseline Rd.
I-10-3(54) NO TRACS	152.0 - 155.5	1967	40th St. - Baseline Rd. - BC PCC
I-10-3(51) NO TRACS	153.9 - 155.1	1967	Broadway Rd. - Baseline - GD
NH-10-3(310) 010 MA 154 H0142 04C	154.0 - 157.9	1992	Superstition T.I. - Baseline Unit I: Vol. I - IV
NH-10-3(317) 010 MA 154 H2035 01C	154.3 - 156.0	1994	Superstition T.I. - Baseline Unit II: Vol. I - IV
NH-10-3(339) H3227 01C	154.6 - 155.9	1992	Superstition T.I. - Baseline Unit I: Sewer Pipe
I-10-3(34) NO TRACS	155.2 - 158.8	1964	Baseline Rd. - Warner Rd. - GD
I-10-3(56) NO TRACS	155.2 - 160.1	1967	Baseline Rd. - Williams Field Rd. - BC, AC
I-10-C-503 010 MA 155 H5540 01C	155.6	2000	Phx-Casa Grande Hwy I-10 - Baseline Rd. T.I. - OP #1097 - B Deck Joint Repair
I-10-3(133) NO TRACS	155.6 - 157.9	1984	Baseline Rd. - Elliot Rd. - Landscape & Irrigation
I-10-3(533) 010 MA 155 H5050 01C	155.6 - 157.7	1999	Phx-Casa Grande Hwy I-10 -Baseline Rd. - Elliot Rd. - Landscape & Irrigation

Table 6. ADOT Previous Projects

Project Number and/or TRACS Number	Milepost	As-Built Date	Description
NH-900-A(072) 999 MA 000 H6371 03C	155.7 - 159.7	2004	Quiet Pavement Phase 3, Baseline Rd. to Ray Rd.
I-10-3-520 010 MA 156 H3966 01C	156.0	1994	Baseline Rd. – Chandler Blvd Mill and Replace
AC-NH-10-3(322) 010 MA 156 H2382 01C	156.0 - 160.2	1995	Baseline Rd. -Chandler Blvd. - Close/Add Median Lane
IM-10-3(353)P 010 MA 156 H3880 01C	156.4 - 156.8	2000	Phx - Tucson Hwy I-10 - Guadalupe Rd. Underpass #1098 - Remove/Replace Bridges

As of June 2021, the Broadway Curve project (ADOT Project No. 010 MA 149 F0072 01C, Federal Project No. 010-C(220)S was under construction. This project does not show on the ADOT Strip Maps.

Table 7 identifies City of Tempe previous projects within study limits.

Table 7. City of Tempe Previous Projects

Parcel Number	As-Built Date	Description
Parcel No 123-25-002B	1981	Baseline Business Park
Project No N/A	1983	Paving – 48th Street and Baseline Rd
Project No 82055	1985	Paving – Baseline Rd: 48th Street to Wendler Dr
Project No 8604-12	1986	Paving – 48th Street and Baseline Rd
Project No 876112	1987	Paving – Baseline Rd: I-10 to Hardy Dr
Parcel No 123-25-023	1989	Residence Inn
Parcel No 123-25-002B	1993	Denny's
Parcel No 301-14-020E	1993	ARCO Gas
Parcel No 123-22-613	1994	The Incredible Universe
Project No 926463	1996	Paving – Priest Dr: Baseline Rd to Western Canal
Parcel No 123-25-031	1997	Amerisuites
Parcel No 301-14-982	1997	University of Advancing Technology

Table 7. City of Tempe Previous Projects (continued)

Parcel Number	As-Built Date	Description
Parcel No 301-14-065	2002	Pointe Office Suites
Parcel No 123-25-049	2003	Eckerd Drugs Store (CVS)
Parcel No 123-22-610	2006	South Mountain Commerce Center
Parcel No 301-14-982	2006	University of Advancing Technology Housing
Parcel No 301-10-012L	2011	Bill's Ghost and Spirits
Parcel No 123-22-615	2017	Frys Gas
Parcel No 301-14-986	2020	SWC Calle Los Cerros and Baseline
Parcel No 301-14-988	2020	In-N-Out

2.0 TRAFFIC AND CRASH DATA

2.1 REVIEW OF CRASH DATA

The crash analysis reviewed the past five years of available crash data from the ADOT database, from January 1, 2017, to December 31, 2021. Crashes on the ADOT mainline were excluded. Crashes were included in the analysis if they occurred on Baseline Road, or within 150 feet of the intersection on an intersecting roadway. The crash analysis focused on four areas; all crashes, intersection crashes, fatal and serious injury (KSI) crashes, and crashes involving non-motorized users.

2.1.1 All Crashes

From 2017 to 2021, a total of 1,499 crashes were reported in the study area. That corresponds to an average of nearly one crash every day. The crashes from 2017 to 2021 resulted in 651 injuries and 3 fatalities, with one fatality involving a pedestrian. **Figure 12** shows a heat map of all crashes reported in the study area from 2017 to 2021. Crashes are more concentrated along major arterial roads and intersections.

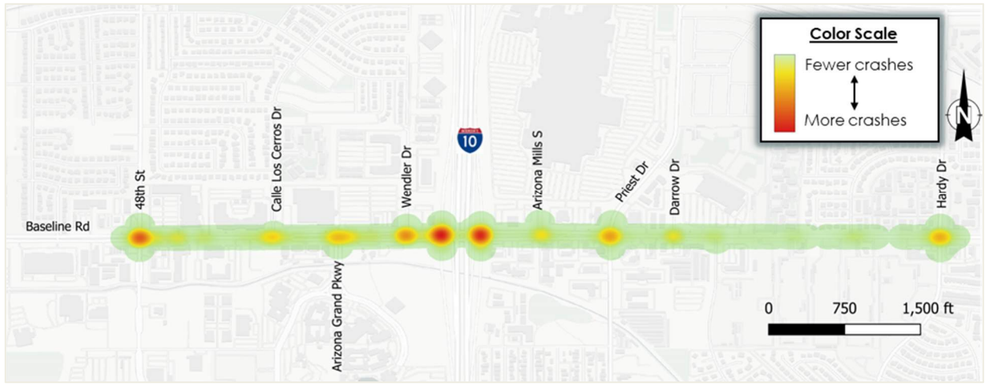

Figure 12. Study Area Heat Map of Crashes, 2017-2021

Figure 13 and **Table 8** summarize the crash data by year and injury severity. In the first three years of the study period from 2017 to 2019, there were an average of 346 crashes per year. A lower number of crashes (174) occurred in 2020, likely due to the traffic impacts associated with the COVID-19 pandemic. In 2021, the crash count increased closer to typical years prior to 2020.

Most crashes (71%) resulted in no injuries. The remaining crashes involved possible injury (16%), minor injury (12%), serious injury (1%), and fatal injury (0.2%). During the five-year period, there were a total of 13 serious injury crashes and 3 fatal crashes.

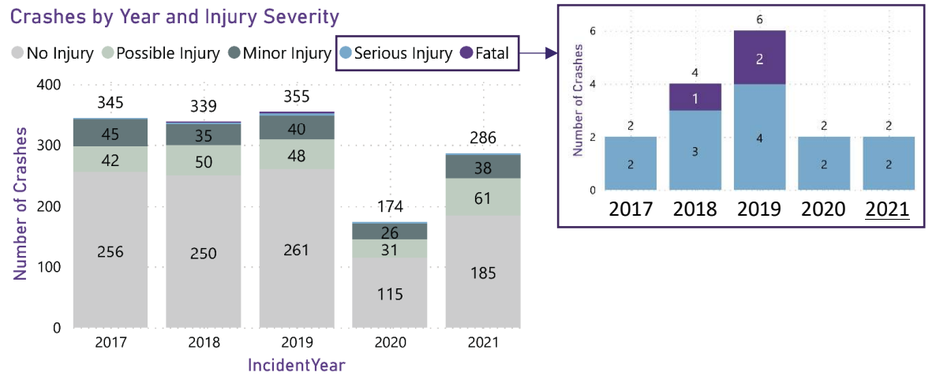

Figure 13. Crashes by Year and Injury Severity, 2017-2021

Table 8. Crashes by Year and Injury Severity, 2017-2021

Year	No Injury	Possible Injury	Minor Injury	Serious Injury	Fatal	Total
2017	256	42	45	2	0	**345**
2018	250	50	35	3	1	**339**
2019	261	48	40	4	2	**355**
2020	115	31	26	2	0	**174**
2021	185	61	38	2	0	**286**
Total	**1,067**	**232**	**184**	**13**	**3**	**1,499**
Percent	**71.2%**	**15.5%**	**12.3%**	**0.9%**	**0.2%**	**100%**

Within the study area, rear end crashes are the most common, representing approximately 45% of all crashes. Other common crash types include left-turn (20%), same direction sideswipe (17%) and angle crashes (14%). When considering the total share of crash types, left-turn and rear-end crashes occurred more frequently on Baseline Road compared to statewide averages (2021 Arizona Motor Vehicle Crash Facts). These trends may be due to the density of access along the corridor and number of signalized intersections. **Table 9** summarizes the number of collisions per crash type.

Table 9. Manner of Collision in Multi-Vehicle Crashes, 2017-2021, Compared to Statewide Averages

Collision Manner	Baseline Road		Percentage Statewide[1]
	Crashes	Percentage	
Angle	206	14.0%	15.5%
Left Turn	293	***19.9%***	17.6%
Rear End	659	***44.8%***	39.2%
Head-On	14	1.0%	2.2%
Sideswipe (same)	247	16.8%	17.2%
Sideswipe (opposite)	6	0.4%	1.7%
U-Turn	4	0.3%	0.5%
Other[2]	30	2.0%	5.4%
Unknown	11	0.7%	0.7%
Total	**1,470**	**100%**	**100%**

Note 1: The statewide averages are based on 2021 Arizona Motor Vehicle Crash Facts.
Note 2: "Other" crashes include rear to rear, rear to side, pedestrian, and pedalcyclist.
Bold red, italicized text denotes values over statewide averages.

The hourly distribution and lighting condition of the crash data is shown in **Figure 14**; the greatest frequency of crashes occur between 1:00 PM to 6:00 PM.

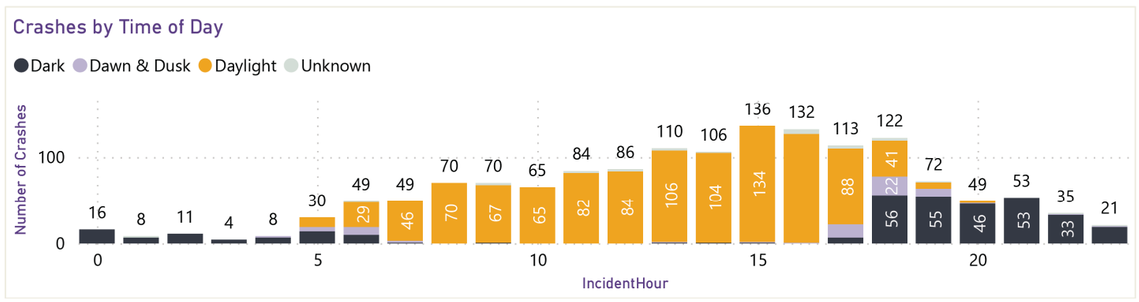

Figure 14. Crashes by Hour of Day, 2017-2021

Figure 15 summarizes behavioral aspects of the crashes reported in the study area. Of all crashes, 2% involved an unrestrained driver, 5% had an impaired driver (driver of Unit 1), 30% were associated with speeding behavior, and 23% involved a young driver (age of Unit 1 driver 24 or younger). 16% of the crashes in the area involved a hit and run, which is above the statewide average (14%). The most common violations were speed too fast for conditions (28%), failure to yield right-of-way (16%), and following too closely (13%).

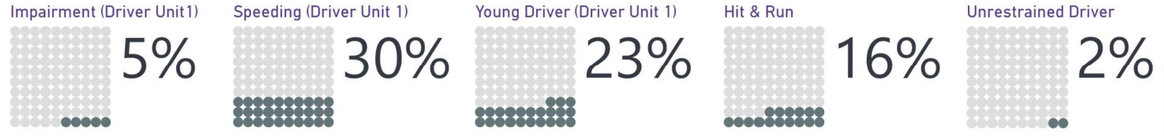

Figure 15. Behavioral Aspects of Crashes, 2017-2021

2.1.2 Intersection Crashes

The ten signalized intersections on the corridor were reviewed as part of the analysis, which are ranked by crash frequency below of crashes within 150 feet of the intersection:

1. I-10 EB Ramps/Baseline Road – 223 crashes
2. I-10 WB Ramps/Baseline Road – 202 crashes
3. 48th Street/Baseline Road – 160 crashes
4. Wendler Drive/Baseline Road – 112 crashes
5. Priest Drive/Baseline Road – 107 crashes
6. Arizona Grand Parkway/Baseline Road – 104 crashes
7. Hardy Drive/Baseline Road – 93 crashes
8. Calle Los Cerros Drive/Baseline Road – 70 crashes
9. Arizona Mills/Baseline Road – 57 crashes
10. Darrow Drive/Baseline Road – 42 crashes

The injury severity of the crashes at each study intersection is shown in **Table 10** and the proportion of individual crash severities can be seen in **Figure 16**. The majority of crashes at the study intersections resulted in no injury for those involved. The proportion of crashes resulting in injury was greater at the intersections of Darrow Drive/Baseline Road and Hardy Drive/Baseline Road.

Serious injury crashes were reported at the following intersections:

- 48th Street/Baseline Road – 5 serious injury crashes
- Calle Los Cerros Drive/Baseline Road – 2 serious injury crashes
- Hardy Drive/Baseline Road – 2 serious injury crashes
- I-10 WB/Baseline Road – 1 serious injury crash

Fatal crashes were reported at the following intersections:

- 48th Street/Baseline Road – 1 fatal crash
- Arizona Grand Parkway/Baseline Road – 1 fatal crash

Crashes are summarized by intersection and manner of collision in **Table 11** and **Figure 17**. Angle and left-turn crashes were the most common collision types at the intersections of 48th Street/Baseline Road, Darrow Drive/Baseline Road, and Hardy Drive/Baseline Road. Rear end crashes were the most common collision manner at all other intersections (with the exception of I-10 WB/Baseline, which had the same frequency of angle/left-turn and rear-end crashes).

Table 10. Injury Severity of Crashes at Study Intersections, 2017-2021

Intersection	No Injury	Possible Injury	Minor Injury	Serious Injury	Fatal	Total	Total (%)
48th Street	114	28	12	5	1	**160**	**13.7%**
Calle Los Cerros	50	11	7	2	0	**70**	**6.0%**
Arizona Grand Parkway	74	14	15	0	1	**104**	**8.9%**
Wendler Drive	74	27	11	0	0	**112**	**9.6%**
I-10 EB	190	25	8	0	0	**223**	**19.1%**
I-10 WB	152	26	23	1	0	**202**	**17.3%**
Arizona Mills South	37	14	6	0	0	**57**	**4.8%**
Priest Drive	80	15	12	0	0	**107**	**9.1%**
Darrow Drive	20	9	13	0	0	**42**	**3.6%**
Hardy Drive	57	14	20	2	0	**93**	**7.9%**
Total	**848**	**183**	**127**	**10**	**2**	**1,170**	**100%**

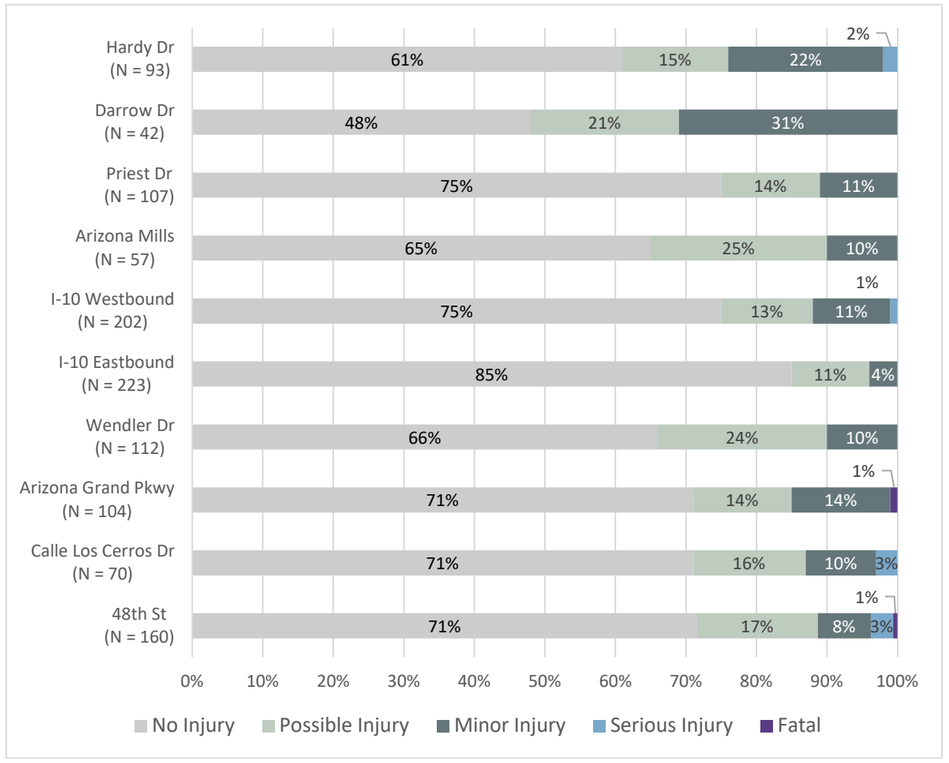

Figure 16. Injury Severity of Study Intersections, 2017-2021

Table 11. Collision Manner of Crashes at Study Intersections, 2017-2021

Intersection	Angle/ Left-Turn	Rear End	Single Vehicle	Pedestrian	Bicyclist	Other	Total	Total (%)
48th Street	81	50	1	4	2	22	**160**	**13.7%**
Calle Los Cerros	6	53	0	1	1	9	**70**	**6.0%**
Arizona Grand Parkway	11	73	0	0	0	20	**104**	**8.9%**
Wendler Drive	41	47	2	2	2	18	**112**	**9.6%**
I-10 EB	49	97	5	1	0	71	**223**	**19.1%**
I-10 WB	71	71	5	0	0	55	**202**	**17.3%**
Arizona Mills South	16	27	1	1	1	11	**57**	**4.8%**
Priest Drive	36	46	3	2	0	20	**107**	**9.1%**
Darrow Drive	22	15	0	0	0	5	**42**	**3.6%**
Hardy Drive	43	34	1	3	1	11	**93**	**7.9%**
Total	**376**	**513**	**18**	**14**	**7**	**242**	**1,170**	**100%**

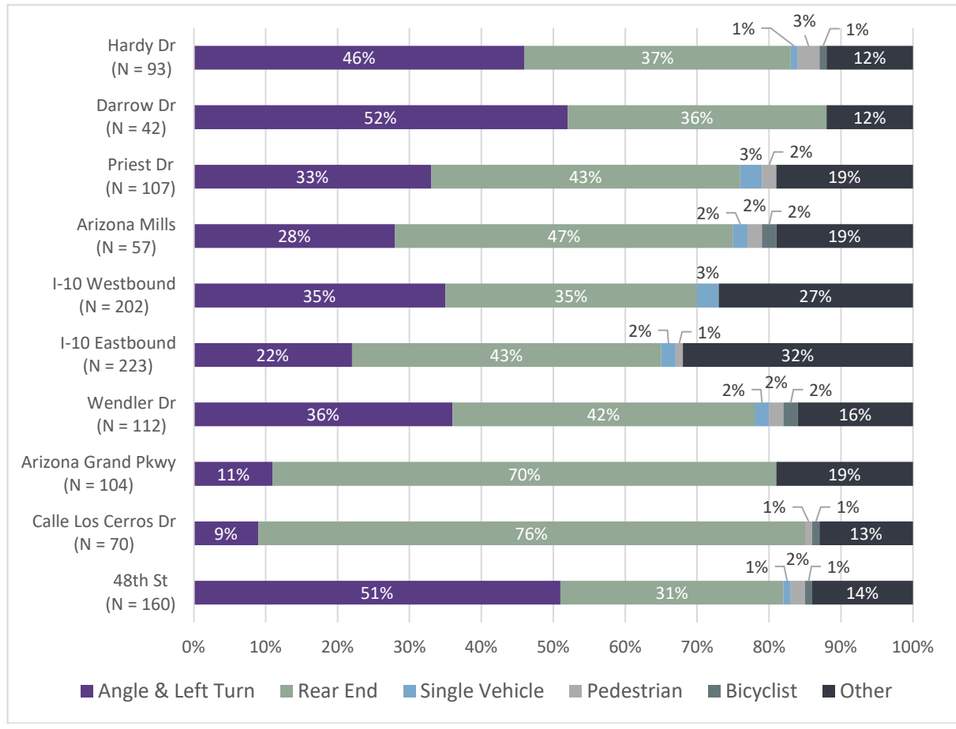

Figure 17. Crash Type by Study Intersection, 2017-2021

2.1.3 Fatal and Serious Injury Crashes

Fatal and serious injury (KSI) crashes represented approximately 1% of all crashes reported in the study area from 2017 to 2021. There was a total of 16 KSI crashes during the study period, which resulted in a total of 21 person injuries and 3 fatalities. **Figure 13** shows the crash frequency by year and by injury severity. **Figure 18** shows a heat map of the reported KSI crashes within the study area. The greatest number of KSI crashes were reported at 48th Street/Baseline Road (6 crashes), Calle Los Cerros/Baseline Road (2 crashes), and Hardy Drive/Baseline Road (2 crashes).

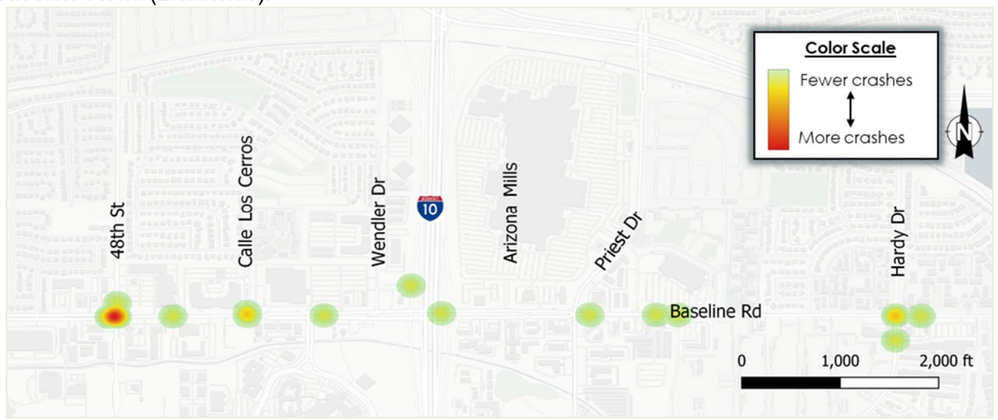

Figure 18. Study Area Heat Map of Fatal and Serious Injury Crashes, 2017-2021

Figure 19 provides a comparison of collision manner between KSI crashes and non-KSI crashes along the corridor (no injury, possible injury, minor injury). The data suggests that rear-end and sideswipe crashes are more likely to result in lower injury levels, while left-turn, pedestrian, and bicycle crashes generally have more severe outcomes.

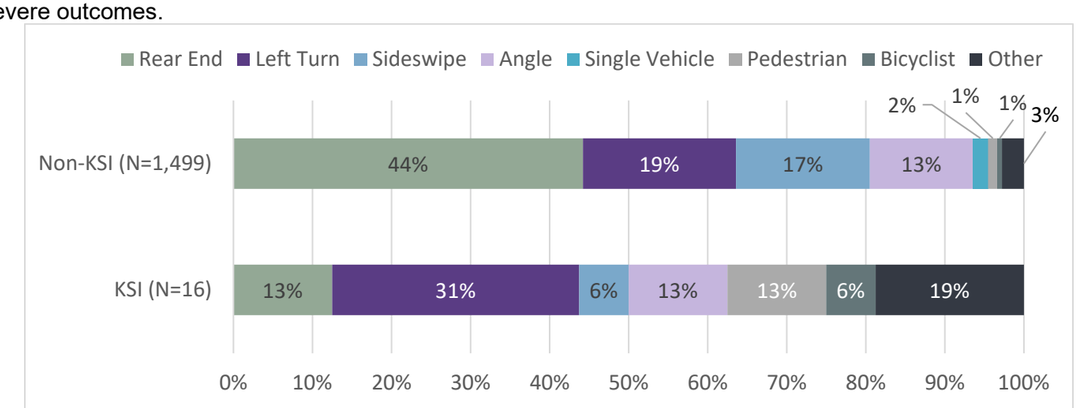

Figure 19. Collision Manner and Injury Severity, 2017-2021

The hourly distribution and lighting condition of the fatal and serious injury crashes is shown in **Figure 20**. Due to the low sample size, trends are limited; however, the crash data shows a slightly higher KSI crash frequency during morning hours (5:00 AM to 10:00 AM).

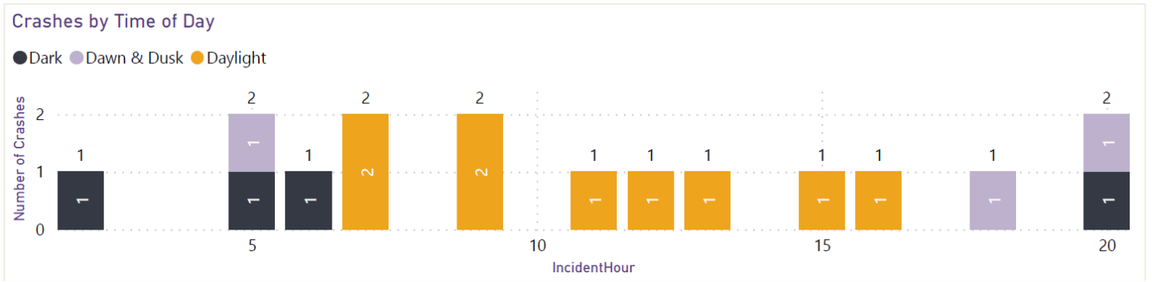

Figure 20. Fatal and Serious Injury Crashes by Hour of Day, 2017-2021

2.1.4 Pedestrian and Bicyclist Crashes

During the five-year period studied, 19 pedestrian crashes and 10 bicycle crashes were reported in the study area. That corresponds to approximately 6 crashes each year involving non-motorized road users. The 29 crashes resulted in 31 injuries and 1 fatality (pedestrian) during the 2017 to 2021 period. Of the pedestrian and bicycle crashes, 3 resulted in no injury (10%), 9 resulted in a possible injury (31%), 14 resulted in minor injuries (48%), 2 resulted in serious injuries (7%), and 1 was fatal (3%). **Figure 21** shows the pedestrian and bicycle crash frequency by year and injury severity.

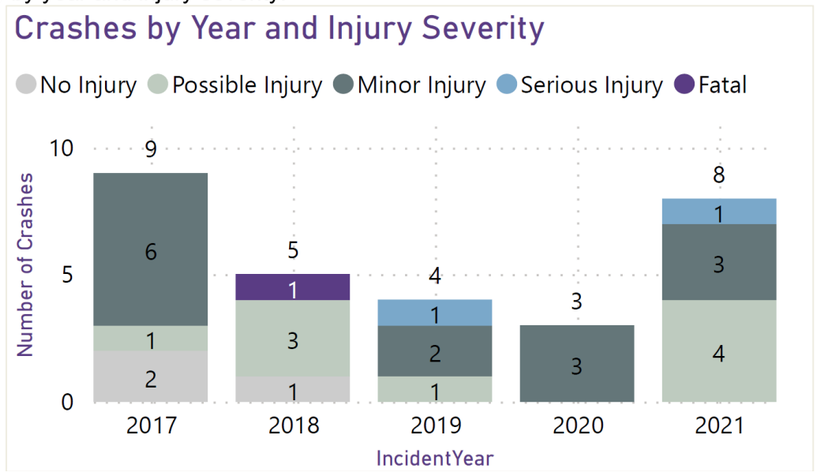

Figure 21. Pedestrian and Bicyclist Crashes by Year and Injury Severity

Figure 22 shows the distribution of pedestrian and bicyclist crashes by hour of the day. The sample size is limited, but crashes involving pedestrians and bicyclists occurred most frequently during the afternoon and evening commuting hours.

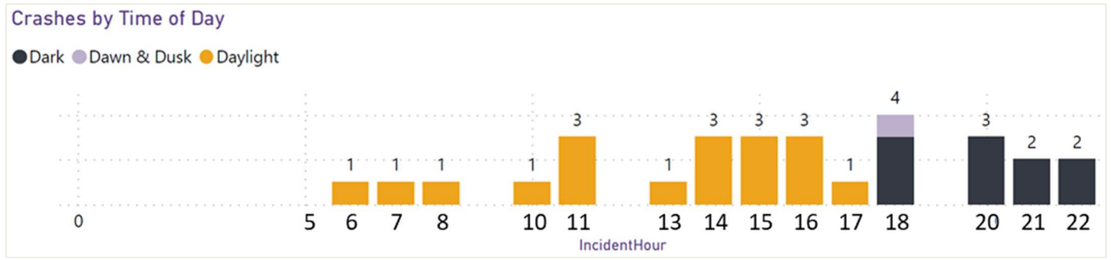

Figure 22. Pedestrian and Bicyclist Crashes by Hour, 2017-2021

Of all 29 crashes involving non-motorized road users, 10% involved speeding, 10% involved impaired driving, 24% were a hit-and-run incident, and 34% occurred in dark conditions.

The location of the pedestrian and bicyclist crashes is shown in **Figure 23**; crashes that were reported within 150 feet of the study intersections are summarized in **Figure 24**.

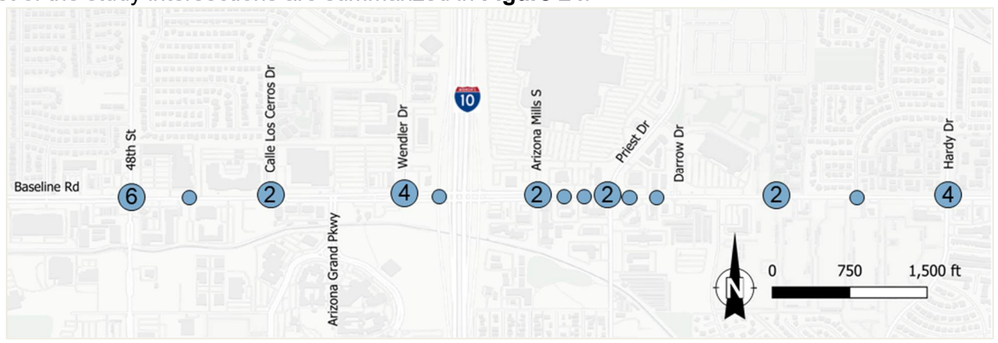

Figure 23. Location of Pedestrian and Bicyclist Crashes, 2017-2021

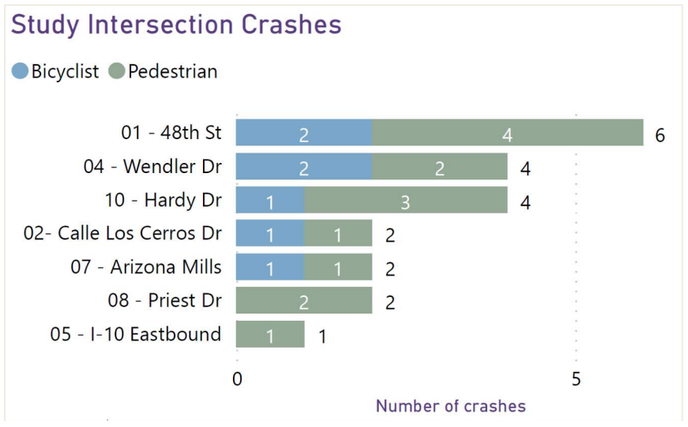

Figure 24. Frequency of Pedestrian and Bicyclist Crashes at the Study Intersections, 2017-2021

The fatal pedestrian crash occurred at the intersection of Priest Drive/Baseline Road in 2018. The two serious injury crashes involved one pedestrian crash on Baseline Road approximately 600 feet east of 48th Street in 2021, and the other involved a bicyclist crash at Calle Los Cerros Drive/Baseline Road in 2019.

The top locations with highest frequency of pedestrian crashes are:

1. 48th Street and Baseline Road (4 crashes)
2. Hardy Drive and Baseline Road (3 crashes)
3. Wendler Drive and Baseline Road (2 crashes)
4. Priest Drive and Baseline Road (2 crashes)
5. Calle Los Cerros and Baseline Road (1 crash)
6. I-10 EB and Baseline Road (1 crash)
7. Arizona Mills and Baseline Road (1 crash)

The remaining five pedestrian crashes occurred midblock east of 48th Street, west of Priest Drive, east of Priest Drive, and at the intersection of Terry Lane/Baseline Road.

The top locations with highest frequency of bicyclist crashes are:

1. 48th Street and Baseline Road (2 crashes)
2. Wendler Drive and Baseline Road (2 crashes)
3. Calle Los Cerros Drive and Baseline Road (1 crash)
4. Arizona Mills and Baseline Road (1 crash)
5. Hardy Drive and Baseline Road (1 crash)

The remaining three bicycle crashes occurred east of Arizona Mills South and near the apartment driveways located approximately 1,000 feet east of Darrow Drive.

2.1.5 Key Takeaways

The safety analysis for the I-10 and Baseline DCR reviewed ADOT crash data from 2017 to 2021. The evaluation included crashes on Baseline Road from 48th Street to Hardy Drive, as well as crashes on intersecting roadways within 150 feet of Baseline Road. Intersection crash summaries represent crashes that occurred within 150 feet from the center of the intersection.

- There was a total of 1,499 crashes during the five-year period (300 crashes/year).
- Of the 1,499 crashes, most were rear end crashes (44%), followed by angle/left-turn (32%), other (20%), single vehicle (<2%), pedestrian-related (<2%), and bicyclist-related (<1%) crashes.
- During the five-year period, there were 1,067 crashes resulting in no injury (71%), 232 possible injury crashes (16%), 184 minor injury crashes (12%), 13 serious injury crashes (1%), and 3 fatal injury crashes (0.2%).
- On the corridor, crashes occurred most frequently during afternoon hours (3-7pm).
- 260 crashes along the corridor involved hit and run (15%).
- Impairment was reported in 4% of crashes, speeding in 30% of crashes, and 23% of crashes involved a young driver (ages 16-24) as the operator of Unit 1.
- The 10 signalized intersections on the corridor were reviewed as part of the analysis, which are ranked by crash frequency below:
    - I-10 EB Ramps/Baseline Road – 223 crashes
    - I-10 WB Ramps/Baseline Road – 202 crashes
    - 48th Street/Baseline Road – 160 crashes
    - Wendler Drive/Baseline Road – 112 crashes
    - Priest Drive/Baseline Road – 107 crashes
    - Arizona Grand Parkway/Baseline Road – 104 crashes

  - Hardy Drive/Baseline Road – 93 crashes
  - Calle Los Cerros Drive/Baseline Road – 70 crashes
  - Arizona Mills/Baseline Road – 57 crashes
  - Darrow Drive/Baseline Road – 42 crashes
- There were 16 crashes on the corridor that resulted a person being KSI, 3 of which involved a non-motorized user. The majority of the KSI crashes (12) occurred within 150 feet of a signalized intersection, as noted below:
  - 48th Street/Baseline Road – 6 KSI crashes
  - Calle Los Cerros Drive/Baseline Road – 2 KSI crashes
  - Hardy Drive/Baseline Road – 2 KSI crashes
  - Arizona Grand Parkway/Baseline Road – 1 KSI crash
  - I-10 WB Ramps/Baseline Road – 1 KSI crash
- There were 29 crashes on the corridor that involved a non-motorized user, 19 involving a pedestrian and 10 involving a bicyclist.
- Of the non-motorized crashes, 7 crashes (24%) involved hit and run.
- One non-motorist crash resulted in fatal injury, involving a pedestrian at the intersection of Priest Drive/Baseline Road on March 12, 2018, at 11:30 AM.
- Two non-motorist crashes resulted in serious injury, one involving a pedestrian on Baseline Road approximately 600 feet east of 48th Street (November 11, 2021, at 7:23 AM) and one involving a bicyclist at Calle Los Cerros Drive/Baseline Road (June 18, 2019 at 4:54 PM).
- Many of the non-motorized crashes (17) occurred within 150 feet of a signalized intersection, as noted below:
  - 48th Street/Baseline Road – 6 crashes; 4 involving pedestrians, 2 involving bicyclists
  - Wendler Drive/Baseline Road – 4 crashes; 2 involving pedestrians, 2 involving bicyclists
  - Hardy Drive/Baseline Road – 4 crashes; 3 involving pedestrians, 1 involving a bicyclist
  - Calle Los Cerros Drive/Baseline Road – 2 crashes; 1 involving a pedestrian, 1 involving a bicyclist
  - Arizona Mills/Baseline Road – 2 crashes; 1 involving a pedestrian, 1 involving a bicyclist
  - Priest Drive/Baseline Road – 2 crashes; both involving pedestrians
  - I-10 EB Ramps/Baseline Road – 1 crash involving a pedestrian

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2.2 EXISTING TRAFFIC CONDITIONS

2.2.1 Traffic Counts

Vehicular, pedestrian, and bicyclist turning movement counts at each signalized intersection along the study corridor were collected on Tuesday, March 7th, 2023. 24-hour traffic volumes were collected on Monday, March 6th, 2023. Classification details for medium and heavy truck counts were also collected. The turning movement counts were collected during heavy traffic peak hours in three time periods throughout the day: AM Period from 7:00-10:00AM, Midday Period from 12:00-2:00PM, and PM Period from 3:00-6:00PM. The volumes were not adjusted based on any factors such as seasonal adjustment factors, but the turning movement counts were balanced from all the count sources. The existing peak hour volumes are shown on **Figure 25**. The existing ADT volumes are shown on **Figure 26**.

Along the Baseline Road corridor, the average daily traffic (ADT) amounts to nearly 55,000 vehicles per day (vpd). The Baseline Road/I-10 TI directional ramps have the highest volume (30,000 vpd southbound and 28,000 vpd northbound) and 48th Street had the second highest volume (19,000 vpd). Upon inspection of historical weekend traffic counts along the corridor, it was found that the weekday traffic counts were higher than the weekend counts. As a result, the weekday analysis was used to identify intersection improvements.

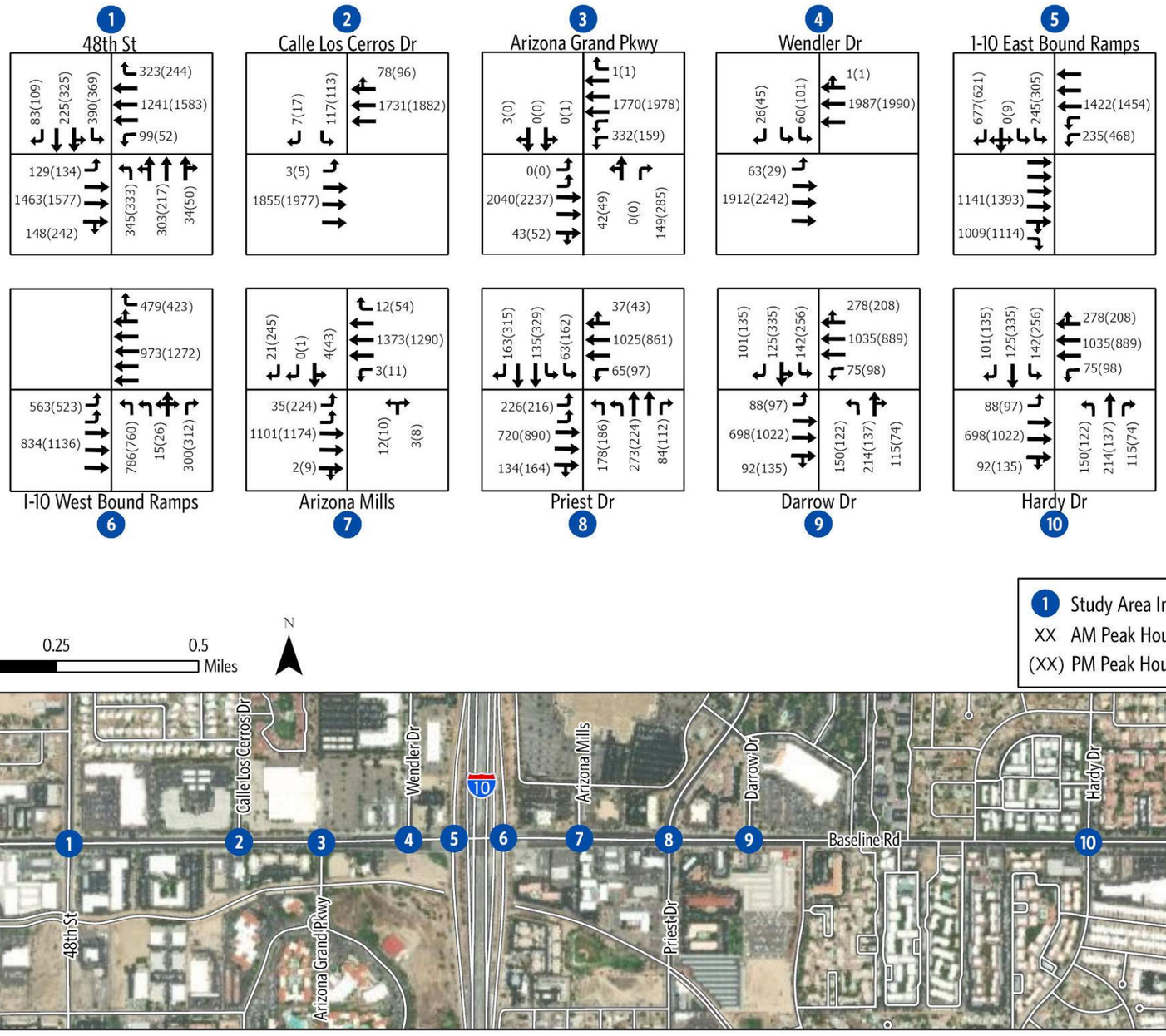

Figure 25. Existing (2023) Peak Hour Volumes

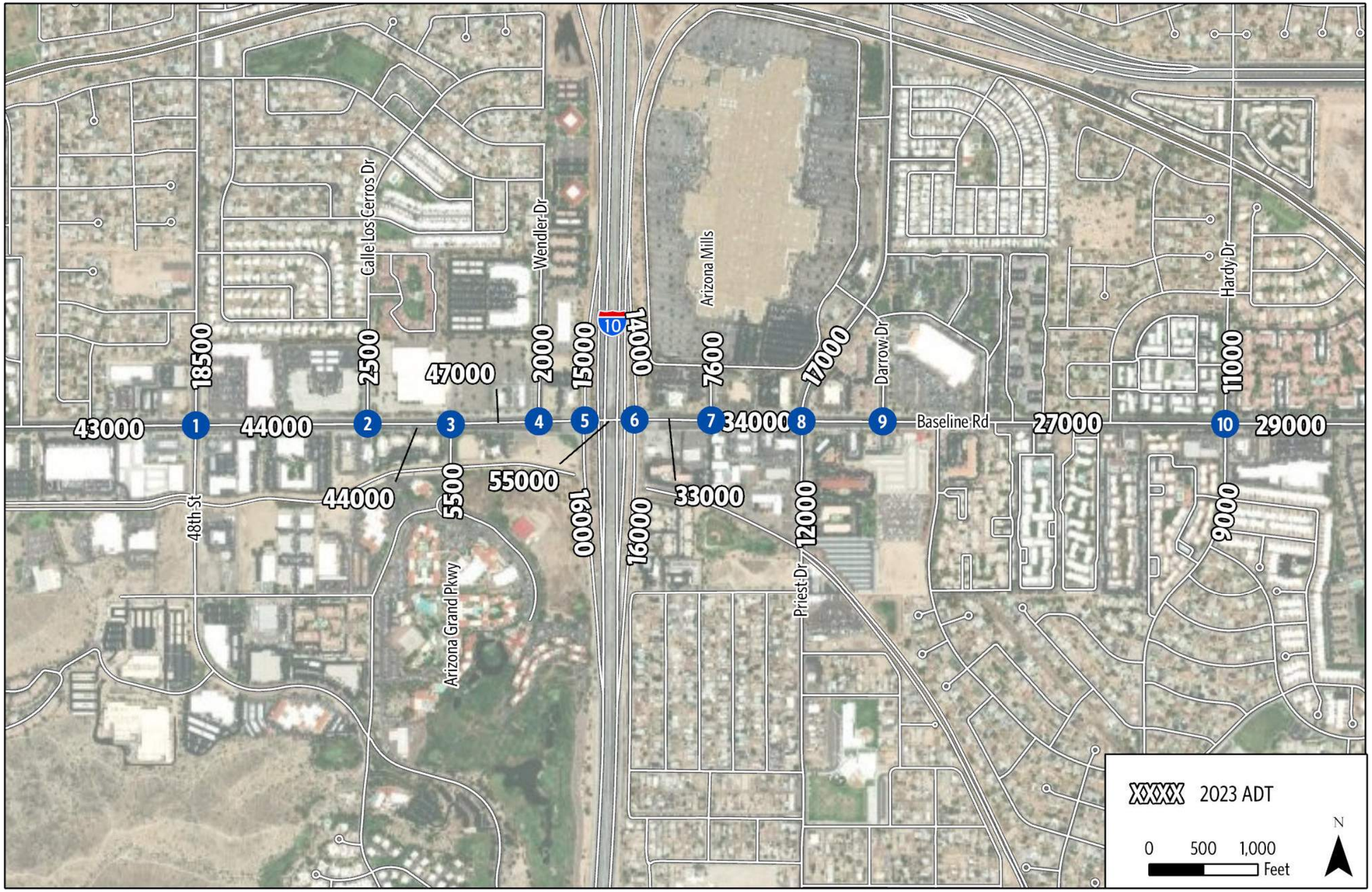

Figure 26. Existing (2023) ADT Volumes in the Study Corridor

The traffic counts were examined for traffic factors including the AM and PM directional split of traffic and the proportion of ADT traveling during the heavy traffic peak hours (K-Value) shown in **Table 12**.

Table 12. Existing Conditions Directional Volumes for Peak Hours

Roadway Segment	AM Peak Hour			PM Peak Hour		
	K-Value	Directional Split		K-Value	Directional Split	
		Eastbound/ Northbound	Westbound/ Southbound		Eastbound/ Northbound	Westbound/ Southbound
North 48th Street	7.5	52%	48%	8.1	49%	51%
South 48th Street	8.8	72%	28%	8.4	72%	28%
North Calle Los Cerros Drive	7.1	55%	45%	10.0	55%	45%
South Arizona Grand Parkway	7.7	39%	61%	7.9	58%	42%
North Wendler Drive	11.5	29%	71%	11.6	63%	37%
I-10 EB Off Ramp	5.9	-	100%	6.6	-	100%
I-10 EB On Ramp	6.9	-	100%	8.8	-	100%
I-10 WB Off Ramp	7.1	100%	-	7.3	100%	-
I-10 WB On Ramp	6.4	100%	-	6.4	100%	-
North Arizona Mills Circle	6.9	71%	29%	10.8	48%	52%
North Priest Drive	6.9	53%	47%	8.3	42%	58%
South Priest Drive	7.0	59%	41%	7.9	46%	54%
North Hardy Drive	7.8	61%	39%	8.7	38%	62%
South Hardy Drive	8.9	44%	56%	9.5	63%	37%
Baseline Road – Wendler Drive to Arizona Grand Parkway	6.5	50%	50%	6.7	47%	63%
Baseline Road – East of Hardy Drive	4.4	44%	56%	7.5	52%	48%
Baseline Road – Wendler Drive to I-10 WB Ramps	5.6	45%	55%	5.7	52%	48%
Baseline Road – West of 48th Street	6.6	45%	55%	7.7	46%	54%
Baseline Road – Darrow Drive to Hardy Drive	7.4	41%	59%	7.2	49%	51%

2.2.2 Origin-Destination

An Origin-Destination analysis was conducted using the StreetLight mobility analytics platform. The analysis revealed that the volumes along Baseline Road are higher west of I-10 than east of I-10. The analysis also indicated that the volumes from the west build up to the I-10 TI and then most of the volume disperse onto I-10 or US 60. A smaller portion continues east on Baseline Road. This pattern results in heavy turning movement volumes from Baseline Road onto I-10. **Figure 27** illustrates the OD patterns observed along Baseline Road near the TI.

Phoenix
Tempe
Mesa
Gilbert
Chandler
Guadalupe
Ahwatukee
Phoenix Sky Harbor International Airport
Red Mountain Fwy
Superstition Fwy
Loop 202
Loop 101
Loop 143
Loop 202 Santan Fwy
Congressman Ed Pastor Fwy
Salt River
Lehi
Rancho de Arboleda
Homestead
Woodridge Lakes
Summer Place Village
Suntrails
Kingsgate
Amberwood
Amberwood II
Tremaine
Renaissance
Pepperwood
Crestview
Alta Mira
Hacienda Solano Park
Cambridge Heights
Rose Lane Trailer Park
Palms Trailer Park
A-1 Trailer Park
Broadway Trailer Court
Villa Monte Vista
South Mountain Trailer Park
South Mountain Park and Preserve
Minnesota Court
Boyer Depot
Parkwood
Laveen
Central City
South Phoenix
Mountain View
Mesa Riverview
Mesa Gateway Airport
Williams Gateway Airport
Spectrum at Val Vista
E Thomas Rd
E Osborn Rd
W Thomas Rd
E Oak St
W McDowell Rd
E Buckeye Rd
W Buckeye Rd
E Broadway Rd
E Roeser Rd
E Guadalupe Rd
W Elliot Rd
E Elliot Rd
W Ray Rd
E Ray Rd
E Chandler Blvd
E Frye Rd
E Adobe St
E University Dr
W University Dr
E Apache Blvd
W Main St
E Main St
E Southern Ave
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S Gilbert Rd
S Val Vista Dr
S Recker Rd
S Higley Rd
S Rural Rd
S Mill Ave
S Price Rd
S Dobson Rd
S Alma School Rd
S Country Club Dr
S Stapley Dr
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Table 13. Level of Service Parameters

Level of Service	Control Delay (sec/veh)
A	<10
B	10 – 20
C	20 – 35
D	35 – 55
E	55 - 80
F	>80

The goal of the operational analysis was to develop interchange and intersection configurations in which the overall interchange and each intersection would operate at LOS “D” or better during the 2050 Peak Hours. The following assumptions and input parameters were used in the intersection analysis:

- Peak hour factor: 0.92
- Vehicle travel speed: 45 mph
- Intersection spacing: based on proposed roadway geometry
- Percentage of heavy vehicles: 2%
- Lane widths: 12 feet
- Base saturation flow rate: 1,900 vehicles per hour per lane (vphpl) for all movements
- Right-turn-on-red movements were included in the analysis and modeled in the software
- Signal cycle lengths were between 120 and 150 seconds

The AM and PM Peak Hour operations along the study corridor were modeled using Vissim 2022 version microsimulation software. The AM and PM Peak Hours conditions were calibrated in each model based on collected field data and ten simulation runs were completed with different random number generated seeds in compliance with the Federal Highway Administration (FHWA) guidelines for developing models to account for variability in the outputs. The ten simulation runs were averaged to determine the traffic operational analysis based on vehicle delay and LOS. The microsimulation included the traffic operational analysis along several driveways and the following intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 EB Ramps
- I-10 WB Ramps
- Arizona Mills Circle
- Priest Drive
- Darrow Drive
- Hardy Drive

2.2.4 Existing Conditions Analysis Results

The traffic operational analysis for each intersection along the corridor was conducted in Vissim 2022 microsimulation software. The results include corridor travel times, overall average intersection delay, average delay of the approaches at each intersection, average queue length for vehicles at approaches of each intersection, and overall maximum queue length at each intersection. Analyses for the Year 2023 existing conditions are shown in **Figures 28 and 29** summarize the existing LOS analysis results for the peak periods.

Several locations are highlighted for significant congestion (LOS “E” or “F”) and long vehicle queue lengths and travel times across the study corridor in the modeled alternatives.

The existing AM Peak Hour traffic operational analysis yielded the following results:

- Average westbound travel time from Hardy Drive to 48th Street is 4.4 minutes
- Average eastbound travel time from 48th Street to Hardy Drive is 4.5 minutes

The existing PM Peak Hour traffic operational analysis yielded the following results:

- LOS E
  - Wendler Drive Southbound Approach
  - Wendler Drive Eastbound Approach
  - I-10 EB Ramps Eastbound Approach
  - I-10 WB Ramps Eastbound Approach
- Average westbound travel time from Hardy Drive to 48th Street is 5.0 minutes
- Average eastbound travel time from 48th Street to Hardy Drive is 6.6 minutes

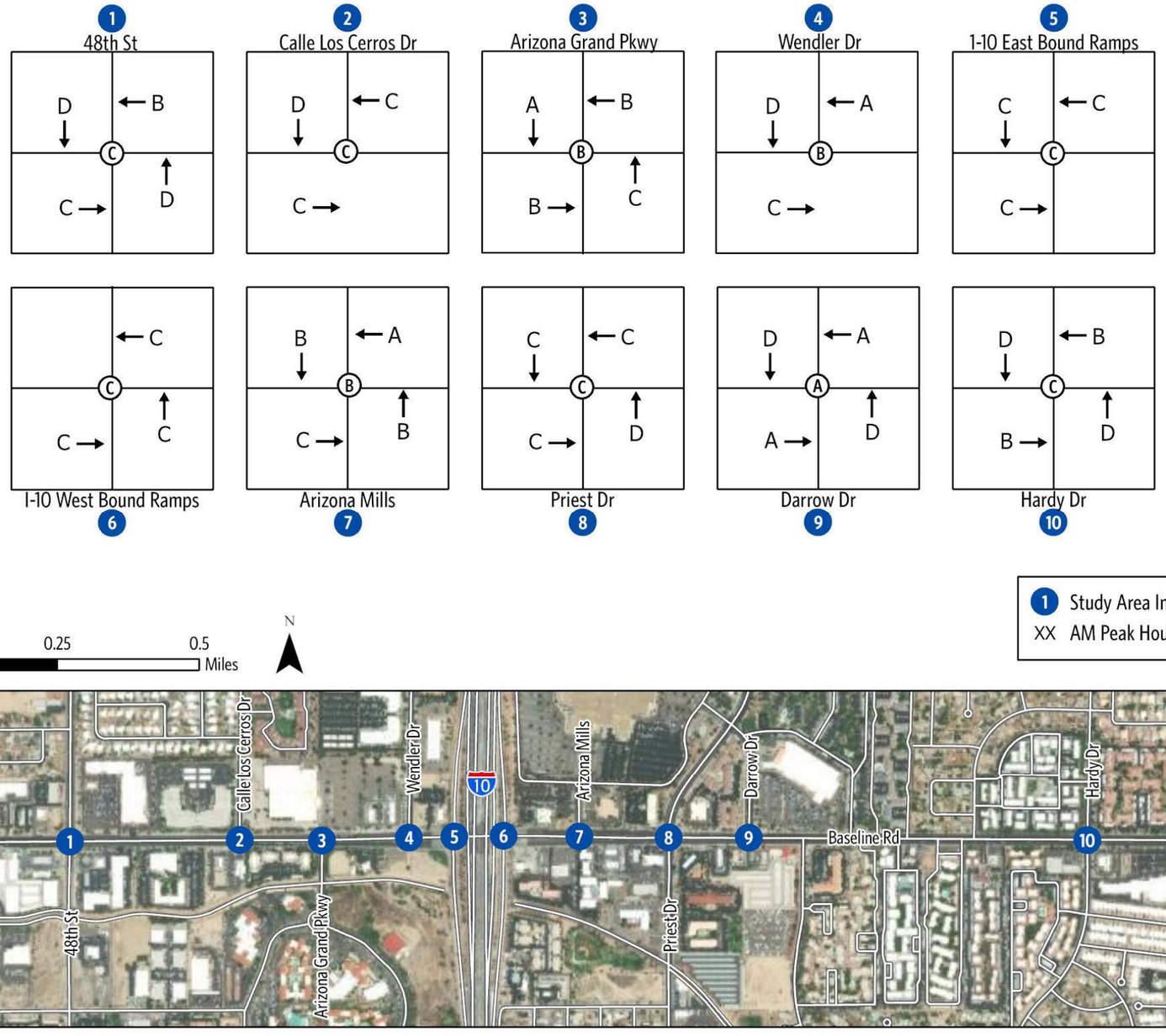
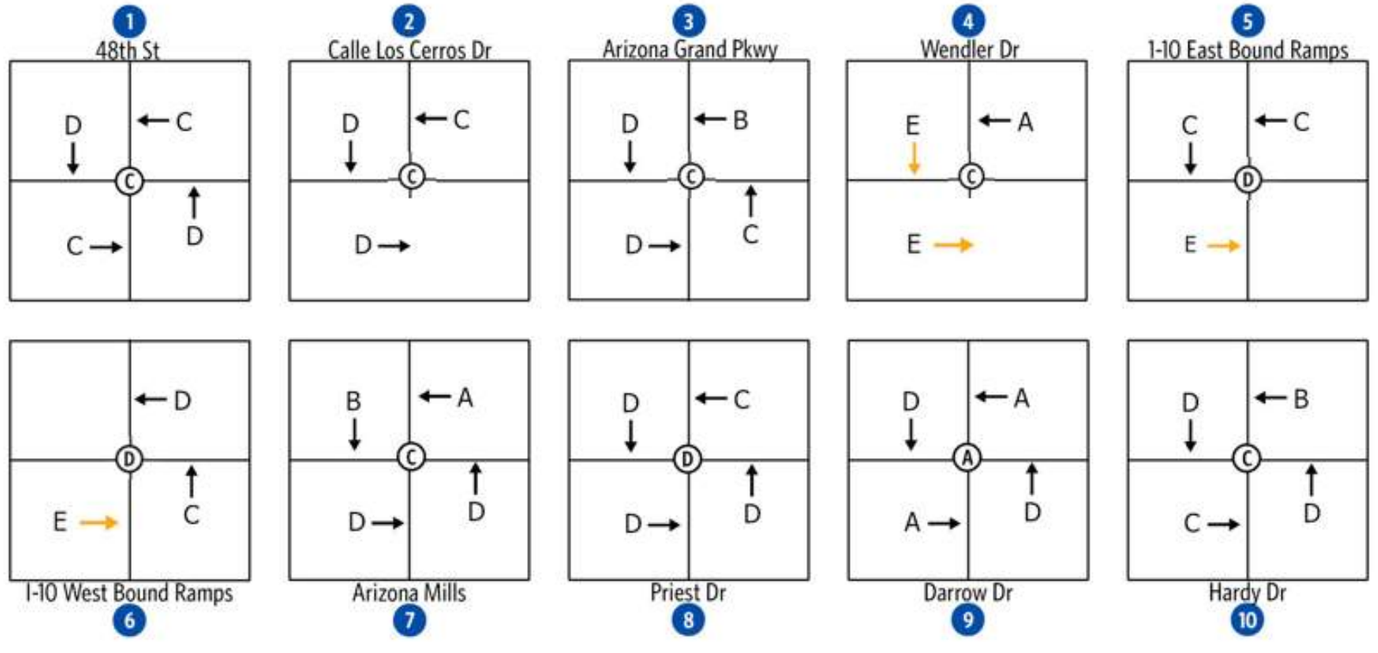


Figure 28. Existing (2023) AM Peak Hour LOS



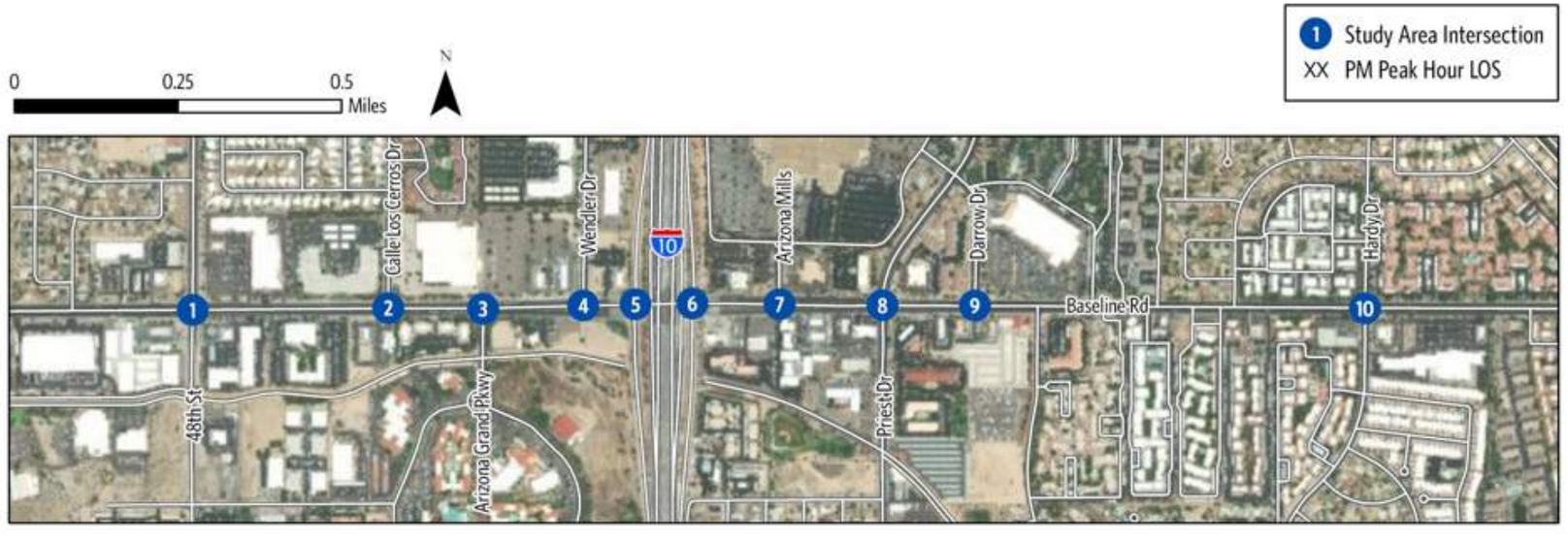


Figure 29. Existing (2023) PM Peak Hour LOS

2.3 FUTURE TRAFFIC CONDITIONS

2.3.1 Traffic Forecast

MAG Travel Demand Model data was obtained for the Study Area for existing (2023) and future year (2050) scenarios. The data provided the existing and future 24 hour estimates necessary for traffic forecasting. Review of the forecasts from MAG suggested that model estimates for the existing conditions were at least 10 to 15 percent different from observed counts. As a result, a post-processing methodology was applied to refine the model estimates in the future.

Future ADT and turning movement volumes for the Study Area were projected using forecasting methodology presented in NCHRP 765 Report: Analytical Travel Forecasting Approaches for Project-Level Planning and Design. The specific procedure used in the current study is an iterative turning movement estimation method which uses the combined Factoring Procedures for Ratio and Difference Methods in the NCHRP 765 Report. The inputs required for post-processing model estimates using this method are:

- Base year traffic counts
- Base year regional TDM estimates
- Future year regional TDM forecasts
- Design hour 30th highest K-factor

The procedure adjusts the model forecasted link volumes using an iterative method to determine future turning movement volumes, using existing turning movement counts as a basis. A tolerance of 10 percent was used to determine the convergence of the iterative method. The iterative process is designed to minimize the errors identified in the existing year model estimates when compared to the observed traffic counts.

The 2050 No-Build traffic turning movement volumes and lane configurations are shown in **Figure 30**.

2.3.2 Alternatives Design

The Baseline Road/I-10 traffic interchange and surrounding area includes several closely spaced intersections and driveways from 48th Street to Hardy Drive. The project limits along the study corridor are between Arizona Grand Parkway and Priest Drive, thus the alternative designs will be focused in this area. The alternatives analyzed include the No-Build alternative, MDI alternative, and DDI alternative. This section provides short descriptions of the alternatives analyzed as a part of the study.

- 2050 No-Build Conditions (**Figure 30**)
  - For comparison purposes only – no capacity or operational adjustments
  - Includes signal timing and phasing optimization.
- MDI Build Alternative (**Figure 31**)
  - Removed signalized intersection at Wendler Drive and replace with Right in-Right out configuration, increasing length of storage lanes along Baseline Road at I-10.
  - I-10 EB Ramp intersection features the following lane configurations:
    - 5 eastbound through lanes and 2 eastbound free-flow right turn lanes
    - 1 southbound left turn lane, 1 southbound shared left/through lane, 1 southbound shared through/right lane, 2 southbound right turn lanes
    - 2 westbound left turn lanes, 3 westbound through lanes
  - I-10 WB Ramp intersection features the following lane configurations:
    - 2 northbound left turn lanes, 1 northbound shared left/through lane, 1 northbound shared through/right lane, 1 northbound right turn lane
    - 2 eastbound left turn lanes, 3 eastbound through lanes
    - 4 westbound through lanes, 1 shared westbound through/right lane, 1 westbound right turn lane
  - Includes signal timing and phasing optimization.
- DDI Build Alternative (**Figure 32**)
  - Remove signalized intersection at Wendler Drive and replace with Right in-Right out configuration.
  - At the traffic interchange, right turn movements off of the ramps will be signalized with no right-turn-on-red (RTOR) movements permitted. Left turn movements on to I-10 will be free-flow.
  - I-10 EB Ramp intersection features the following lane configurations:
    - 3 eastbound through lanes and 2 eastbound right turn lanes (EBR are free movements)
    - 2 southbound left turn lanes, 2 southbound right turn lanes
    - 1 westbound left turn lanes, 3 westbound through lanes
  - I-10 WB Ramp intersection features the following lane configurations:
    - 2 northbound left turn lanes, 2 northbound right turn lanes
    - 1 eastbound left turn lane, 3 eastbound through lanes
    - 3 westbound through lanes, 1 WBT/R lane, 1 WBR lane (WBR is free movement)
  - Includes signal timing and phasing optimization.

2.3.3 Alternatives Analysis Results

Analyses for the Year 2050 No-Build Alternative and Year 2050 Recommended Build Alternatives are shown in **Table 14** and **15. Figures 33 to 42** summarize the No-Build, MDI Build, and DDI Build Alternatives LOS analysis results for the peak periods. Several locations are highlighted for significant congestion (LOS “E” or “F”) and long vehicle queue lengths and travel times across the study corridor in the modeled alternatives.

No-Build Concept

The No-Build AM Peak Hour traffic operational analysis yielded the following results:

- LOS E
  - 48th Street / Baseline Road Eastbound Approach
  - Wendler Drive Southbound Approach
  - I-10 WB Ramp Westbound and Eastbound Approaches
  - Priest Drive / Baseline Road Westbound Approach
  - Hardy Drive / Baseline Road Westbound Approach
- LOS F
  - 48th Street Northbound Approach
- Average westbound travel time from Hardy Drive to 48th Street is 10.8 minutes.
- Average eastbound travel time from 48th Street to Hardy Drive is 7.8 minutes.

The No-Build PM Peak Hour traffic operational analysis yielded the following results:

- LOS E
  - Priest Drive Northbound Approach
  - Darrow Drive Southbound Approach
- LOS F
  - 48th Street Northbound, Southbound, Eastbound Approaches
  - Calle Los Cerros Northbound, Southbound, Eastbound Approaches
  - Arizona Grand Parkway Northbound, Southbound, Eastbound Approaches
  - Wendler Drive Southbound, Eastbound Approaches
  - I-10 EB Ramps Southbound and Eastbound Approaches
  - I-10 WB Ramps Northbound, Eastbound and Westbound Approaches
  - Arizona Mills Circle Southbound, Eastbound and Westbound Approaches

  - Priest Drive Southbound and Westbound Approaches
  - Darrow Drive Northbound and Westbound Approaches
  - Hardy Drive Northbound, Southbound and Westbound Approaches
- Average westbound travel time from Hardy Drive to 48th Street is 20.2 minutes.
- Average eastbound travel time from 48th Street to Hardy Drive is 25.2 minutes.

MDI Concept

The MDI Build AM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Northbound Approach
  - Calle Los Cerros Southbound and Eastbound Approaches
  - Arizona Grand Parkway Northbound and Southbound Approaches
  - I-10 WB Ramp Westbound Approach
  - Arizona Mills Circle Southbound Approach
  - Priest Drive / Baseline Road Westbound Approach
  - Darrow Drive Southbound and Northbound Approaches
  - Hardy Drive Northbound Approach
- LOS F
  - 48th Street Southbound Approach
- Average estimated westbound travel time from Hardy Drive to 48th Street is 11.1 minutes.
- Average estimated eastbound travel time from 48th Street to Hardy Drive is 7.7 minutes.

The MDI Build PM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Eastbound Approach
  - Calle Los Cerros Southbound Approach
  - Arizona Grand Parkway Northbound and Southbound Approach
  - I-10 WB Ramp Westbound Approach
  - Darrow Drive Northbound Approach
- LOS F
  - 48th Street Southbound and Northbound Approaches
  - I-10 EB Ramp Southbound Approach
  - I-10 WB Ramp Northbound Approach
  - Arizona Mills Circle Southbound Approach
- Average estimated westbound travel time from Hardy Drive to 48th Street is 10.7 minutes.
- Average estimated eastbound travel time from 48th Street to Hardy Drive is 10.4 minutes.

DDI Concept

The DDI Build AM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Northbound Approach
  - Calle Los Cerros Southbound Approach
  - Darrow Drive Northbound Approach
- LOS F
  - 48th Street Southbound Approach
- Average estimated westbound travel time from Hardy Drive to 48th Street is 7.9 minutes.
- Average estimated eastbound travel time from 48th Street to Hardy Drive is 5.8 minutes.

The DDI Build PM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Eastbound Approach
  - Calle Los Cerros Southbound Approach
  - Arizona Grand Parkway Southbound Approach
  - I-10 WB Ramp Westbound Approach
  - Arizona Mills Circle Southbound Approach
  - Darrow Drive Northbound Approach
- LOS F
  - 48th Street Northbound and Southbound Approaches
- Average estimated westbound travel time from Hardy Drive to 48th Street is 9.3 minutes.
- Average estimated eastbound travel time from 48th Street to Hardy Drive is 8.5 minutes.

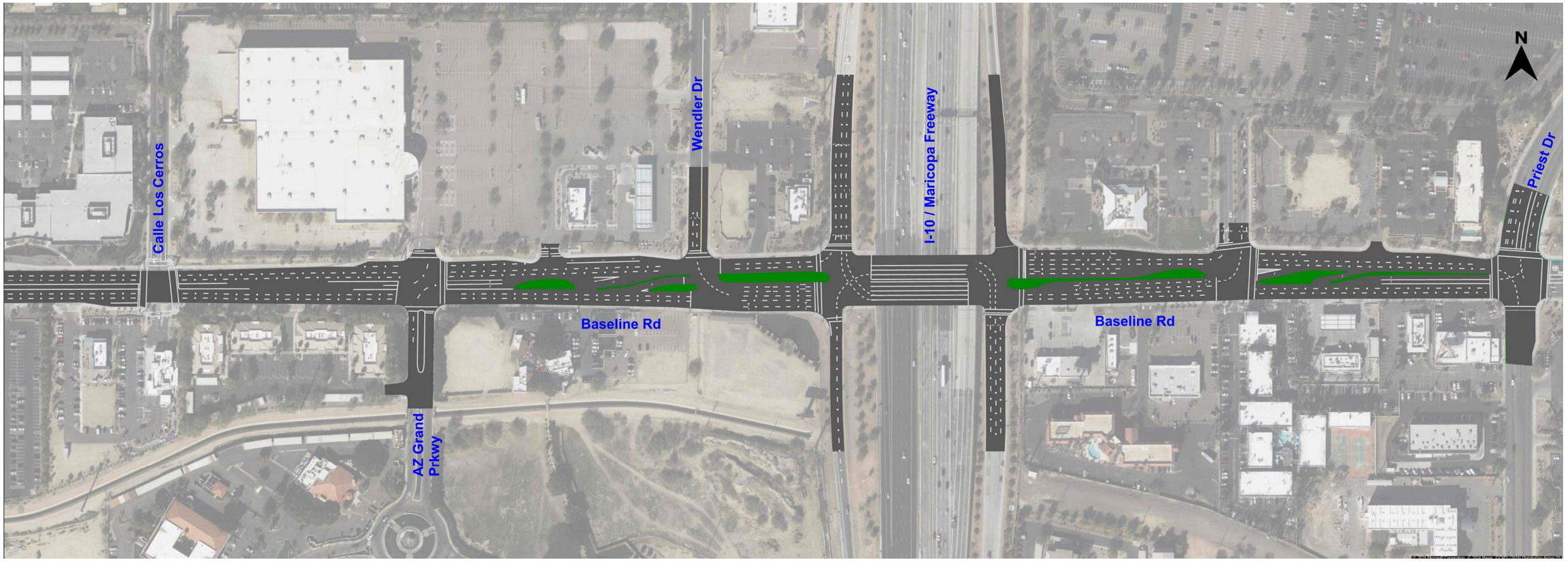


Figure 30. No Build Alternative

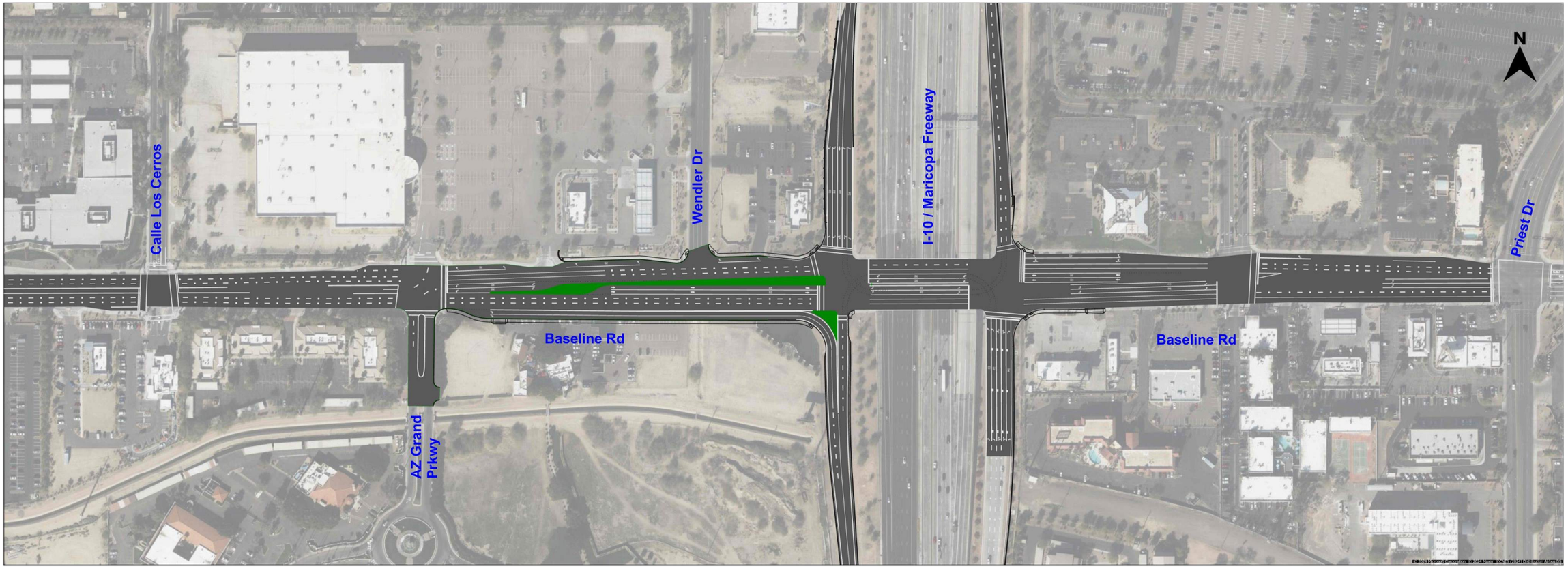


Figure 31. MDI Build Alternative

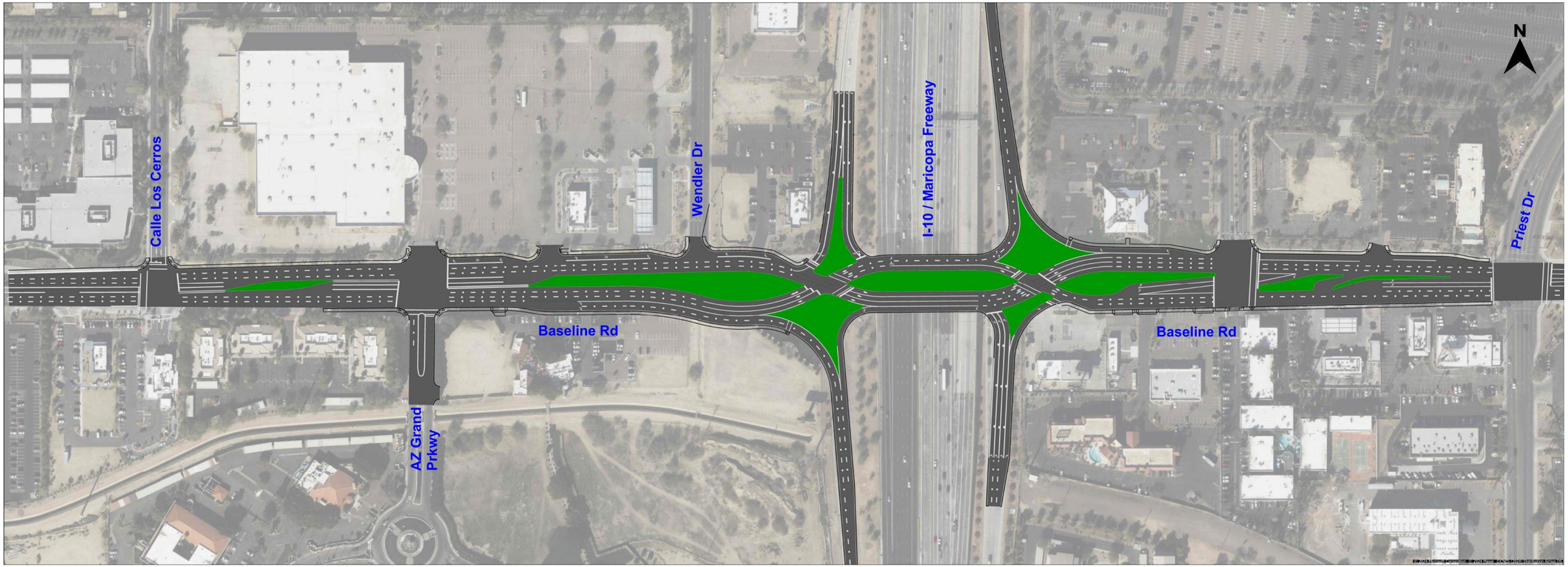


Figure 32. DDI Build Alternative

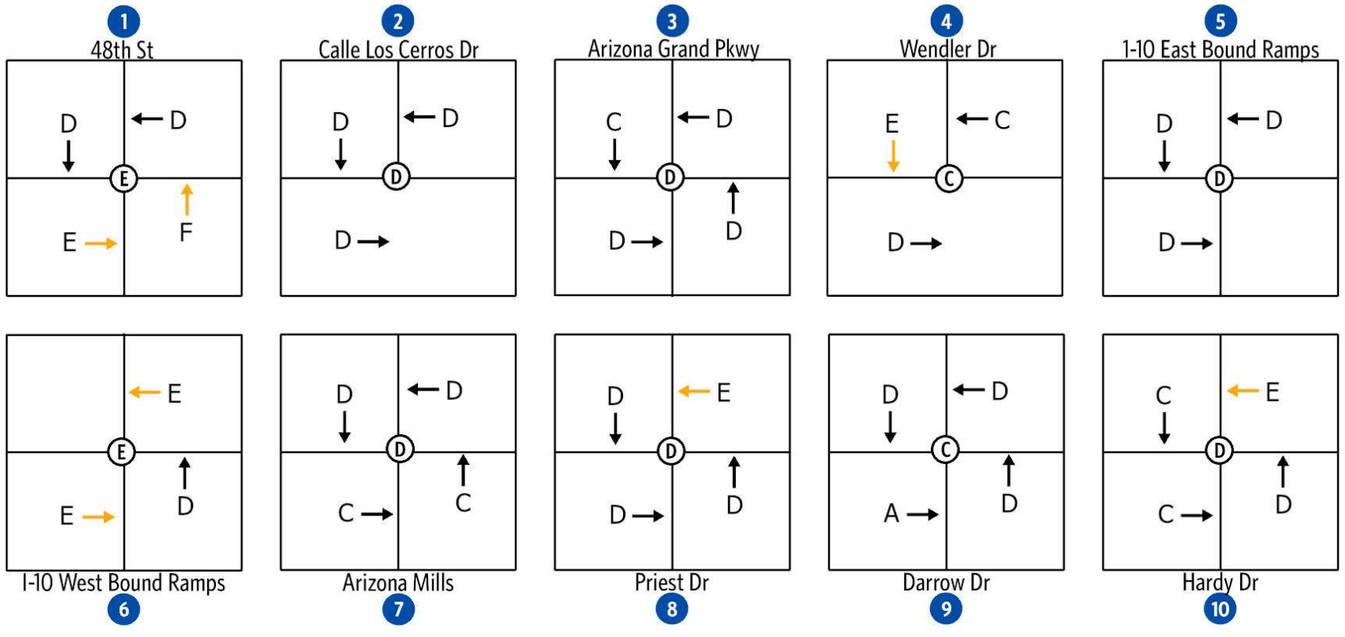


Figure 33. 2050 No-Build AM Peak Hour LOS

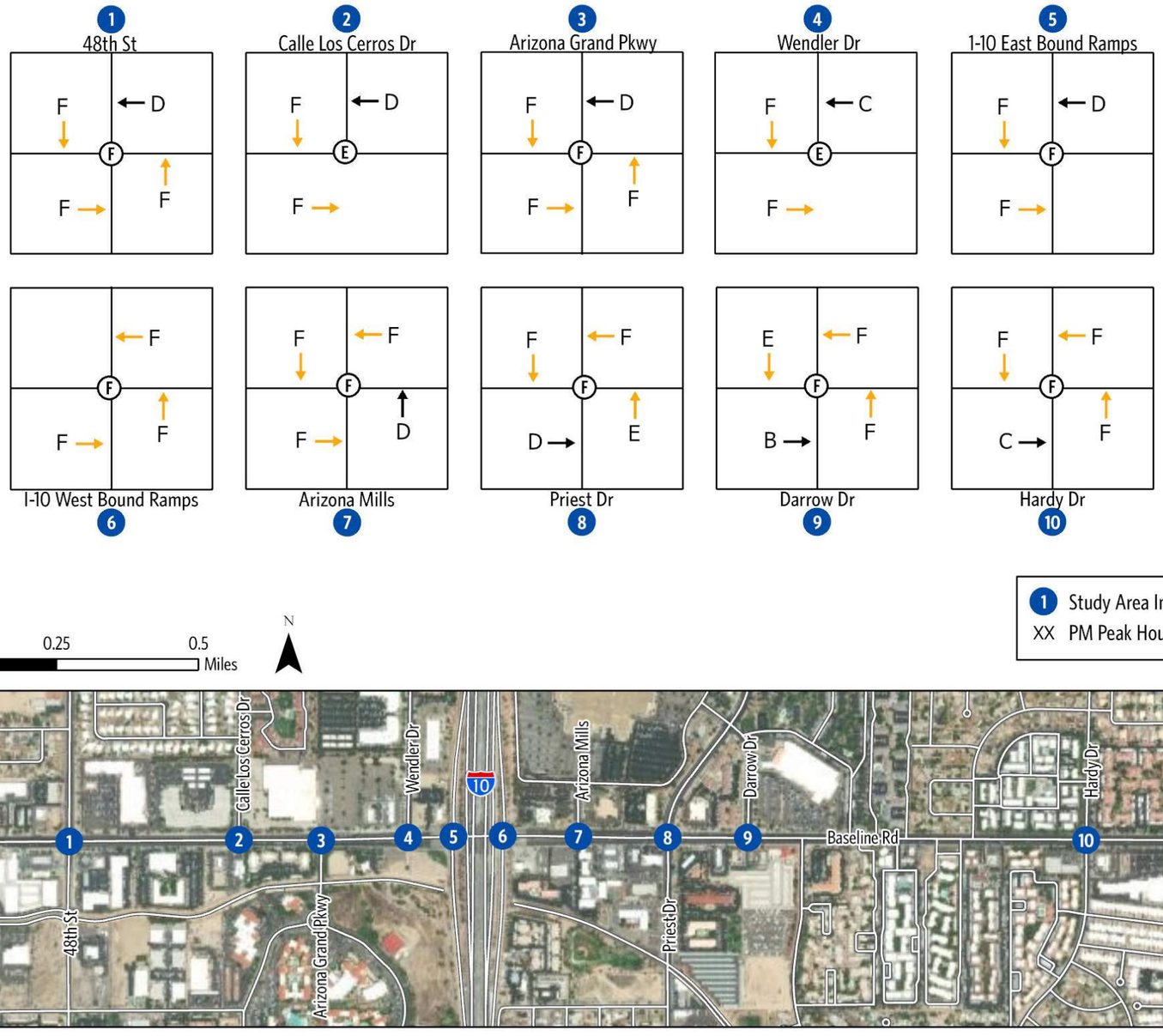


Figure 34. 2050 No-Build PM Peak Hour LOS

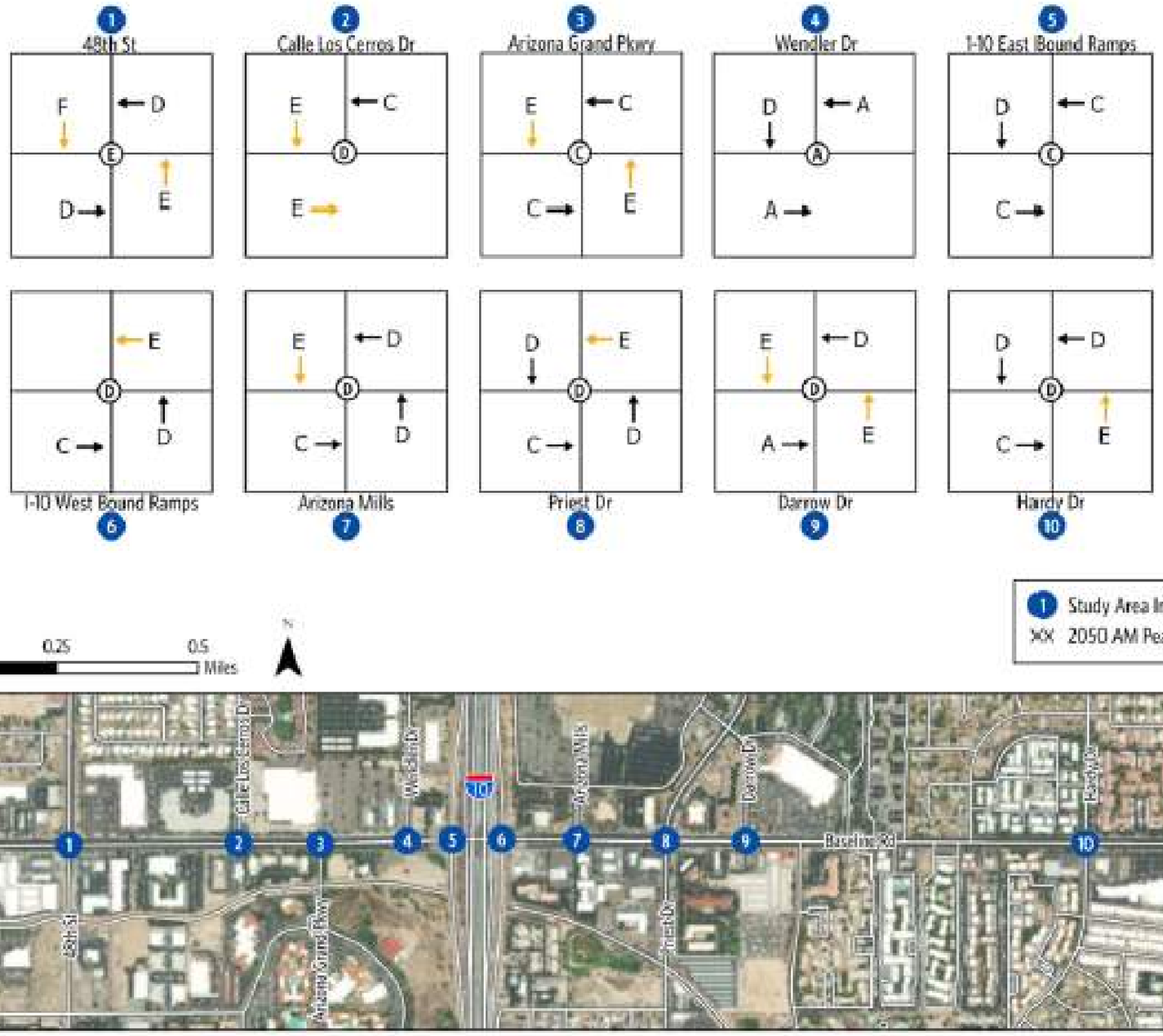


Figure 35. 2050 MDI AM Peak Hour LOS

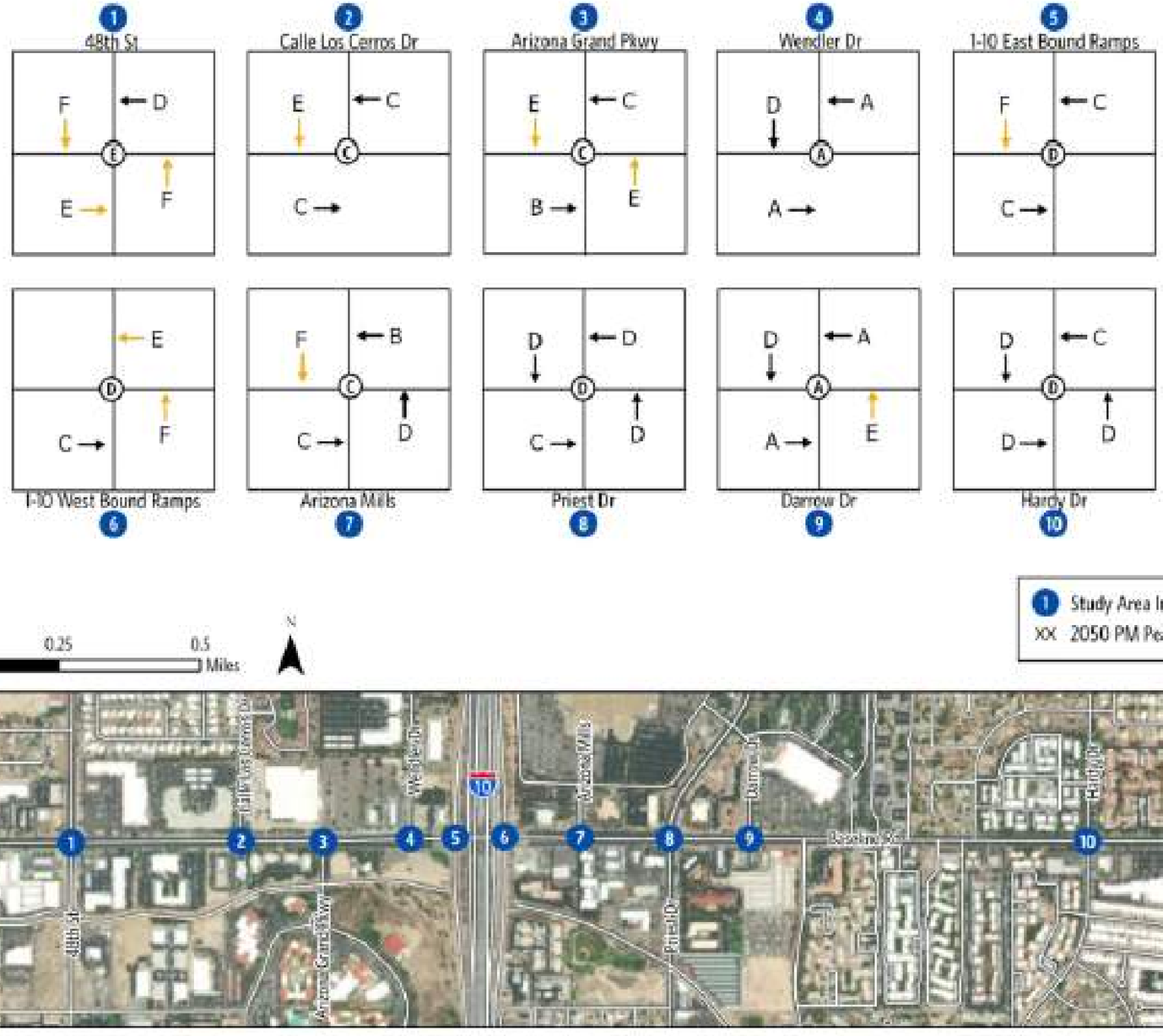


Figure 36. 2050 MDI PM Peak Hour LOS

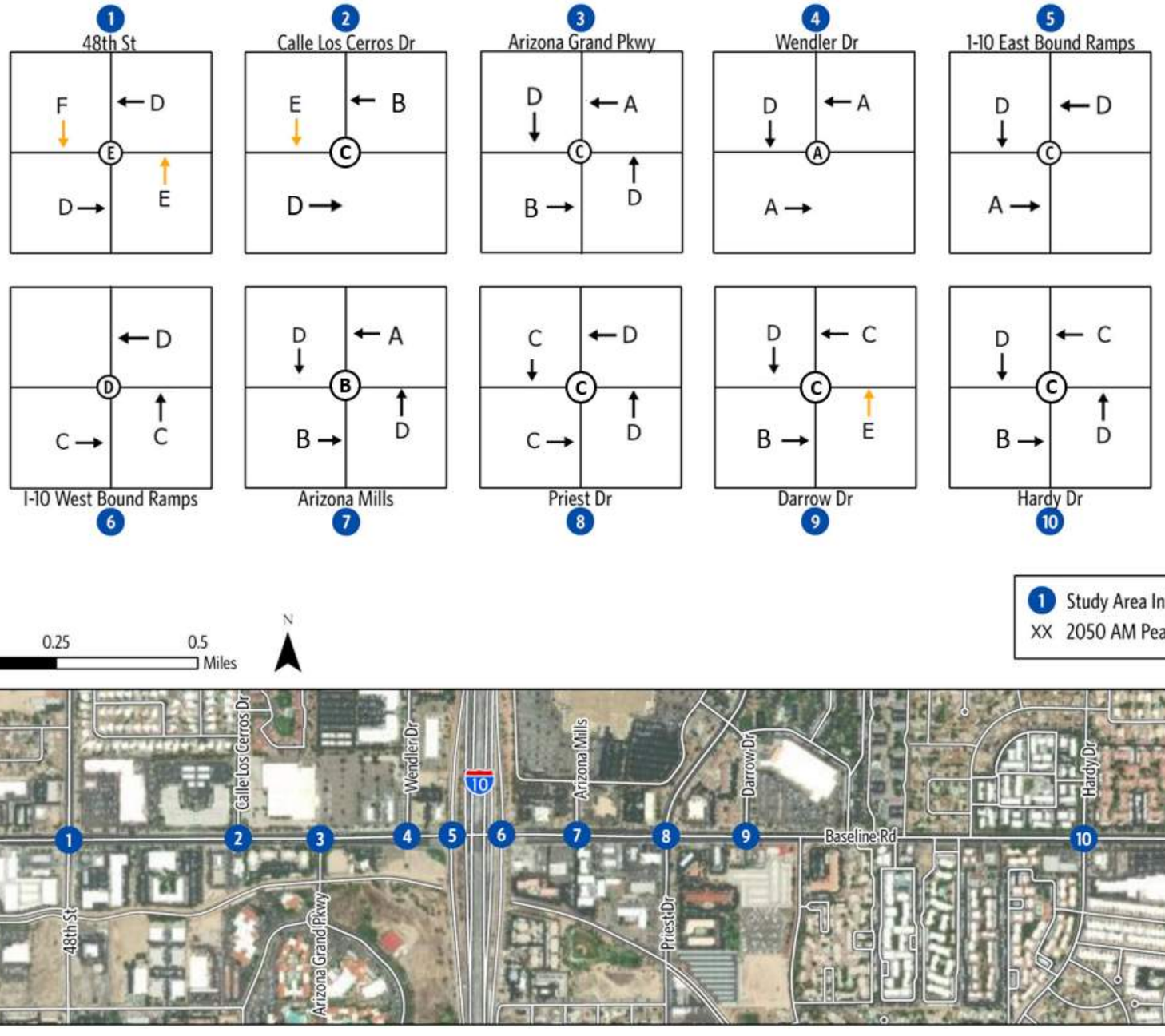
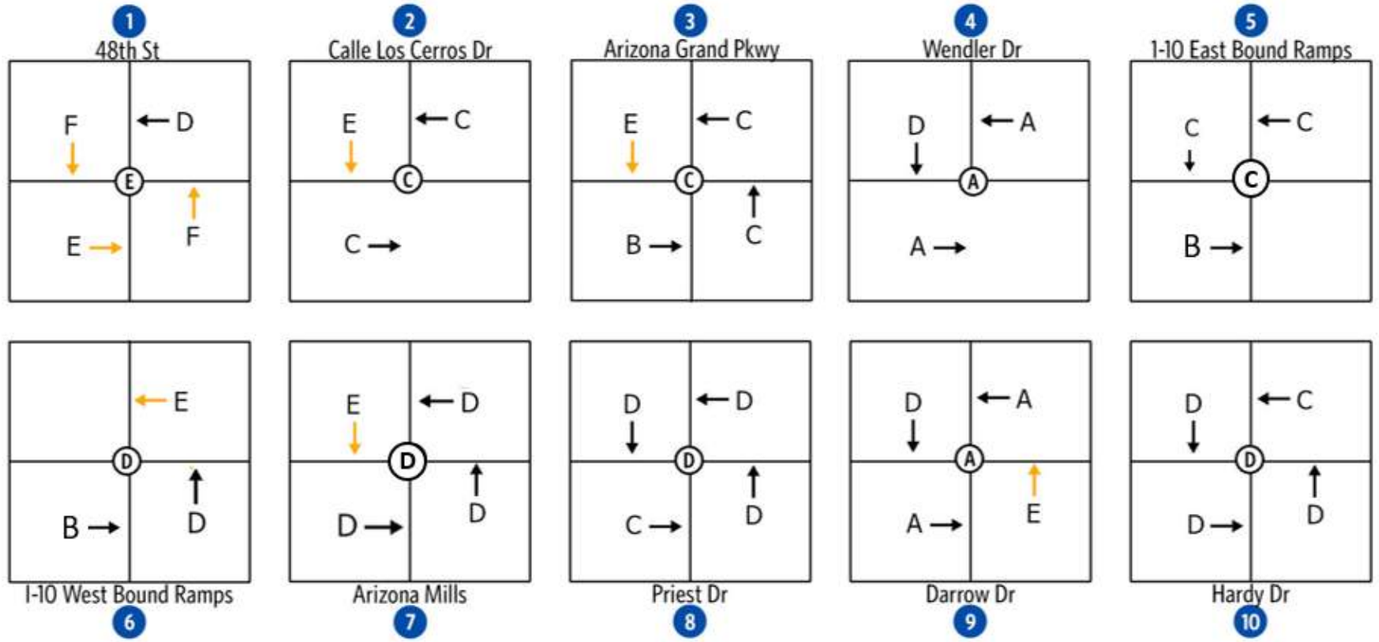


Figure 37. 2050 DDI AM Peak Hour LOS



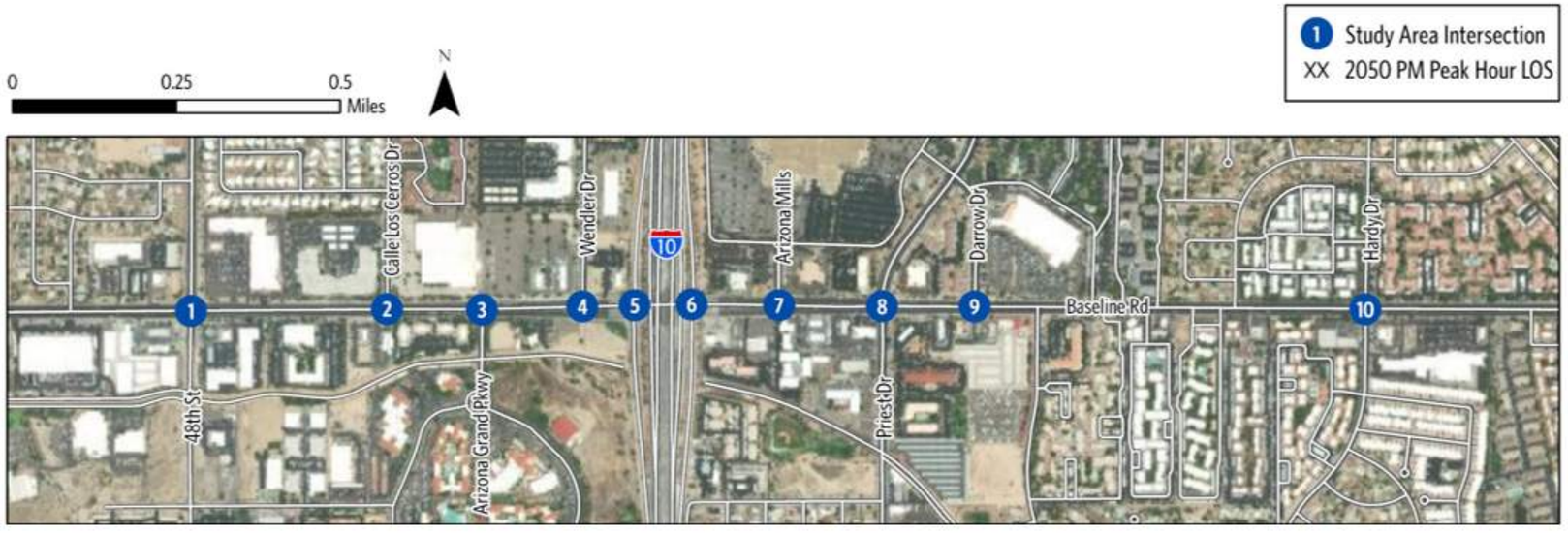


Figure 38. 2050 DDI PM Peak Hour LOS

Table 14. AM LOS Alternatives Summary

Intersection	Existing		No-Build		MDI		DDI	
	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS
Baseline Road / 48th Street	30.9	C	64.0	E	59.8	E	59.0	E
Baseline Road / Calle Los Cerros Drive	31.2	C	38.9	D	45.2	D	41.8	D
Baseline Road / Arizona Grand Parkway	12.1	B	39.6	D	32.1	C	23.5	C
Baseline Road / Wendler Drive	11.4	B	32.6	C	4.3	A	6.2	A
Baseline Road / I-10 EB Ramp	30.5	C	43.2	D	34.5	C	21.2	C
Baseline Road / I-10 WB Ramp	33.1	C	63.3	E	42.6	D	38.3	D
Baseline Road / Arizona Mills Circle	19.9	B	43.9	D	37.0	D	18.8	B
Baseline Road / Priest Drive	31.9	C	52.0	D	47.8	D	38.1	D
Baseline Road / Darrow Drive	9.9	A	27.7	C	38.3	D	31.6	C
Baseline Road / Hardy Drive	28.0	C	45.5	D	41.7	D	34.2	C

Table 15. PM LOS Alternatives Summary

Intersection	Existing		No-Build		MDI		DDI	
	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS	Intersection Delay (s)	Intersection LOS
Baseline Road / 48th Street	32.9	C	114.0	F	66.7	E	64.2	E
Baseline Road / Calle Los Cerros Drive	22.5	C	75.4	E	31.9	C	32.1	C
Baseline Road / Arizona Grand Parkway	30.5	C	83.7	F	33.2	C	25.6	C
Baseline Road / Wendler Drive	21.2	C	79.7	E	5.0	A	6.8	A
Baseline Road / I-10 EB Ramp	46.8	D	101.9	F	43.8	D	36.5	C
Baseline Road / I-10 WB Ramp	49.9	D	116.6	F	51.2	D	44.8	D
Baseline Road / Arizona Mills Circle	32.4	C	160.9	F	28.2	C	42.8	D
Baseline Road / Priest Drive	39.5	C	127.1	F	38.1	D	35.0	D
Baseline Road / Darrow Drive	8.8	A	113.7	F	9.1	A	8.6	A
Baseline Road / Hardy Drive	30.1	C	93.9	F	36.7	D	37.5	D

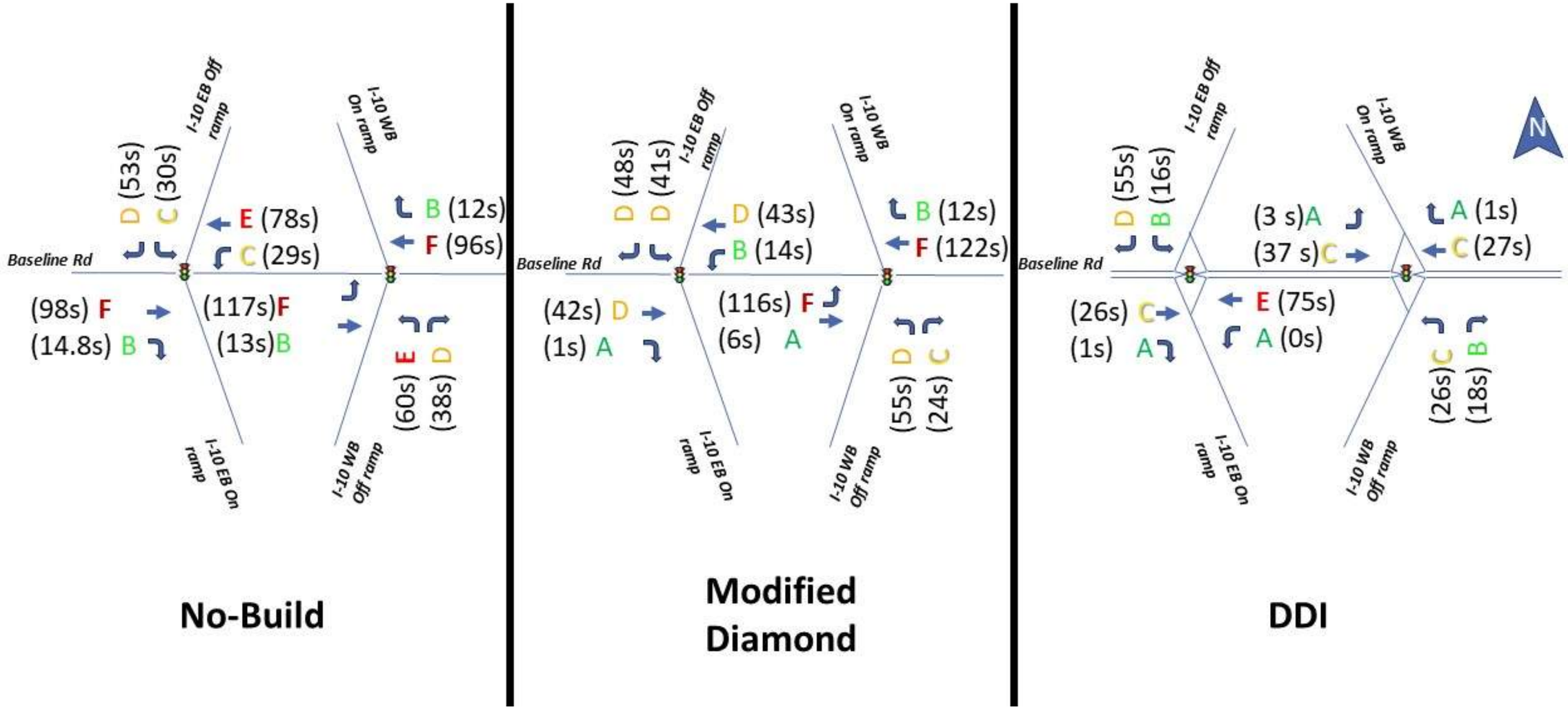


Figure 39. 2050 LOS and Delay – AM Peak Hour

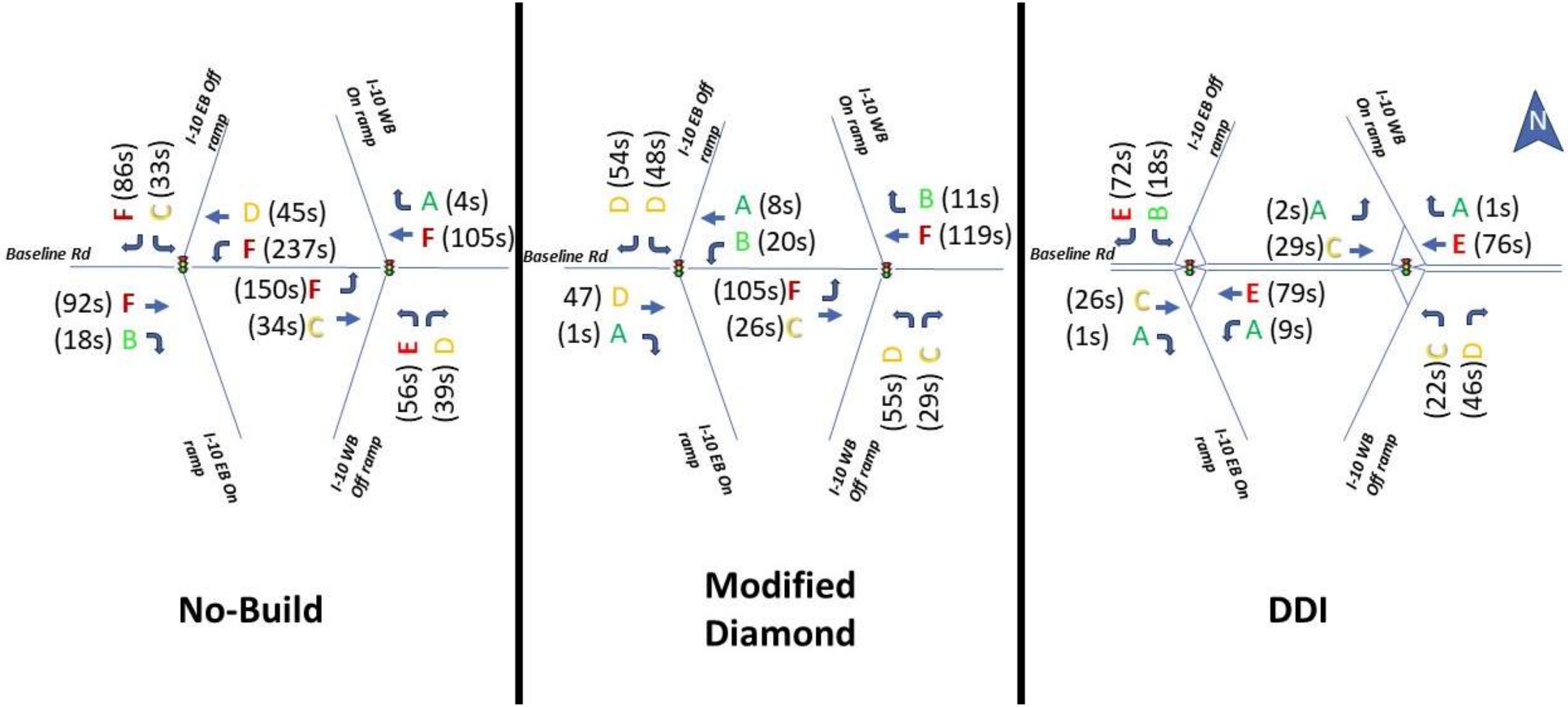


Figure 40. LOS & Delay – PM Peak Hour

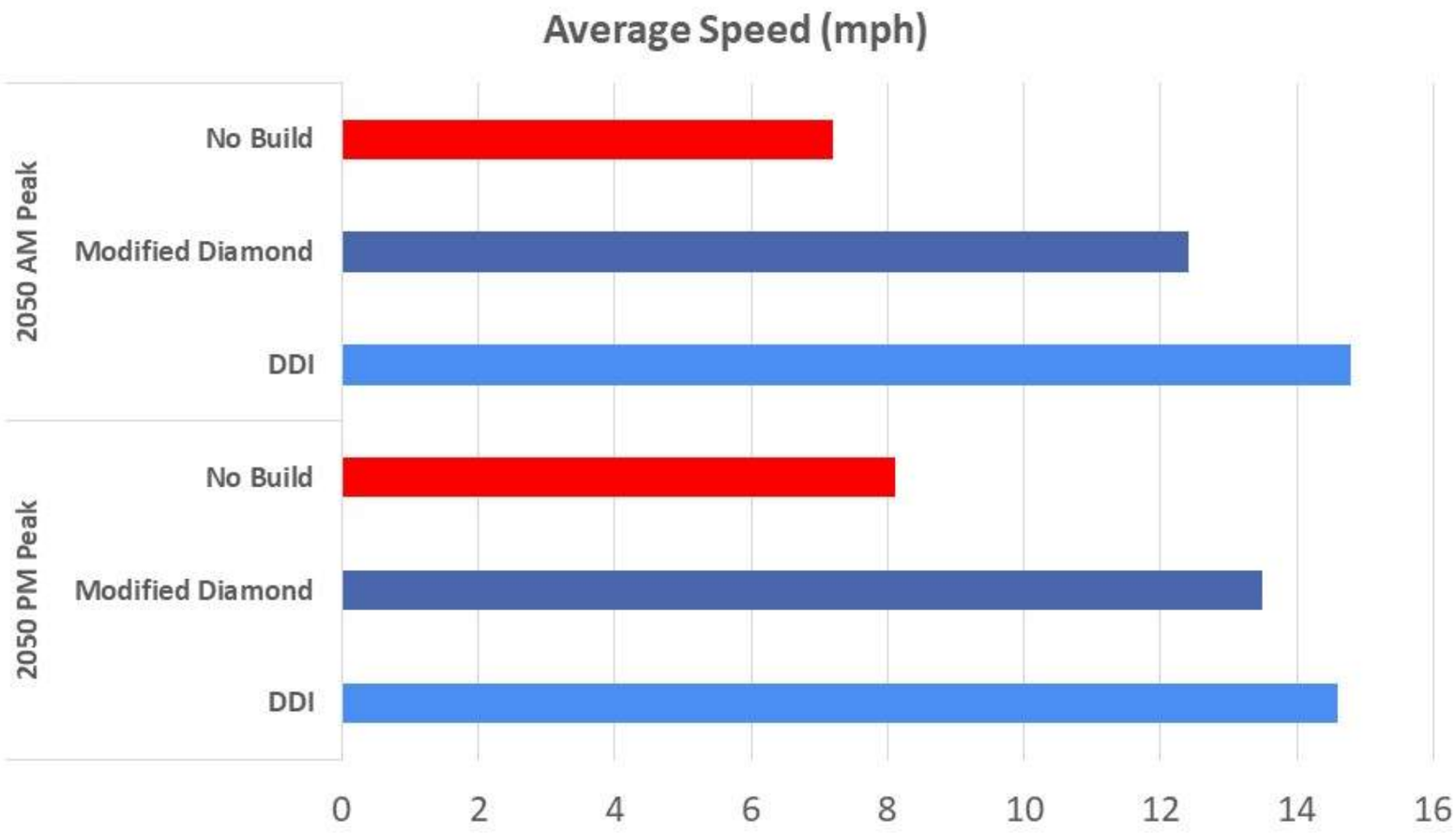


Figure 41. Average Speed 2050 Baseline Road

Figure 42. 2050 95th Percentile Queue Lenghts

3.0 DESIGN CONCEPT ALTERNATIVES – BASELINE ROAD TI

3.1 INTRODUCTION

The No Build Alternative and Build Alternatives were developed and evaluated for the I-10/Baseline Road TI.

Two interchange build configurations were evaluated to improve level of service along Baseline Road: a MDI and DDI. The following sections include background information and detail the alternative development and evaluation. Issues, constraints, and recommendations are also discussed.

Each interchange alternative evaluated contains elements common to the other alternatives. Common elements to all TI build alternatives include the following:

- Baseline Road remains under I-10 because there is an existing overpass bridge.
- Existing traffic signal at Wendler Drive to be removed.
- Maintain access to businesses located adjacent to Baseline Road.

3.2 DESIGN CONCEPT ALTERNATIVES CONSIDERED

3.2.1 No Build Alternative

The No Build alternative would not improve the level of service along Baseline Road. Congestion on Baseline Road would not be alleviated.

The existing conditions of Baseline Road will be unaltered. Baseline Road will maintain the existing condition of three through lanes in each direction. Dedicated right turn lanes and storage lengths at the following locations will remain in place: eastbound at the I-10 EB entrance ramp, westbound at the I-10 WB entrance ramp, westbound at parcel numbers 123-22-614 (Burger King) and 123-22-613 (Frys Electronics) at the intersection of Arizona Grand Parkway. Dedicated left turn lanes at the following locations will remain in place: eastbound at Wendler Drive, Eastbound at I-10 WB entrance ramp, westbound at I-10 EB entrance ramp, and westbound to parcel number 301-10-77 (Aunt Chilada's Mexican Cantina). All existing traffic signals will remain in place, and there would be no changes to sidewalks, crosswalks, driveways, or bus stops.

3.2.2 Modified Diamond Alternative

The MDI alternative would expand the existing Baseline Road infrastructure with modifications to the existing diamond interchange and adjacent intersections.

I-10 TI Ramp Modifications:

The modified ramps would intersect Baseline Road at existing signalized intersections. The widening of the I-10 exit ramps to Baseline Road would allow for additional storage which will facilitate an increase in the signal timing for the through movement along Baseline Road. Widening of the I-10 entrance ramps will allow dedicated right and left turn movements to be made simultaneously. This will allow for signal timings and phasing to be adjusted to increase efficiency of traffic flow through the intersections.

The I-10 EB exit ramp to Baseline Road is proposed to be widened from four lanes to five lanes at its intersection with Baseline Road. The typical section for the exit ramp consists of the left most lane being a dedicated left turn lane. The second lane from the left will be a combination through/left turn lane. The middle lane will be a dedicated through lane. The two right most lanes will be dedicated right turn lanes.

The I-10 EB entrance ramp is proposed to be widened to four lanes to accommodate dedicated right turn lanes from eastbound Baseline Road and dedicated left turn lanes from westbound Baseline Road. The proposed four lanes will be reduced to match the existing two-lane ramp section prior to its connection with I-10.

The I-10 WB exit ramp to Baseline Road is proposed to be widened from four lanes to five lanes at its intersection with Baseline Road. The typical section for the exit ramp consists of the two left most lanes being dedicated left turn lanes. The middle lane will be a combination through/left turn lane. The fourth lane will be a combination through/right turn lane with the right most lane being a dedicated right turn lane.

The I-10 WB entrance ramp is proposed to be widened to three lanes to accommodate dedicated right turn lane from westbound Baseline Road and dedicated left turn lanes from eastbound Baseline Road. This will allow right and left turn movements to be made simultaneously. The proposed three lanes will be reduced to match the existing single lane ramp section.

Baseline Road Modifications:

Three through lanes will be provided in each direction for Baseline Road throughout the project limits. Existing dedicated right and left turn lanes will be perpetuated. The storage length for the existing dedicated turn lanes will be extended. An additional dedicated right turn lane is proposed for eastbound traffic between Arizona Grand Parkway and the I-10 EB entrance ramp intersection.

The traffic signal at Wendler Drive will be eliminated. Wendler Drive is proposed to be a right in/out intersection. A dedicated right turn lane to Wendler Drive is proposed to be added for westbound traffic. The elimination of the traffic signal will increase traffic flow in the vicinity of the I-10 EB exit ramp intersection.

Improvements to Baseline Road between the intersections with Arizona Grand Parkway and the I-10 EB ramps will include the closure of two driveways to parcel number 301-10-177 (Aunt Chilada's Mexican Cantina) on the south side of Baseline Road. Currently the parcel is served by three driveways off Baseline Road. The project proposes to retain the western most drive while closing the eastern two driveways. The closure of the middle drive will eliminate the need for the existing westbound dedicated left turn lane. The eastbound dedicated left turn lane to Wendler Drive is proposed to be eliminated with Wendler Drive being proposed as a right in/out intersection. With the elimination of these existing left turn lanes, the dual dedicated left turn lanes for northbound I-10 entrance ramp are proposed to be extended to the west. The existing eastbound dedicated right turn lane for I-10 EB entrance ramp will be extended to the west along with a proposed additional dedicated right turn lane.

See **Figure 43** for the proposed layout of the MDI.

The proposed roadway layout impacts business access to Aunt Chilada's, Town of Guadalupe strip mall, and Denny's. Town of Guadalupe first driveway will be closed to meet minimum distance from ramp requirement. The second driveway will be relocated to the east so that the westbound dedicated left turn lane can be eliminated in order to facilitate the extension of the dual left turn lanes for the I-10 WB ramp. Access to Aunt Chilada's will be relocated and/or reconstructed from Arizona Grand Parkway. Access to Denny's from Baseline Road will be closed.

Sidewalks and raised median improvements are also provided in MDI alternative. The existing signalized T-intersection at Wendler Dr/Baseline Road will be reestablished as a right in/right out because of its close proximity to traffic interchange. As the intersection is being reestablished as a right in/right out the traffic signal is proposed to be removed. This will eliminate a point of congestion along the corridor.

Approximately 0.45 acres of right-of-way will be required for proposed Baseline Road ramps and arterial widening.

Proposed drainage improvements through the corridor include catch basins with storm drain. Existing roadway catch basins will be removed and reconstructed to the proposed curb line and existing area inlets will be removed and reconstructed to the outside of the proposed roadway widening.

Due to the increased pavement area proposed in this alternative, peak flows from the traffic interchange entering the trunkline are increased. While the downstream detention basins are intended to dampen the increased flows of the trunkline, further study is needed to verify that no increases in peak flow will be observed at the Tempe Drain.

The estimated total project cost is $16,224,000.

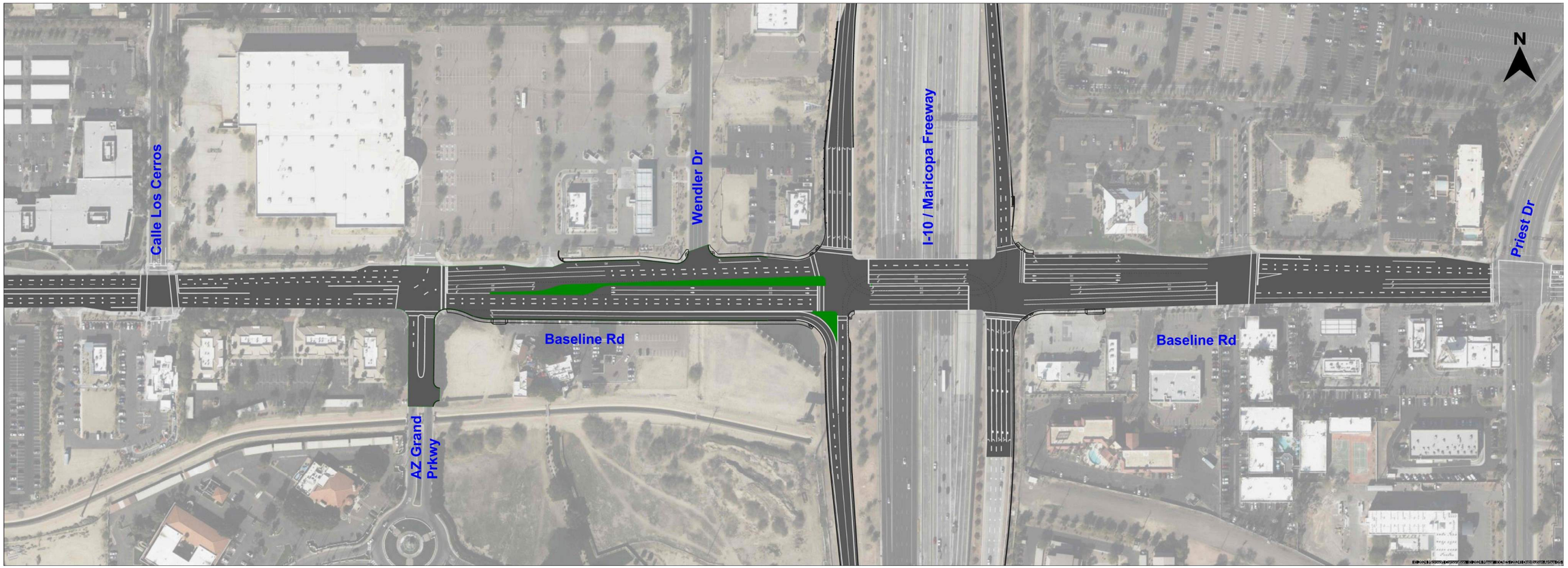


Figure 43. Proposed Modified Diamond Configuration

3.2.3 Diverging Diamond Alternative

The DDI alternative would construct two signalized ramp intersections on Baseline Road, with eastbound and westbound traffic crossing to the opposite side of the road through the TI area. The crossovers eliminate the need for left-turning vehicles to cross paths of approaching vehicles. The two intersections would be controlled by two-phase traffic signals.

I-10 TI Ramp Modifications:

The modified ramps would intersect Baseline Road with free flow intersections for the entrance ramps and yield conditions for the exit ramps.

The I-10 EB exit ramp to Baseline Road is proposed to maintain a four-lane section as it approaches Baseline Road. The four-lane section will be realigned and separated into two lanes for the right turn movement and two lanes for the left turn movements. The two right turn lanes will be signal controlled at their intersection with Baseline Road to provide pedestrian access across the ramp intersection. The two left turn lanes will be yield controlled at their intersection with Baseline Road.

The I-10 EB entrance ramp is proposed to be a three-lane section. The right two lanes will accommodate a free flow movement from eastbound Baseline Road. The left most lane would accommodate a free flow movement for westbound Baseline Road. The two lanes from eastbound Baseline Road and the single lane for from westbound Baseline Road would be separated by an island prior to their merging together to form the three-lane section. The proposed three lane segment will be reduced to match the existing two-lane ramp section prior to its connection with I-10.

The I-10 WB exit ramp to Baseline Road is proposed to provide a four-lane section as it approaches Baseline Road. The four-lane section will be realigned and separated into three lanes for the left turn movement and a single lane for the right turn movement. The single right turn lane will be signal controlled at its intersection with Baseline Road to provide pedestrian access across the ramp intersection. The three left turn lanes will be yield controlled at their intersection with Baseline Road.

The I-10 WB entrance ramp is proposed to be a three-lane section. The left two lanes will accommodate a free flow movement from eastbound Baseline Road. The right most lane would accommodate a free flow movement for westbound Baseline Road. The two lanes from eastbound Baseline Road and the single lane for from westbound Baseline Road would be separated by an island prior to their merging together to form the three-lane section. The proposed three lane segment will be reduced to match the existing two-lane ramp section prior to its connection with I-10.

Baseline Road Modifications

Three through lanes will be provided in each direction for Baseline Road throughout the project limits except for the eastbound lanes being reduced to two through lanes at the intersection with the I-10 WB entrance ramp and crossover on the east side of I-10.

The traffic signal at Wendler Drive will be eliminated. Wendler Drive is proposed to be a right in/out intersection. A dedicated right turn lane to Wendler Drive is proposed to be added for westbound traffic. The elimination of the traffic signal will increase traffic flow in the vicinity of the I-10 EB exit ramp intersection.

Improvements to Baseline Road between the intersections with 48th Street and I-10 EB ramps will include modifications to the existing curb lines to widen the roadway to accommodate the width required to develop the crossover conditions for the diverging diamond interchange. Infrastructure adjacent to the existing curb such as driveways, sidewalks, and curb ramps are proposed to be constructed along with the proposed widening of Baseline Road. Modifications to raised medians are proposed to conform to the new roadway geometry and lane configurations. Eastbound dual dedicated right turn lanes are proposed for the southbound I-10 entrance ramp. Westbound dedicated right turn lanes are proposed for Wendler Drive, access driveway to Burger King, and the driveway to Fry's Electronics. Dual left turn lanes are proposed for both directions at the Arizona Grand Parkway intersection. Modifications will include the closure of two driveways to parcel number 301-10-177 (Aunt Chilada's Mexican Cantina) on the south side of Baseline Road. Currently the parcel is served by three driveways off Baseline Road. The project proposes to retain the western most drive while closing the eastern two driveways. Additional access to Aunt Chilada's will be relocated and/or reconstructed from Arizona Grand Parkway. Access to Denny's from Baseline Road will be closed.

Improvements to Baseline Road between the I-10 EB and northbound ramp and the proposed Baseline Road crossovers will include a four-lane section with left most lane being a westbound dedicated left turn lane for free flow movement onto the I-10 EB entrance ramp. Eastbound Baseline Road is proposed as a three-lane section with the outside lane being a dedicated left turn lane onto the I-10 WB entrance ramp. The middle eastbound lane will be a combination through/left turn lane. The inside eastbound lane will be a through lane.

Improvements to Baseline Road between the I-10 WB ramps and Priest Drive will include modifications to the existing curb lines to widen the roadway to accommodate the width required to develop the crossover conditions for the diverging diamond interchange. Infrastructure adjacent to the existing curb such as driveways, sidewalks, and curb ramps are proposed to be constructed along with the proposed widening of Baseline Road. Modifications to raised medians are proposed to conform to the new roadway geometry and lane configurations. A third eastbound through lane will be provided immediately east of the eastern Baseline Road crossover intersection. Eastbound dual dedicated left turn lanes will be provided at the intersections of Arizona Mills South and at Priest Drive. Single westbound dedicated left turn lanes will be provided at the Shell Gasoline Station and Arizona Mills South intersection. Westbound dedicated right turn lanes are proposed for the following locations: Driveway serving parcel numbers 123-25-031 & 123-25-050, intersection at Arizona Mills South, and at the I-10 WB entrance ramp.

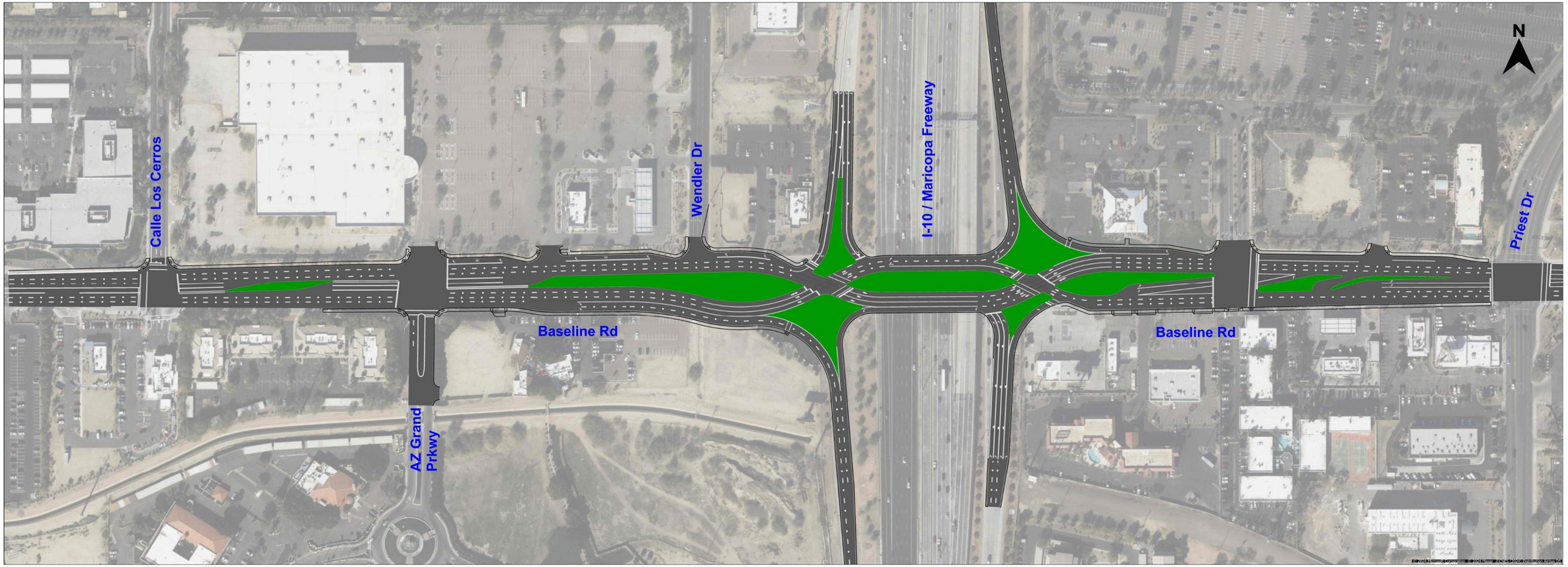


Figure 44. Proposed DDI Configuration

The Baseline Road crossovers increases overall interchange safety by reducing the number of conflicts to only 18 (versus 30 for the diamond). Furthermore, with traffic crossed over, traffic may flow freely onto and from the ramps connecting to I-10, resulting in the lowest overall interchange delay of the alternatives.

Approaching the DDI, three through lanes and two right-turn lanes would be provided on Baseline Road. Left-turn lanes are not required because left-turning traffic can flow freely onto the ramps. Departing the TI, lane configuration maintains three through lanes in both directions except eastbound at the eastern Baseline Road crossover intersection. See **Figure 44** for the proposed layout of the DDI.

The approach and departure legs of the DDI obstruct business access and encroach into municipal/private right-of-way. The existing driveways will be consolidated or relocated to maintain business access. A total take of parcel number 301-10-012L (Harvest Dispensary) will be required due to its close proximity to the northbound exit ramp intersection with Baseline Road.

Pedestrian access will be provided throughout the project limits. Access between the Baseline Road crossovers will be provided in the median area.

Approximately 2.29 acres of right-of-way will be required for the proposed Baseline Road ramps, Baseline Road DDI approach and departure legs, and drainage improvements.

Proposed drainage improvements through the corridor include catch basins, storm drain, channel reconstruction and headwall reconstruction. Existing roadway catch basins will be removed and reconstructed to the proposed curb line and existing area inlets will be removed and reconstructed to the outside of the proposed roadway widening. Existing channel and headwall impacted by new pavement will be removed and replaced outside the proposed pavement limits.

This proposed alternative layout features a reduction in paved area and an increase in unpaved area. Due to these characteristics, peak flows from the traffic interchange entering the trunkline are decreased. No increases in peak flow will be observed at the Tempe Drain.

The estimated total project cost is $41,699,000.

3.2.4 Wendler Drive

In both build alternatives the existing traffic signal at Baseline Road and Wendler Drive will be eliminated to improve operations on Baseline Road. With the removal of the traffic signal, left turns onto and off Baseline Road would be unprotected, so they will be prohibited by the extension of the raised median on Baseline Road. In both build alternatives, these prohibited left turn movements can be completed by passenger cars making a U-Turn at Arizona Grand Parkway from the westbound direction, Arizona Mills South from the eastbound direction, or at another nearby intersection. Traffic signal timing and phasing for U-turn movements will be accounted for in final design.

The study team evaluated multiple options to allow vehicles to retain access to Wendler Drive from eastbound Baseline Road and from Wendler Drive to eastbound Baseline Road. All these options would require acquiring new right-of-way and would impact the parcels at the northwest corner of the traffic interchange. These options were not evaluated any further given these impacts, and the relatively low demand for the left turn movements. Traffic counts were collected in 2023 and showed that the left turn movement for eastbound Baseline Road to northbound Wendler Drive was 63 vehicles per hour (Peak Hour) in the morning and 29 vehicles per hour (Peak Hour) in the evening. The left turn movements for southbound Wendler Drive to eastbound Baseline Road were 60 vehicles per hour (Peak Hour) in the morning and 101 vehicles per hour (Peak Hour) in the evening.

3.3 EVALUATION OF ALTERNATIVES

All Traffic Interchange Alternatives were evaluated by three criteria. The evaluation criteria included: Safety, Level of Service, and Impact & Cost. Each criterion is comprised of multiple evaluation elements and is briefly described below. The results of the evaluation are summarized in **Table 16**, Evaluation Matrix.

3.3.1 Safety

This criterion evaluates the impact of project improvements after construction to protect from risk or injury.

- Vehicular Safety – Design provides infrastructure to mitigate conflicts and aid in vehicles traveling through the system.
- Active Transportation Safety –Design provides shorter distance to cross vehicle traffic, access to ADA compliant crosswalks and sidewalk ramps to travel through corridors.
- Access Control – Design minimizes driveways within ADOT access control.
- Traffic Interchange Conflict Points – The quantity of locations where the paths of road users coincide for each traffic interchange type.

3.3.2 Level of Service

This criterion measures the efficiency of the corridor to move vehicles, pedestrians, and bicycles through the traffic interchange for the projected 2050 volumes.

- Traffic Operations – Design optimizes the use of traffic signals and signs to efficiently move vehicles through network.
- Active Transportation Facilities – Design provides infrastructure to accommodate multiple modes of active transportation and easy to follow path network.
- I-10 Incident Management – The access emergency vehicles have to freeway to respond to an incident.

3.3.3 Impacts & Cost

This criterion rates each alternative based upon socioeconomic impacts and elements that contribute to total cost.

- Business Access Impacts - This criterion evaluates access to existing businesses for all transportation system users.
- Environmental Impacts - This criterion evaluates the effects on land ownership/land use, biological resources, cultural resources, floodplains, section 404 and 401 of the clean water act, noise, air quality, environmental justice and Title VI.
- Community Impacts – This criterion evaluates the economic and social impacts of each alternative on the local and regional population.
- Utility Impacts – This criterion evaluates each alternative based on Utility adjustments or relocations required.
- ROW Impacts – This criterion evaluates each alternative based on right-of-way required to construct improvements including the acquisition cost and schedule.
- Constructability – This criterion considers traffic control for commuter traffic and the traveling public during construction for each alternative including the overall construction schedule.
- Total Cost – This element rates each alternative based upon the total project construction costs for the improvements, which includes all anticipated activities and right-of-way acquisition.

3.4 EVALUATION MATRIX

The Evaluation Matrix calculates the weighted score for each evaluation element per alternative by multiplying the initial score and weight together. The total is defined as the sum of the weighted scores per alternative. The adjusted total is the total score modified to be out of 100 which defines each criterion (Safety, Level of Service, Impacts & Cost) as 1/3 of the available 100.

Table 16. Evaluation Matrix

Evaluation Criteria	Initial Score			Weight	Weighted Score		
	No Build	MDI	DDI		No Build	MDI	DDI
Safety					**20**	**36**	**42**
Vehicular Safety	2	3	4	3	6	9	12
Active Transportation Safety	1	4	3	3	3	12	9
Access Control	1	3	3	2	2	6	6
Traffic Interchange Conflict Points	3	3	5	3	9	9	15
Level of Service					**12**	**28**	**23**
Traffic Operations	1	3	4	3	3	9	12
Active Transportation Facilities	1	3	3	3	3	9	9
I-10 Incident Management	3	5	1	2	6	10	2
Impacts & Cost					**51**	**46**	**31**
Business Access Impacts	4	3	2	2	8	6	4
Environmental Impacts	2	3	4	1	2	3	4
Community Impacts	2	4	4	3	6	12	12
Utility Impacts	5	4	3	1	5	4	3
ROW Impacts	5	4	1	2	10	8	2
Constructability	5	4	3	1	5	4	3
Total Cost	5	3	1	3	15	9	3
		Total			**83**	**110**	**96**
		Adjusted Total **Criteria Max Score = 1/3 of 100**			**36**	**55**	**50**

CRITERIA SHOULD BE SCORED ON A SCALE OF 1-5, WITH 1 BEING POOR AND 5 BEING GOOD.

1 - POOR
2 - BELOW AVERAGE
3 - AVERAGE
4 - ABOVE AVERAGE
5 - GOOD

EACH CRITERIA SHOULD BE GIVEN A WEIGHT BETWEEN 1-3 IN ORDER OF MOST IMPORTANT TO STAKEHOLDERS, WITH 1 BEING IMPORTANT AND 3 BEING CRITICAL.

1 - IMPORTANT
2 - VERY IMPORTANT
3 - CRITICAL

4.0 MAJOR DESIGN FEATURES OF THE RECOMMENDED ALTERNATIVE

4.1 INTRODUCTION

The purpose of this chapter is to detail the major design features associated with the recommended Modified Diamond traffic interchange at Baseline Road. The recommended alternative is described in **Chapter 3** and shown on the plan sheets in **Appendix G**.

4.2 DESIGN CONTROLS

The modified diamond interchange and Baseline Road widening will be designed to meet current ADOT Roadway Design Guidelines (RDG) and American Association of State Highway and Transportation Officials (AASHTO) design guidelines. City of Tempe Public Department Engineering Design Criteria (COT Design Criteria) will be used for the design of Baseline Road outside the interchange control of access limits. **Table 17** presents the preliminary ramp and Baseline Road design criteria used to develop the recommended alternative.

Table 17. Preliminary Design Criteria

DESCRIPTION OF CRITERION	VALUE FOR DESIGN
Design Year:	2050
Level of Service: Controlled Access Highways, Urban / Fringe-Urban Area:	C - D (RDG, Table 103.2A)
Design Speed: Mainline: Ramp Exit at Mainline Gore: Ramp Entrance at Mainline Gore: Ramp Body: Ramp Terminus: Baseline Road (Principal Arterial):	65 mph Mainline design speed minus 5 mph (RDG, Section 503.3) (parallel-type ramps) Mainline design speed minus 10 mph (RDG, Section 503.3) 50 mph (RDG, Section 503.3) 35 mph (RDG, Section 503.3) 50 mph (RDG, table 101.3)
Lane Width: I-10, ramps Baseline Road	12 feet (RDG, Section 504.5) 11-12 feet (COT)
Ramp Shoulder Width: Left Shoulder Right Shoulder	(RDG, Table 302.4) 2 feet 8 feet (use 2 feet at crossroad terminus and for 2-lane dual metered ramps)

Table 17. Preliminary Design Criteria

DESCRIPTION OF CRITERION	VALUE FOR DESIGN
Minimum Horizontal Curve Length: Baseline Road:	 500 feet (COT Standards, Table 4-3)
Maximum Gradient: Ramps: Upgrade Downgrade Baseline Road:	 4% desirable, 6% maximum (RDG, Section 504.1) 5% desirable, 6% maximum (RDG, Section 504.1) 0.4% maximum (COT Design Criteria, Section C.17))
Maximum Grade Break Without Vertical Curve: Ramps: Baseline Road:	0.2% for design speed ≥ 50 mph (RDG, Section 204.4) 0.4% for design speed ≤45 mph (RDG, Section 204.4) 0.2% ((RDG, Section 204.4))
Minimum Vertical Curve Length Ramps: Baseline Road:	400 feet (RDG, Section 504.1) 100 feet (COT Design Criteria, Section C.18)
Normal Cross Slope: Ramps: Baseline Road:	2.0% (AASHTO Green Book (2018), Section 4.2.2.1) 2.5% (COT Design Criteria, Section C.19)
Superelevation: I-10: Baseline Road:	 e_{max}=0.060 '/ft. (RDG, Table 202.1A) e_{max}=0.060 '/ft
Side Slopes: Mainline Baseline Road	 Std C-02.10 (RDG, Figure 306.4) 4:1 Fill, 4:1 Cut (COT)
Taper Rate (Lane Drop): Ramp Baseline Road Taper Rate (Lane Addition): Ramp Baseline Road	Design speed (mph) to one: (RDG, Section 207) 50:1 50:1 25:1 (RDG, Section 207) 25:1
Horizontal/Lateral Clearances: Clear Zone / Recovery Area Width:	(RDG, Section 303.2, Table 303.2A) 30 feet
Minimum Vertical Clearance (SR 202L): Overpass Underpass Sign Structure	(ADOT Bridge Practice Guidelines, Section 2) 16.5 feet 16.5 feet 18.0 feet

4.3 HORIZONTAL AND VERTICAL ALIGNMENTS

No modifications are proposed to the existing horizontal and vertical alignments for Baseline Road, I-10 mainline and I-10 Baseline Road Ramps A, B, C, and D.

4.4 ACCESS CONTROL

Access control already exists and will be maintained in accordance with ADOT and FHWA Access Control Policy requirements. A design exception for access control will be required during final design.

4.5 RIGHT-OF-WAY

New right-of-way and temporary construction easements (TCE's) are necessary for the recommended alternative. The approximate TCE required would be 0.23 acres and is summarized in **Table 18**.
The approximate right-of-way required would be 0.45 acres and is summarized in **Table 19**.

Table 18. MDI TCE Requirements

Parcel Description	SF	Acres
SRP Irrigation Highland Canal	227	0.01
301-10-177 ARIZONA GRAND RESORT LLC	5,532	0.13
123-25-002B ARC CAFEHLD001 LLC	1,389	0.03
123-22-615 DILLON COMPANIES INC	907	0.02
123-22-614 KRAF INC	1,887	0.04

Table 19. MDI New Right-of-Way Requirements

Parcel Description	SF	Acres
301-10-177 ARIZONA GRAND RESORT LLC	18,413	0.42
301-10-012L FLORENCE HOMES LLC	1,077	0.02

4.6 STRUCTURES

Modifications to existing retaining wall would be required to facilitate the widening of Baseline Ramp B. The retaining wall will be designed in accordance with the latest LRFD Bridge Design Specifications – Customary U. S. Units, AASHTO, as superseded by the ADOT Bridge Practice Guidelines.

4.7 DRAINAGE

4.7.1 Off-Site Drainage Systems

The hydraulic performance of existing offsite drainage features is not expected to be impacted by the roadway widening. An analysis of the Tempe Drain will be required to verify the increased pavement does not increase peak flow observed.

4.7.2 On-Site Drainage Systems

The drainage evaluation was based on the requirements of Chapter 600 of ADOT's Roadway Design Guidelines. The minimum catch basin spacing was based on the allowable spread requirements for each roadway classification.

The proposed I-10 ramp and Baseline Road widening would require the relocation of the catch basins currently located along the outside edges of the roadways. Some of the area inlets located within the infield areas would also need to be relocated at traffic interchanges. All of the current onsite drainage system outfalls will be retained with connections to the existing offsite drainage system.

The relocation of the catch basins would require the extension of the existing storm drain system to connect existing laterals to the new catch basins. Additional catch basins and manholes would be proposed at some locations to conform to the new roadway widths and design criteria.

4.8 EARTHWORK

The earthwork required for the construction of the MDI alternative would be approximately 5,759 cubic yards of excavation.

4.9 TRAFFIC DESIGN

The following sections describe the proposed concepts for guide signs, pavement marking, traffic signals and lighting. The traffic design concepts were developed based on the guidelines presented in the following documents:

- Manual on Uniform Traffic Control Devices (MUTCD) (11th Edition, December 2023)
- Arizona supplement to MUTCD (ADOT 2009)
- ADOT Signing and Marking Standard Drawings (ADOT 2014, with updates)
- ADOT Traffic Signals and Lighting Standards (ADOT 2015, with updates)
- ADOT Traffic Engineering TGP (ADOT 2011, with updates)
- City of Tempe Supplement to M.A.G Uniform standard Details (2014, with updates)
- MCDOT Pavement Marking Manual (2020)

The traffic design will continue to be refined during the final design. Traffic design along all service ramps and project limits that are overlaid by PCCP, and that lie within ADOT jurisdiction limits, will follow ADOT

Specification, Standards and Guidelines. Traffic elements along Baseline Road that are overlaid by AR-ACFC will follow City of Tempe standards. Coordination efforts for clear limits of ADOT and City of Tempe maintained areas along Baseline Road will continue and be documented in the existing or new IGA as needed during final design. In addition, coordination with any adjacent current design or construction projects underway will continue.

4.9.1 Signs

The guide signs changes along Baseline Road would include changes to existing overhead guide signs on approaches to the interchange and cardinal signs to guide traffic on specific lane use for ramp access. The preferred alternative will require modifications to several of the existing tapered tube structures listed on **Table 3** to accommodate the additional lane. The cost estimate corresponding to the modification of the sign structures assumed that new structures would be used for any sign structure that has to be removed and replaced. However, an evaluation of the existing sign structures should be performed during final design to determine if it can be re-used.

The preferred alternative will require modifications to several of the ground mounted Regulatory, Warning and Marking signs to accommodate the roadway widening. The ground mounted signs will be finalized during final design, including verifying vertical and horizontal sign clearances, minimum sign spacing requirements, sign alignments on overhead structures and sign sheeting.

4.9.2 Pavement Marking

Pavement Marking will consist of new striping to accommodate the added lanes and TI upgrades on service interchange ramps and along Baseline Road. The existing stripe obliteration and restriping will be necessary at various locations to accommodate the preferred alternative. The pavement marking will include edge and lane stripe, stop lines, crosswalk, arrows, legends, symbols, raised pavement markers, wrong way arrows, object markers and other markings in accordance with applicable standards.

4.9.3 Ramp Lighting

The light poles along service interchange ramps on I-10 Baseline Road TI will be impacted due to added lanes. The impacted light poles will be removed and new ADOT standard aluminum poles with LED luminaires will be installed.

The design methodology and criteria for ADOT freeway lighting is based on the illuminance method set forth in AASHTO Roadway Lighting Design Guide (RLDG). Excerpts of the RLDG criteria are provided in shown below.

- Minimum average maintained horizontal illuminance (Interstate and other freeways): 0.6 footcandles.
- Minimum illuminance value:0.2-foot candles
- Average to minimum uniformity ratio: 3:1 or better.
- Light loss factor (LLF): 0.8

The existing electrical service located on the Northeast corner of I-10 and Baseline Road TI will accommodate the new added lighting on service ramps. The final design will continue to refine the lighting design to meet the criteria with existing pole spacing and existing mounting heights, address issues with light spill and glare outside ADOT ROW.

4.9.4 Crossroad Lighting

The luminaires along Baseline Road will be converted from High Pressure Sodium to LED lighting. The impacts to Baseline Road geometry due to added right turn lanes will require removal of the majority of the existing light poles along the project corridor. The City of Tempe standard light poles will be installed along with new LED luminaires. The new installed light poles will be unmetered and powered from existing source.

The design methodology and criteria for City of Tempe lighting is based on the illuminance method set forth in AASHTO RLDG criteria are shown below.

- Minimum average maintained horizontal illuminance (Major Arterial): 1.2 footcandles
- Average to minimum uniformity ratio: 4:1 or better

The final design will continue to refine the lighting design to meet the criteria with existing pole spacing and existing mounting heights, address issues with light spill and glare outside ROW limits.

4.9.5 Underdeck Lighting

The existing LED underdeck lighting are installed underneath the I-10 overpass to illuminate Baseline Road under the bridge structure. The existing underdeck luminaires are located on the abutment wall above the sidewalk. Based on review of as-builts, the existing underdeck lighting will be sufficient to accommodate the proposed design. However, the final design will continue to verify the location of LED wall packs not to violate the minimum vertical clearance underneath the bridge if these luminaires fall within travelled way.

4.9.6 Traffic Signals

The traffic signals along Baseline Road, including the I-10 TI, are maintained by the City of Tempe. The impacts to Baseline Road geometry due to added lanes will require removal of majority of the existing traffic signals and traffic signal cabinets along the project corridor. The City of Tempe standard traffic signal modular poles will be installed along with new traffic signal cabinets. The new traffic signal poles will be powered from the existing power source.

The existing traffic signal at Wendler Drive will be removed to increase traffic flow on Baseline Road, in the vicinity of I-10 TI. The proposed traffic control at Wendler Drive and Baseline Road intersection will be turned into a right in/out intersection with dedicated right turn lane to Wendler Drive from Baseline Road.

The signal design will continue to be refined during the final design to accommodate signal phasing, ADA compliance, required signal to signal coordination, signal to Traffic Operation center communication along with IGA documentation as needed.

4.10 ACTIVE TRANSPORTATION FACILITIES DESIGN

4.10.1 Americans with Disability Act (ADA)

Existing pedestrian and bicycle facilities identified in ADA Report as deficient will be addressed in final design to make compliant with current standards.

4.11 CONSTRUCTION PHASING AND TRAFFIC CONTROL

Traffic control design concepts plans were developed to specify how the traffic will be managed during various phases of construction based on the guidelines presented in Part VI of the *Manual of Uniform Traffic Control Devices* (MUTCD), with Revision 1 and 2 incorporated, and by the Arizona Supplement to Part VI of the MUTCD. The City of Tempe Traffic Barricade Manuals should be used for maintenance of traffic on the respective City of Tempe Street. The City of Tempe has adopted the policies, standards, and guidelines of the City of Phoenix Traffic Barricade Manual except as modified per the City of Tempe Barricade Manual.

The conceptual construction phasing plan for both alternative is shown in **Table 20.**

Table 20. Construction Phasing Plan Modified Diamond Interchange

Construction Phase	Work Description
Phase 1	Construct outside widening on EB and WB Baseline Road (Stationery Lane Closure- 1 outside Lane EB and 1 outside lane WB)
Phase 2	Construct median improvements on Baseline Road. (Stationery Lane closure-1 Inside Lane EB &1 Inside Lane WB))
Phase 3a	Construct widening on Baseline Rd/ I-10 Traffic Interchange Service Ramp B (Full Ramp Closure) & Ramp A (Outside 1 Lane Closure)
Phase 3b	Construct widening on Baseline Rd/ I-10 Traffic Interchange Service Ramp D (Full Ramp Closure) & Ramp C (Outside 1 Lane Closure)
Phase 4	Construct and complete miscellaneous improvements

During the construction of Baseline Road, the roadway will remain open to traffic. The access to existing business will be maintained along Baseline Road during all phases of construction. The existing traffic control devices will remain compatible with temporary traffic control during construction. The existing traffic signal operations, with existing or temporary portable traffic signal equipment, will be maintained during all phases of construction. Traffic control will adequately maintain the roadway conditions and ensure safety conditions for all modes of traffic. The access to sidewalks, marked and unmarked crosswalk, bus stops, and bicycle lanes shall be maintained during all phases of construction.

The construction phasing plan and traffic control plans will be refined during final design. At final design, coordination with local agencies will be made to identify project specific restrictions and requirements (special events, restricted closure time, etc.) that may impact traffic control. Coordination with any current design or adjacent construction project underway will be continued to minimize delays to traffic.

The anticipated construction schedule is shown in **Table 21**.

Table 21. Construction Schedule Modified Diamond Interchange

Construction Phase	Timeline (Work week)
Phase 1	12 weeks
Phase 2	12 weeks
Phase 3a	8 weeks
Phase 3b	8 weeks
Phase 4	2 weeks

4.12 UTILITY COORDINATION

4.12.1 Utility Conflicts

There are utilities that are anticipated to be relocated within the project limits. The following is an inventory of the potential impacted utilities. Note that ADOT- owned utilities are not included in this summary. Examples of ADOT-owned utilities not included are FMS, street lighting, traffic communication systems, and storm drain lines.

4.12.1.1 MDI Alternative Conflict Locations

AT&T/Cox Fiber Optics: Existing AT&T fiber optics located within existing Cox conduit located along the south of Baseline Road outside of the sidewalk west of the I-10 underpass, in the existing sidewalk under the I-10 bridge and continues east outside the existing sidewalk.

MDI alternative proposed pavement widening will occur over the existing Cox/AT&T Fiber Optics lines between Arizona Grand Parkway and SB I-10 and Baseline Road Intersection, potential vertical clearance conflict, recommendation to relocate Cox/AT&T Fiber Optics to outside proposed pavement limits.

City of Tempe Water & Sewer: Existing City of Tempe Water line and Sewer are located within existing Baseline Road pavement and median.

MDI alternative proposed median improvements will occur over the existing water lines and sewer east of Arizona Grand Parkway to SB I-10 and Baseline Road Intersection, existing valves, pullboxes, and manholes will need to be adjusted to proposed grade.

CenturyLink/Lumen/Lvl 3 Fiber Optics: Existing CenturyLink/Lumen/Lvl 3 Fiber Optic lines are located north of Baseline Road outside the sidewalk east of Arizona Grand Parkway to west of SB I-10 and Baseline Road Intersection, and in two conduits south of Baseline Road, one within existing sidewalk and the other outside existing sidewalk.

MDI alternative proposed pavement widening will occur over the existing CenturyLink/Lumen/Lvl3 Fiber Optics lines between Arizona Grand Parkway and SB I-10 and Baseline Road Intersection, potential vertical clearance conflict, recommendation to relocate CenturyLink/Lumen/Lvl3 Fiber Optics to outside proposed pavement limits. MDI alternative proposed pavement widening for the right turn lane at Wendler Drive will occur over the existing Fiber conduit lines between Wendler Drive to SB I-10 and Baseline Road Intersection and adjustment to existing curb, gutter and sidewalk west of Wendler Drive for the shopping

plaza entrance, potential vertical clearance conflict, recommendation to relocate CenturyLink/Lumen/Lvl3 line to outside proposed improvements.

City of Phoenix Fiber Optics: Existing City of Phoenix Fiber Optic lines are located north of Baseline Road outside the sidewalk east of Arizona Grand Parkway to west of SB I-10 and Baseline Road Intersection.

MDI alternative proposed pavement widening for the right turn lane at Wendler Drive will occur over the existing Fiber conduit lines between Wendler Drive to SB I-10 and Baseline Road Intersection and adjustment to existing curb, gutter and sidewalk west of Wendler Drive for the shopping plaza entrance, potential vertical clearance conflict, recommendation to relocate City of Phoenix Fiber Optic line to outside proposed improvements.

Sprint Fiber Optics: Existing Sprint Fiber line located along the south of Baseline Road outside of the sidewalk west of the I-10 underpass, in the existing pavement under the I-10 bridge and continues east in the existing sidewalk.

MDI alternative proposed pavement widening will occur over the existing Sprint Fiber Optics lines between Arizona Grand Parkway and SB I-10 and Baseline Road Intersection, potential vertical clearance conflict, recommendation to relocate Sprint Fiber Optics to outside proposed pavement limits.

Salt River Project Electric: Existing underground power is located south of Baseline Road outside the sidewalk east of Arizona Grand Parkway to west of SB I-10 and Baseline Road Intersection

MDI alternative proposed pavement widening will occur over the existing underground power between Arizona Grand Parkway and SB I-10 and Baseline Road Intersection, potential vertical clearance conflict with the conduit and conflict with electrical service cabinets, recommendation to relocate SRP Underground Electric to outside proposed pavement limits.

Salt River Project Irrigation: Existing irrigation crosses down Wendler Drive, crossing Baseline Road, into an earthen channel south of Baseline Road.

MDI alternative proposed pavement widening will occur over the existing SRP Irrigation line and earthen channel south of Baseline Road, recommendation adjust existing irrigation pipe elevation as needed and to extend irrigation pipe and reconstruct headwall outside proposed improvements.

Southwest Gas: Existing Southwest Gas 4" high pressure line is located north of Baseline Road outside the sidewalk east of Arizona Grand Parkway to west of SB I-10 and Baseline Road Intersection, where the gas line continues within existing Baseline Road to east of NB I-10 and Baseline Road Intersection.

MDI alternative proposed pavement widening for the right turn lane at Wendler Drive will occur over the existing 4" PE gas line between Wendler Drive to SB I-10 and Baseline Road Intersection, potential vertical clearance conflict, recommendation to relocate Southwest Gas line to outside proposed improvements. MDI alternative proposes adjustment to existing curb, gutter and sidewalk west of Wendler Drive for the shopping plaza entrance, will be over the existing 4" PE gas line, existing gas valve will need to be adjusted to proposed grade.

Zayo Fiber Optics: Existing Zayo Fiber Optic lines are located north of Baseline Road within the existing pavement from West of Calles Los Cerros, within south of Baseline Road within the existing pavement between east of Arizona Grand Parkway to west of SB I-10 and Baseline Road Intersection, and within Baseline Road.

MDI alternative proposed pavement widening will occur over the existing Zayo Fiber Optics lines between Arizona Grand Parkway and SB I-10 and Baseline Road Intersection, potential vertical clearance conflict, recommendation to relocate Zayo Fiber Optics to outside proposed pavement limits. MDI alternative proposed pavement widening for the right turn lane at Wendler Drive will occur over the existing Fiber conduit lines between Wendler Drive to SB I-10 and Baseline Road Intersection and adjustment to existing curb, gutter, and sidewalk west of Wendler Drive for the shopping plaza entrance, potential vertical clearance conflict, recommendation to relocate Zayo line to outside proposed improvements.

Table 22. MDI Alternative Utility Conflicts

Company Name		
Utility Type	**Conflict Quantity**	**Proposed Solution**
American Telephone & Telegraph		
Fiber Optics	~758' in shared conduit with Cox in proposed new pavement	Relocate conduit, pull boxes and pedestals to outside new sidewalk with Cox Conduit
City of Phoenix Traffic		
Fiber Optics	~650', in proposed pavement or sidewalk	Relocate conduit, pull boxes and pedestals to outside new sidewalk
Traffic Signals	0', outside of construction limits	None
City of Phoenix Water Services Department		
Reclaimed Water	0', outside of construction limits	None
Sewer	0', outside of construction limits	None
Water	0', outside of construction limits	None
City of Tempe		
Sewer	0', construction of median will not change existing grading. Adjust 1 Manhole	Adjust Manhole to grade
Water	0', construction of median will not change existing grading. 2 valves, 2 pull boxes in proposed median construction. 1 fire hydrant in proposed new pavement	Adjust valves and boxes to grade. Relocate fire hydrant outside new sidewalk.
Cox Communications-Maricopa		
CATV	0', construction of median will not change existing grading. 1 manhole in proposed median construction	Adjust manhole to grade
Fiber Optics	~758' in proposed new pavement	Relocate conduit, pull boxes and pedestals to outside new sidewalk

Table 22. MDI Alternative Utility Conflicts

Company Name		
Utility Type	**Conflict Quantity**	**Proposed Solution**
Crown Castle Solutions Corporation		
Fiber Optics	0', outside of construction limits	None
Kínder Morgan (El Paso Natural Gas)		
Gas	0', outside of construction limits	None
Flood Control District of Maricopa County		
Electric	0', outside of construction limits	
Storm Drains	0', construction of median and pavement widening along South Baseline Road will not change existing grading	
Water	0' outside of construction limits	
CenturyLink/Lumen/Lvl 3		
Fiber Optics	~2,098', in proposed pavement or sidewalk	Relocate conduit, pull boxes and pedestals to outside new sidewalk
MCI Verizon		
Fiber Optics	0', outside construction limits	None
Salt River Project-Maricopa County		
Electric	~1050', 4 electrical cabinets in proposed new pavement. 1 Overhead Power Pole in edge of new sidewalk	Relocate to outside new sidewalk. Overhead Power pole relocate if accessible sidewalk width cannot be obtained
Irrigation	~21' Irrigation line under new pavement. ~11' Earthen irrigation ditch under new sidewalk	Adjust irrigation pipe elevation if needed. Extend Irrigation pipe over covered earthen ditch.
Southwest Gas		
Gas	0', outside construction limits	None
High Pressure	~175' in proposed new pavement and sidewalk. 1 valve in new sidewalk	Relocate to outside new pavement. Adjust valve to grade
Sprint Communications Company		
Fiber Optics	~705' in proposed new pavement	Relocate conduit, pull boxes and pedestals to outside new sidewalk
Zayo Group FKA AGL		
Fiber Optics	~790' in proposed new pavement. 1 manhole in new curb and gutter.	Relocate conduit, pull boxes and pedestals to outside new sidewalk

4.13 LANDSCAPE

New landscape improvements for this project should make use of plants that are consistent with the area and are listed on the Arizona Department of Water Resources Low Water Use plant list. New landscape improvements would need to meet the standards of either ADOT or City of Tempe depending on maintenance responsibilities. No new turf can be included as a part of any landscape improvements in the right-of-way and new concrete header curb would be necessary to separate existing areas of turf on commercial properties and to designate maintenance responsibility boundaries between ADOT, City of Tempe, and commercial properties. Green infrastructure and water harvesting features will be evaluated in final design.

Any interior areas of new medians or traffic islands within ADOT right-of-way would need to be finished with pavers or a paved surface. No new ADOT landscape would be added in the medians or islands. The median areas outside of the ADOT right-of-way would be landscaped according to City of Tempe Standards.

The new landscaping in the Baseline Road medians would require new water meters, services and irrigation systems using City of Tempe Standards.

Landscape improvements for ADOT or commercial frontage areas impacted by the project could include new granite mulch, plant replacements where practicable, and irrigation repairs to maintain function of existing irrigation systems.

4.13.1 Modified Diamond Alternative Impacts

The following areas within the project limits have been identified as areas that would require removal or modifications to the existing landscape improvements and install new landscape in the new raised medians. Existing vegetation impacted by the new interchange would not be salvaged. However, it may be possible to salvage the existing irrigation equipment operated by the City of Tempe.

- Baseline Road West of I-10 – Existing landscape in the right-of-way adjacent to commercial frontages on the north and south sides of Baseline Road will need to be removed due to roadway widening and changes to existing driveways. The existing irrigation systems in these areas will need to be modified to accommodate landscape not impacted by the new interchange. The need to replace landscape material in the commercial frontages would be minimal since the available landscape areas will be reduced. In addition to the north and south sides of Baseline Road, there are four existing raised medians west of Interstate 10 that would be removed and replaced with one large, raised median. The existing medians are densely landscaped with trees, shrubs, accents, cactus, granite mulch, boulders, and short decorative rock walls. In addition, there are City of Tempe water meters, utility services, a backflow preventer, solar controller, remote control valve assemblies, PVC piping, sleeves, and drip emitters located in the medians.
- Southbound I-10 to Baseline Road Exit Ramp (West side) – Existing ADOT landscape plantings west of the Southbound I-10 to Baseline Road exit ramp may be impacted due to roadway widening resulting in the removal of existing trees. Replacement trees would be proposed to be watered on the existing ADOT irrigation system.
- Northbound I-10 Entry and Exit ramps at Baseline Road (East side) – Existing landscape plantings east of Interstate 10 would be impacted by the new interchange and would require landscape restoration along the east side of the NB I-10 entry and the exit ramps north and south of Baseline Road. It is expected that some shrubs would be removed, and granite mulch would need minor restoration with possible irrigation repairs due to the ramp widening.

4.14 INTELLIGENT TRANSPORTATION SYSTEMS

4.14.1 Modified Diamond Interchange (MDI) Alternative

The project improvements will impact the locations of several existing and future Broadway Curve ITS devices:

- Roadway changes to Ramp A would not impact the WWD and CCTV camera on the northwest corner of Baseline Road and westbound ramps, but would most likely impact the detection cabinet and transformer located west of Ramp A.
- Roadway changes to Ramp D would most likely impact the WWD camera as well as the ramp metering loops and equipment.
- Roadway changes to Ramp B and Ramp C would not impact the IIWWS.
- The trunkline on both sides of the freeway would most likely not be impacted. Minor adjustments to pull boxes and conduits may be necessary.

4.15 GEOTECHNICAL AND PAVEMENT DESIGN

4.15.1 Recommended Pavement Structural Sections

According to the Tempe Transportation Master Plan, Baseline Road is classified as an arterial road. The existing pavement sections for AC shown above are not considered to be acceptable by current City standards based on the deficient AB. The City Standard Details (T-306 and T 313) for an arterial requires 2” of AC (A-12.5) over 4” AC (A-25) over 12 to 15 inches of AB. The I 10 Broadway Curve project also utilized an ACB underneath the PCCP, however, that is most typically used in depressed sections. Given the limited use on the I-10 ramps and the anticipated elevated ramps, it is recommended that a standard AB (Class 2) be utilized.

It is anticipated the existing pavement will be reconstructed as part of this project. The future road is planned to be an arterial and, based on a cursory check of anticipated soils at the subgrade elevation within the area, there is potential for soils with medium to high plasticity values. Due to potential for these clayey soils, from a costing perspective it is recommended to utilize a conservative value (i.e. 15 inches) based on City standard T-309 for AB. Based on discussions with the project team, it is assumed the proposed PCCP ramp section will match the existing PCCP thickness from the more recent I-10 Broadway Curve project along with 4 inches of AB, per the ADOT minimum underneath PCCP, instead of 3 inches of ACB. Based on a request from the project team to aid with construction, the proposed PCCP crossroad section will be thickened to match the ramp pavement section.

The table below provides preliminary recommendations for pavement. The assumptions herein should be verified during final design.

Table 23. Preliminary Recommended Pavement Sections

Location	PCCP (Plain) (in)	AC (1/2”) (in.)	AC (3/4”) (in.)	AB (Class 2) (in.)	Total (in.)
New Baseline Road, I-10 Ramps	12.0	---	---	4	16
New Baseline Road within ADOT ROW	11.0	---	---	4	15
Existing Baseline Road – within City ROW	---	Mill 2.0 and Replace 2.0	---	---	2.0
New Baseline Road – within City ROW	---	2.0	4.0	15	21

4.15.2 Retaining Walls

A Geotechnical Report was prepared for new retaining wall (RW No. 71 R-Baseline Ramp B-40-RT) to be constructed as a part of Broadway Curve project. Construction recommendations for modifications to the retaining wall should reference S3-20 Submittal Walls Geotechnical Report.

5.0 ITEMIZED ESTIMATE OF PROBABLE COSTS

5.1 MODIFIED DIAMOND

The estimated construction cost for improvements for the MDI is $14,437,763. The final design cost is estimated to be $691,800. The right-of-way cost is estimated to be $1,094,900. There are no utility relocation costs. The estimated total project cost is $16,224,000. The detailed itemized cost estimate is shown below. Costs have been estimated based upon unit prices obtained from ADOT's most current available bid tabulations.

ARIZONA DEPARTMENT OF TRANSPORTATION

Estimated Engineering Construction Cost

PRELIMINARY COST ESTIMATE ALT 1 - MODIFIED DIAMOND, FINAL DCR

Project Number: F0523 01L — October 31, 2024

Location: I-10 Baseline TI — Base Year: 2024

ITEM NO.		ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011		CLEARING AND GRUBBING	ACRE	2	$2,500.00	$5,000.00
2020020		REMOVAL OF CONCRETE CURB	L.FT.	1,632	$8.00	$13,056.00
2020021		REMOVAL OF CONCRETE CURB AND GUTTER	L.FT.	4,249	$9.00	$38,241.00
2020025		REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS	SQ.FT.	15,547	$4.00	$62,188.00
2020027		REMOVAL OF CONCRETE BARRIER	L.FT.	1,601	$50.00	$80,050.00
2020029		REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	22,466	$12.00	$269,592.00
2020031		REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SQ.YD.	2,718	$28.00	$76,104.00
2020053		REMOVE (END TREATMENT)	EACH	1	$1,000.00	$1,000.00
2030301		ROADWAY EXCAVATION	CU.YD.	5,759	$45.00	$259,155.00
3030022		AGGREGATE BASE, CLASS 2	CU.YD.	1,193	$95.00	$113,335.00
4010011		PORTLAND CEMENT CONCRETE PAVEMENT (11")	SQ.YD.	377	$150.00	$56,550.00
4010012		PORTLAND CEMENT CONCRETE PAVEMENT (12")	SQ.YD.	6,683	$145.00	$969,035.00
4090005		ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) (	TON	3,388	$186.00	$630,168.00
5030XXX		CLOSED DRAINAGE SYSTEM	L. SUM	1	$226,000.00	$226,000.00
606XXXX		FREEWAY SIGNING	L. SUM	1	$329,500.00	$329,500.00
7010005		MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM	1	$730,000.00	$730,000.00
7020008		IMPACT ATTENUATION DEVICE (SMART CUSHION)	EACH	1	$30,000.00	$30,000.00
704XXXX		PAVEMENT MARKINGS	L. SUM	1	$6,500.00	$6,500.00
731XXXX		LIGHTING	L. SUM	1	$472,700.00	$472,700.00
7320713		UTILITY RELOCATION WORK	L.SUM	1	$100,000.00	$100,000.00
733XXXX		TRAFFIC SIGNALS (NEW AND MODIFICATIONS)	L. SUM	1	$564,800.00	$564,800.00
802001x		LANDSCAPING	L. SUM	1	$146,000.00	$146,000.00
8101013		EROSION CONTROL (	L.SUM	1	$37,000.00	$37,000.00
9010001		MOBILIZATION	L.SUM	1	$730,000	$730,000.00
9080001		CONCRETE CURB (C-05.10) (TYPE A)	L.FT.	549	$40	$21,960.00
9080090		CONCRETE CURB AND GUTTER (	L.FT.	3,320	$50	$166,000.00
9080101		CONCRETE CURB AND GUTTER, TYPE A (MAG DET. 220-1)	L.FT.	1,541	$50.00	$77,050.00
9080107		CONCRETE SINGLE CURB (MAG DET. 222)	L.FT.	1,367	$75	$102,525.00
9080201		CONCRETE SIDEWALK (C-05.20)	SQ.FT.	4,648	$14	$65,072.00
9080241		CONCRETE SIDEWALK (MAG DET. 230)	SQ.FT.	9,748	$14	$136,472.00
9080295		CONCRETE SIDEWALK RAMP	SQ.FT.	1,070	$20	$21,400.00
9080304		CONCRETE DRIVEWAY (	SQ.FT.	1,222	$15	$18,330.00
9100001		CONCRETE BARRIER	L.FT.	1,189	$150	$178,350.00
9140153		RETAINING WALL (	SQ.FT.	4,733	$210	$993,930.00
9240170		CONTRACTOR QUALITY CONTROL	L.SUM	1	$146,000.00	$146,000.00
9250001		CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1	$146,000.00	$146,000.00
		SUBTOTAL ROADWAY				**$8,019,063.00**
		30% UNIDENTIFIED ITEMS (ROADWAY)	L.SUM	1	$2,406,000	$2,406,000.00
		TOTAL ROADWAY				**$10,425,063.00**
		CONSTRUCTION ENGINEERING		15%	$1,563,800.00	$1,563,800.00
		CONSTRUCTION POST DESIGN SERVICES		1%	$104,300.00	$104,300.00
		CONSTRUCTION CONTINGENCY (5%)		5%	$521,300.00	$521,300.00
		PUBLIC INVOLVEMENT		1	$100,000.00	$100,000.00
		ICAP (10.7%)		7.90%	$1,004,400.00	$1,004,400.00

		LABOR AND MATERIALS INFLATION TO FISCAL YEAR 2026			1.0524	$718,900.00
TOTAL ESTIMATED CONSTRUCTION COST (EXCLUDING UTILITY RELOCATION AND R/W)						**$14,437,763.00**
DES	**PREDESIGN AND FINAL DESIGN**					
		PREDESIGN/NEPA/PI SERVICES (0% OF BASE YEAR CONSTRUCTION COST)			0.00%	$0.00
		INDIRECT COST ALLOCATION (7.9% OF ALL PREDESIGN COSTS)			7.90%	$0.00
		PREDESIGN COST INFLATION TO FISCAL YEAR 2024			1.0000	$0.00
		SUBTOTAL PREDESIGN				**$0.00**
		FINAL DESIGN SERVICES (6% OF BASE YEAR CONSTRUCTION COST)			6.0%	$625,500.00
		INDIRECT COST ALLOCATION (7.9% OF ALL FINAL DESIGN COSTS)			7.90%	$49,400.00
		FINAL DESIGN COST INFLATION TO FISCAL YEAR 2025			1.0250	$16,900.00
		SUBTOTAL FINAL DESIGN				**$691,800.00**
	TOTAL ESTIMATED DESIGN COST					**$691,800.00**
UTIL	**UTILITY RELOCATION**					
		PRIOR RIGHT UTILITY RELOCATIONS & SERVICE AGREEMENTS				$0.00
		INDIRECT COST ALLOCATION (7.9% OF ALL UTILITY COSTS)			7.90%	$0.00
		UTILITY RELOCATION COST INFLATION TO FISCAL YEAR 2026			1.0524	$0.00
	TOTAL ESTIMATED UTILITY COST					**$0**
R/W	**RIGHT-OF-WAY**					
		RIGHT-OF-WAY				$990,000.00
		INDIRECT COST ALLOCATION (7.9% OF ALL RIGHT-OF-WAY COSTS)			7.90%	$78,200.00
		RIGHT-OF-WAY PRICE ESCALATION TO FISCAL YEAR 2025			1.0250	$26,700.00
	TOTAL ESTIMATED RIGHT-OF-WAY COSTS					**$1,094,900**
				TOTAL ESTIMATED PROJECT COST		**$16,224,000**

5.2 DIVERGING DIAMOND

The estimated construction cost for improvements for the DDI is $30,346,138. The final design cost is estimated to be $1,460,100. The right-of-way cost is estimated to be $9,892,700. There are no utility relocation costs. The estimated total project cost is $41,699.000. The detailed itemized cost estimate is shown below. Costs have been estimated based upon unit prices obtained from ADOT's most current available bid tabulations.

ARIZONA DEPARTMENT OF TRANSPORTATION

Estimated Engineering Construction Cost

PRELIMINARY COST ESTIMATE ALT 2 - DDI, FINAL DCR

Project Number: F0523 01L — October 31, 2024

Location: I-10 Baseline TI — Base Year: 2024

ITEM NO.		ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011		CLEARING AND GRUBBING	ACRE	6	$2,500.00	$15,000.00
2020020		REMOVAL OF CONCRETE CURB	L.FT.	4,265	$8.00	$34,120.00
2020021		REMOVAL OF CONCRETE CURB AND GUTTER	L.FT.	8,831	$9.00	$79,479.00
2020025		REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS	SQ.FT.	46,444	$4.00	$185,776.00
2020027		REMOVAL OF CONCRETE BARRIER	L.FT.	1,853	$50.00	$92,650.00
2020029		REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	35,596	$12.00	$427,152.00
2020031		REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SQ.YD.	18,994	$28.00	$531,832.00
2020053		REMOVE (END TREATMENT)	EACH	1	$1,000.00	$1,000.00
2030301		ROADWAY EXCAVATION	CU.YD.	15,795	$45.00	$710,775.00
3030022		AGGREGATE BASE, CLASS 2	CU.YD.	3,517	$95.00	$334,115.00
4010011		PORTLAND CEMENT CONCRETE PAVEMENT (11")	SQ.YD.	17,250	$140.00	$2,415,000.00
4010012		PORTLAND CEMENT CONCRETE PAVEMENT (12")	SQ.YD.	9,963	$145.00	$1,444,635.00
4090005		ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) (	TON	3,649	$186.00	$678,714.00
5030XXX		CLOSED DRAINAGE SYSTEM	L. SUM	1	$456,000.00	$456,000.00
606XXXX		FREEWAY SIGNING	L. SUM	1	$551,300.00	$551,300.00
7010005		MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM	1	$1,541,000.00	$1,541,000.00
7020008		IMPACT ATTENUATION DEVICE (SMART CUSHION)	EACH	1	$30,000.00	$30,000.00

704XXXX		PAVEMENT MARKINGS	L. SUM	1	$12,900.00	$12,900.00
731XXXX		LIGHTING	L. SUM	1	$811,700.00	$811,700.00
7320713		UTILITY RELOCATION WORK	L.SUM	1	$200,000.00	$200,000.00
733XXXX		TRAFFIC SIGNALS (NEW AND MODIFICATIONS)	L. SUM	1	$1,427,200.00	$1,427,200.00
802001x		LANDSCAPING	L. SUM	1	$308,000.00	$308,000.00
8101013		EROSION CONTROL (	L.SUM	1	$77,000.00	$77,000.00
9010001		MOBILIZATION	L.SUM	1	$1,541,000	$1,541,000.00
9080001		CONCRETE CURB (C-05.10) (TYPE A)	L.FT.	1,636	$40	$65,440.00
9080090		CONCRETE CURB AND GUTTER (	L.FT.	5,619	$50	$280,950.00
9080101		CONCRETE CURB AND GUTTER, TYPE A (MAG DET. 220-1)	L.FT.	3,341	$50.00	$167,050.00
9080107		CONCRETE SINGLE CURB (MAG DET. 222)	L.FT.	5,626	$75	$421,950.00
9080201		CONCRETE SIDEWALK (C-05.20)	SQ.FT.	25,997	$14	$363,958.00
9080241		CONCRETE SIDEWALK (MAG DET. 230)	SQ.FT.	22,048	$14	$308,672.00
9080295		CONCRETE SIDEWALK RAMP	SQ.FT.	1,076	$20	$21,520.00
9080304		CONCRETE DRIVEWAY (	SQ.FT.	2,770	$15	$41,550.00
9100001		CONCRETE BARRIER	L.FT.	1,726	$150	$258,900.00
9140153		RETAINING WALL (	SQ.FT.	2,250	$210	$472,500.00
9240170		CONTRACTOR QUALITY CONTROL	L.SUM	1	$308,200.00	$308,200.00
9250001		CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1	$308,200.00	$308,200.00
		SUBTOTAL ROADWAY				**$16,925,238.00**
		30% UNIDENTIFIED ITEMS (ROADWAY)	L.SUM	1	$5,078,000	$5,078,000.00
		TOTAL ROADWAY				**$22,003,238.00**
		CONSTRUCTION ENGINEERING		15%	$3,300,500.00	$3,300,500.00
		CONSTRUCTION POST DESIGN SERVICES		1%	$220,000.00	$220,000.00
		CONSTRUCTION CONTINGENCY (5%)		5%	$1,100,200.00	$1,100,200.00
		PUBLIC INVOLVEMENT		1	$100,000.00	$100,000.00
		ICAP (10.7%)		7.90%	$2,111,200.00	$2,111,200.00

		LABOR AND MATERIALS INFLATION TO FISCAL YEAR 2026			1.0524	$1,511,000.00
TOTAL ESTIMATED CONSTRUCTION COST (EXCLUDING UTILITY RELOCATION AND R/W)						**$30,346,138.00**
DES	**PREDESIGN AND FINAL DESIGN**					
		PREDESIGN/NEPA/PI SERVICES (0% OF BASE YEAR CONSTRUCTION COST)			0.00%	$0.00
		INDIRECT COST ALLOCATION (7.9% OF ALL PREDESIGN COSTS)			7.90%	$0.00
		PREDESIGN COST INFLATION TO FISCAL YEAR 2024			1.0000	$0.00
		SUBTOTAL PREDESIGN				**$0.00**
		FINAL DESIGN SERVICES (6% OF BASE YEAR CONSTRUCTION COST)			6.0%	$1,320,200.00
		INDIRECT COST ALLOCATION (7.9% OF ALL FINAL DESIGN COSTS)			7.90%	$104,300.00
		FINAL DESIGN COST INFLATION TO FISCAL YEAR 2025			1.0250	$35,600.00
		SUBTOTAL FINAL DESIGN				**$1,460,100.00**
		TOTAL ESTIMATED DESIGN COST				**$1,460,100.00**
UTIL	**UTILITY RELOCATION**					
		PRIOR RIGHT UTILITY RELOCATIONS & SERVICE AGREEMENTS				$0.00
		INDIRECT COST ALLOCATION (7.9% OF ALL UTILITY COSTS)			7.90%	$0.00
		UTILITY RELOCATION COST INFLATION TO FISCAL YEAR 2026			1.0524	$0.00
		TOTAL ESTIMATED UTILITY COST				**$0**
R/W	**RIGHT-OF-WAY**					
		RIGHT-OF-WAY				$8,944,800.00
		INDIRECT COST ALLOCATION (7.9% OF ALL RIGHT-OF-WAY COSTS)			7.90%	$706,600.00
		RIGHT-OF-WAY PRICE ESCALATION TO FISCAL YEAR 2025			1.0250	$241,300.00
		TOTAL ESTIMATED RIGHT-OF-WAY COSTS				**$9,892,700**
					TOTAL ESTIMATED PROJECT COST	**$41,699,000**

6.0 SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

An individual Categorical Exclusion (CE), along with supporting technical reports, will be prepared for the proposed I-10 Baseline Road TI project. The Individual CE will be prepared in accordance with National Environmental Policy Act, Environmental Quality regulations, and ADOT's CE Checklist Manual (October 2024) and will be completed during the next phase of design. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project will be carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.

The following resources or areas of impact will be evaluated as part of the Individual CE:

- Landownership, jurisdiction, and land use
- Social and economic considerations
- Cultural resources
- Section 4(f) resources
- Biological resources
- Hazardous materials
- Air quality
- Noise
- Utilities
- Floodplains and drainages
- Section 404, 401, and 402 of the Clean Water Act and Arizona Pollutant Discharge Elimination System
- Visual resources
- Prime and unique farmland

The project is being prepared in cooperation with the City of Tempe, Town of Guadalupe, City of Phoenix, and MAG. The Individual CE will be prepared per the preferred alternative and will identify mitigation measures to offset potential environmental impacts.

Appendix A – AASHTO Controlling Design Criteria Report

PHOENIX – CASA GRANDE HIGHWAY
I-10

I-10; BASELINE RD TRAFFIC INTERCHANGE
TRACS NO. 010-C(229)T F0523 01L

AASHTO CONTROLLING DESIGN CRITERIA REPORT

December 2024

PREPARED FOR:

ARIZONA DEPARTMENT OF TRANSPORTATION

PREPARED BY:

501 N. 44TH ST, SUITE 300
PHOENIX, AZ 85008

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Summary of Nonconforming Existing Design Features iii

Summary of AASHTO Controlling Design Criteria 1-19

SUMMARY OF NONCONFORMING EXISTING DESIGN FEATURES

(Note: The analysis of all design features is based upon the 2018 AASHTO Green Book and A Policy on Design Standards - Interstate System, May 2016.)

Baseline Rd T.I. (M.P. 156.0)

Lane Width
1. I-10 lane width of 11 ft is lower than required 12 ft.

Shoulder Width
1. I-10 lane width of 11 ft is lower than required 12 ft.

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRACS NUMBER:
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL INTERSTATE - URBAN

ROUTE: I-10
BEGIN MP: 155.7
END MP: 156.4

LANE AND SHOULDER WIDTHS

	MILEPOST BEGIN (MP)	MILEPOST END (MP)	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
LANE WIDTH	155.7	156.3	11-12	12
	156.3	156.4	11	12
INSIDE SHOULDER	155.7	156.1	12	4
	156.1	156.3	11-12	4
	156.3	156.4	11	4
OUTSIDE SHOULDER	155.7	156.1	10-17	10
	156.1	156.2	12	10
	156.2	156.3	8-12	10
	156.3	156.4	12	10

DESIGN SPEED

THE AASHTO RECOMMENDED DESIGN SPEED OF THE ROADWAY IS: 70MPH

AS-BUILT DESIGN SPEED IS: 65 MPH

THE POSTED SPEED LIMIT IS: 65 MPH (MP 155.3 to MP 156.3)

TERRAIN IS LEVEL.
AVERAGE PROJECT ELEVATION: 1,200

GRADES

EXISTING MAXIMUM GRADE IS: 2.8%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2023 ADT (VPD)	DESIGN YEAR 2043 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
US 60 – Baseline Rd	199,553	213,274	7%	53%	8%
Baseline Rd – Elliot Rd	193,318	206,611	8%	53%	6%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Baseline Road TI OP	156.00	99.99’	17.11’	16.00’

STRUCTURES – (See Attachment #2)

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Baseline Road TI OP	156.0	186.0	186.0	Yes	Yes	HS-20	HS-20

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)

SEE ATTACHMENT #1

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

		SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MILEPOST (MP)	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
I-10 EB Cst Centerline							
8173+11.47	155.3	0.020	0.020	0.060	65	0°-23'00"	3°27'06"
8255+03.00	156.9	0.020	0.020	0.060	65	0°-15'02"	3°27'06"
I-10 WB Cst Centerline							
8108+82.30	154.1	0.020	0.020	0.060	65	1°-29'18"	3°27'06"
8255+14.75	156.9	0.020	0.020	0.060	65	0°-14'58"	3°27'06"

***Method 5**

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
CROSS ROAD

TRACS NUMBER:
MAINLINE MILEPOST: 156.0
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: URBAN ARTERIAL
INTERSECTION SATION: **8210+33.62 Med CL = 20+00.00 Baseline Rd CL**

LANE AND SHOULDER WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
LANE WIDTH	11	10
INSIDE SHOULDER	0	0
OUTSIDE SHOULDER	4	0
MEDIAN WIDTH	8	0

DESIGN SPEED

THE AASHTO RECOMMENDED DESIGN SPEED OF THE ROADWAY IS: 45 MPH

THE POSTED SPEED LIMIT IS: 40 MPH

TERRAIN IS LEVEL.

GRADES

EXISTING MAXIMUM GRADE IS: 2.14%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 5.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 1.5% - 2.5%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
CROSS ROAD

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2018 ADT (VPD)	DESIGN YEAR 2040 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
48th St – 1-10	53,981				
I-10 – Priest Dr	53,578				
Priest Dr – Hardy Dr	33,016				

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
CROSS ROAD

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

	SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
Baseline Rd Cst Centerline						
NA			Tangent			

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

TRACS NUMBER:	**010 MA F0523**	**MAINLINE MILEPOST:**	155.8
PROJECT LOCATION:	I-10; BASELINE ROAD TI		
HIGHWAY SECTION:	PHOENIX – CASA GRANDE HIGHWAY		
RAMP DESIGNATION:	RAMP A		
DESCRIPTION:	WB Entrance Ramp		

BASIS OF DERIVATION

CASE (1 OR 2 OR 3):	2
TRAFFIC CONDITIONS (A OR B OR C):	C

PAVEMENT WIDTHS

		EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
		30 -24	20
SHOULDER WIDTHS	Inside	2-4	2-4
	Outside	8	6-10

DESIGN SPEED

THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:

RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 5.12%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0 - 5.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2023 ADT (VPD)	DESIGN YEAR 2043 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
Ramp A	14,888		9%	NA	9%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

	SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
1+75.05	0.020	0.020	0.100	45	1°00’00”	10°36’37”
8+52.97	0.020	0.020	0.100	40	1°30’00”	13°58’28”

***Method 5**

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

TRACS NUMBER:	**010 MA F0523**	**MAINLINE MILEPOST:**	155.9
PROJECT LOCATION:	I-10; BASELINE ROAD TI		
HIGHWAY SECTION:	PHOENIX – CASA GRANDE HIGHWAY		
RAMP DESIGNATION:	RAMP B		
DESCRIPTION:	EB Exit Ramp		

BASIS OF DERIVATION

CASE (1 OR 2 OR 3):	3
TRAFFIC CONDITIONS (A OR B OR C):	C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
SHOULDER WIDTHS		
	35-55	27
Inside	4-8	2-4
Outside	10	6-10

DESIGN SPEED

THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:

RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 2.5537%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0 - 5.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2023 ADT (VPD)	DESIGN YEAR 2043 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
Ramp B	11,584		9%	NA	9%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

	SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
22+61.88	0.020	0.057	0.100	45	4°05’03”	10°36’37”
42+65.78	0.020	0.020	0.100	45	1°00’10”	10°36’37”
52+59.02	0.020	0.020	0.100	45	1°14’49”	10°36’37”

***Method 5**

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

TRACS NUMBER:	**010 MA F0523**	**MAINLINE MILEPOST:**	156.2
PROJECT LOCATION:	I-10; BASELINE ROAD TI		
HIGHWAY SECTION:	PHOENIX – CASA GRANDE HIGHWAY		
RAMP DESIGNATION:	RAMP C		
DESCRIPTION:	WB Exit Ramp		

BASIS OF DERIVATION

CASE (1 OR 2 OR 3):	2
TRAFFIC CONDITIONS (A OR B OR C):	C

PAVEMENT WIDTHS

		EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
SHOULDER WIDTHS		24-54	21
	Inside	4	2-4
	Outside	8	6-10

DESIGN SPEED

THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:

RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 3.5145%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0 - 5.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2023 ADT (VPD)	DESIGN YEAR 2043 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
Ramp C	14,933		9%	NA	9%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

	SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
5+88.22	0.020	0.020	0.100	45	0°45’00”	10°36’37”

***Method 5**

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

TRACS NUMBER:	**010 MA F0523**	**MAINLINE MILEPOST:**	156.2
PROJECT LOCATION:	I-10; BASELINE ROAD TI		
HIGHWAY SECTION:	PHOENIX – CASA GRANDE HIGHWAY		
RAMP DESIGNATION:	RAMP D		
DESCRIPTION:	EB Entrance Ramp		

BASIS OF DERIVATION

CASE (1 OR 2 OR 3):	2
TRAFFIC CONDITIONS (A OR B OR C):	C

PAVEMENT WIDTHS

		EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
SHOULDER WIDTHS		24-30	21
	Inside	2	2-4
	Outside	2-4	6-10

DESIGN SPEED

THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:

RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 4.0248%

AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0 - 5.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0%

AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2023 ADT (VPD)	DESIGN YEAR 2043 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
Ramp D	16,285		9%	NA	9%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

	SUPERELEVATION				DEGREE OF CURVE	
HPI STATION	MINIMUM (FT/FT)	EXISTING (FT/FT)	MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	EXISTING (DEGREE)	MAXIMUM (DEGREE)
3+66.39	0.020	0.028	0.100	40	2°00’00”	13°58’28”
16+81.31	0.020	0.020	0.100	45	1°30’00”	10°36’37”

***Method 5**

ATTACHMENT 1 - VERTICAL CURVE INVENTORY

Project Name: I-10; BASELINE RD TRAFFIC INTERCHANGE
Project Number: 010-C(229)T F0253 01L
Roadway Type: PRINCIPAL ARTERIAL INTERSTATE - URBAN

VPI STATION	MILEPOST		TRAFFIC DIRECTION (1w, 1a or 2)	GRADE IN (%)	GRADE OUT (%)	CURVE LENGTH (ft)	CURVE TYPE	STOPPING SIGHT DISTANCE		SPEED	
	BEGIN	END						AVAILABLE (ft)	AASHTO MINIMUM (ft)	AVAILABLE (mph)	DESIGN (mph)
I-10 EB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.182	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
8236+81.31	156.4	156.6	1w	1.472	0.949	1000	Crest	2563	645	>90	65
I-10 WB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.812	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
BASELINE RD RAMP A											
6+25.00			1w	2.411	-5.120	650	Crest	432	360	50	45
10+00.00			1w	-5.120	2.898	100	Sag	96	250	15	35**
BASELINE RD RAMP B											
25+50.00			1w	-3.000	3.000	640	Sag	465	360	50	45
31+48.06			1w	3.000	-1.000	500	Crest	520	360	55	45
36+50.00			1w	-1.000	2.554	400	Sag	505	360	55	45
BASELINE RD RAMP C											
2+00.00			1w	1.656	3.515	200	Sag	3547	250	>90	35
9+25.00			1w	3.515	1.058	600	Crest	739	360	70	45
BASELINE RD RAMP D											
1+75.00			1w	2.000	4.025	200	Sag	1465	250	>90	35
7+40.00			1w	4.025	1.072	600	Crest	665	360	65	45

Appendix B – ADA Report

I-10/Baseline Road TI
ADA Compliance and Feasibility Report

November 2023

PREPARED FOR:

AZTEC Engineering Group

ADOT

PREPARED BY:

Y2K Engineering, LLC.

Project No. 2023-014

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INTRODUCTION

The implementation of a newly designed traffic interchange is proposed for Interstate 10 (I-10) on Baseline Road. An accessibility audit was performed on existing intersections within the study area to support this project. The purpose of the audit was to review the existing intersection and roadway segment facilities and to assess compliance with the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design[1], the Manual on Uniform Traffic Control Devices (MUTCD)[2], and the 2013 Proposed Public Right-of-Way Accessibility Guidelines (2013 PROWAG)[3]. The purpose of this review is to determine the extent of reconstruction that will be required as part of the project to meet accessibility standards.

CRITERIA

The MUTCD, ADA, and 2013 PROWAG standards and guidelines were used as criteria for the accessibility audit. The ADA standards referenced refer to the design of curb ramps, accessible routes, and access to pedestrian push buttons. Within Chapter 4E, the MUTCD contains standards for the location, signage, features, and access of pedestrian push buttons. The 2013 PROWAG provides additional criteria for the design of curb ramps, accessible routes, and pedestrian push buttons.

This report recognizes that between the date of the accessibility field audit and the delivery of this report, the final rule on PROWAG[4] was issued. As the final rule was not published at the time of the field audit, this report will still reference the 2013 PROWAG. Additionally, the changes within the final rule PROWAG are principally consistent (with few minor exceptions) with the study's original criteria and make no change to the report's findings. All relevant changes between the 2013 PROWAG and the final rule PROWAG have been noted in the report.

A notable difference of the final rule PROWAG is that the guidelines no longer incorporate MUTCD criteria by reference. However, there is no material impact on the report's findings since the previously referenced criteria from MUTCD are now included directly within the final rule PROWAG text. The report acknowledges this difference simply because it is an evident change.

It is important to note that while the final rule PROWAG was published by the Architectural and Transportation Barriers Compliance Board (Access Board), the guidelines will not become enforceable under the ADA until adopted by the U.S. Department of Justice (DOJ) and the U.S. Department of Transportation (USDOT). Nonetheless, the PROWAG guidelines have and continue to be generally accepted as best practices for the design of new construction, and the guidelines are anticipated to be adopted as federal regulations in the near future.

The criteria considered in the audit is listed below; further detail on each can be found in the respective manuals.

[1] https://www.access-board.gov/ada/

[2] https://mutcd.fhwa.dot.gov/htm/2009/part4/part4e.htm

[3] https://www.access-board.gov/prowag/proposed/

[4] https://www.access-board.gov/prowag/

2010 ADA Standards

- 307.4 – 80” minimum vertical clearance
- 308.3 – 24” maximum side reach to pedestrian pushbutton
- 308.3 – pushbutton height between 15” and 48”
- 403.5 – 36” clear width on the accessible route
- 405.2 – 8.3% maximum running slope of the ramp
- 405.3 – 2.08% maximum cross slope of the ramp
- 406.2 – 5% maximum counterslope of adjoining gutter
- 406.3 – 10% maximum slope of ramp side flares
- 406.4 – 8.3% maximum slope of ramp side flares (if top landing area < 36” in length)
- 406.4 – 36”x 36” landing at the top of the ramp (with max 2.08% slope)
- 406.6 – for diagonal curb ramps: 48” to active traffic, 24” from flare to crosswalk marking (see Figure 1)
- 406.7 – pedestrian refuge islands with a minimum 48” long by 36” wide landing

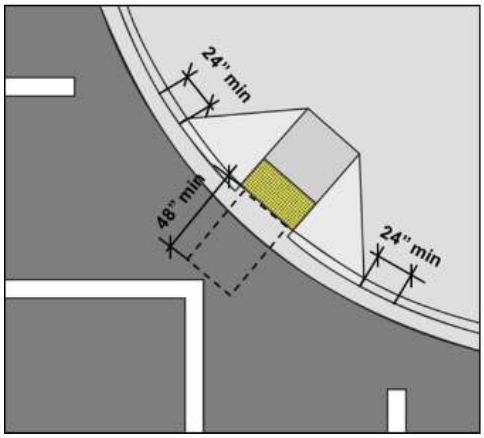

Figure 1: ADA 406.6 Criteria

MUTCD

Final rule PROWAG citations are noted in parenthesis following each MUTCD citation.

- 4E.06.07 (R306.2) – pedestrian clearance time to support a pedestrian walking at a speed of 3.5 seconds or less
- 4E.08.04-A (R307.1) – unobstructed pushbutton for wheelchair access
- 4E.08.04-B (R203.2) – accessible route from pushbutton to ramp
- 4E.08.04-C (R307.4) – maximum 5’ spacing from pushbutton to crosswalk line (see Figure 2)
- 4E.08.04-D (R307.4) – pushbutton between 1.5’ and 6’ from the edge of the curb, not further than 10’ from the edge of the curb (see Figure 2)
- 4E.08.04-E (R307.5) – pushbutton parallel to the crosswalk to be used
- 4E.08.07 (R307.4.1) – If two pushbuttons are provided on the same corner, they are to be separated by a minimum of 10’
- 4E.10.03 (R307.4.1) – if the pushbutton spacing is <10’, APS features are provided (locator tone, vibrotactile arrow, speech messages)

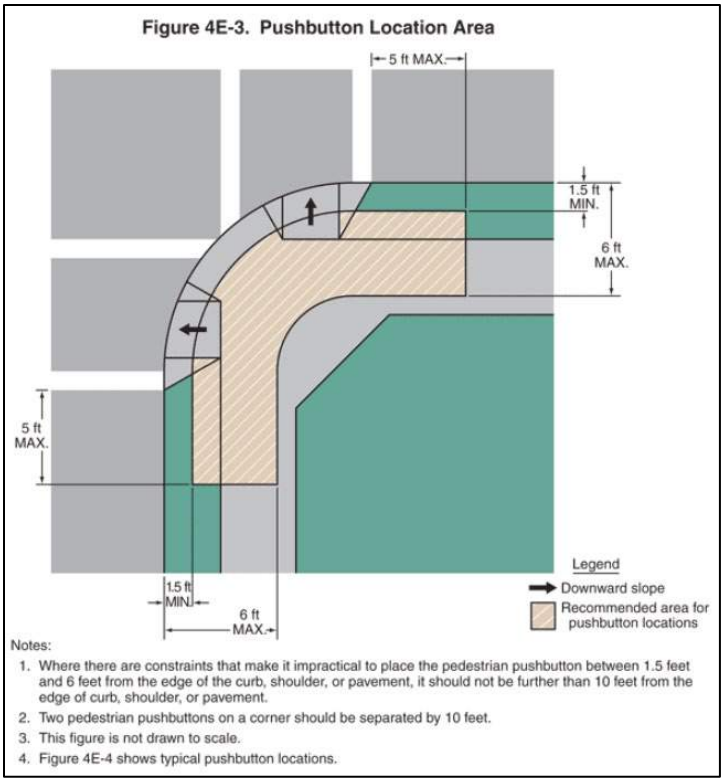

Figure 2: MUTCD Figure 4E-3 Pushbutton Location Area

2013 PROWAG

Final rule PROWAG citations are noted in parenthesis following each 2013 PROWAG citation.

- R207.1 (R203.6.1.1) * – A curb ramp, blended transition, or a combination of curb ramps and blended transitions shall connect the pedestrian access routes at each pedestrian street crossing.
- R209.1 (R206.1) – accessible pedestrian signals/pedestrian pushbutton features per MUTCD 4E.09-13
- R302.3 (R302.2) – 48” continuous clear width of pedestrian access routes
- R302.5 (302.4.1) – 5% maximum grade (or ≤ road grade) for pedestrian access routes
- R302.6 (302.5.1) – 2.0%* maximum cross slope for pedestrian access routes
- R302.7 (R302.6.2) – maximum vertical surface change of ¼”
- R304.2.1 (R304.2.5) – 48” turning space at the top of the ramp (with max 2.0%** slope***)
- R304.2.2 (R304.2.1) – 8.3% maximum grade running slope of the ramp
- R305.1.4 (R305.1.4) – detectable warning surface present across the ramp with 2’ depth
- R305.2.4 (R305.2.4) – pedestrian refuge minimum dimensions of 6’ length, 5’ width, 2’ between detectable warnings
- R404.3 (R404.3) – 2.5’x4’ clear space at pushbuttons

**In alterations where existing physical constraints prevent compliance with this standard, a single diagonal curb ramp is permitted. The justification behind a non-compliant determination should be documented.*
***Final rule PROWAG changed this to 2.1%. This change had no impact on the findings of this report.*
****Both versions of PROWAG state conditions which allow for an exception to this standard. None of those conditions were applicable within the study area.*

FIELD REVIEW PROCESS

Two separate field reviews were conducted for the ADA Audit at the seven specified study intersections that are within the anticipated project limits of new construction:

- Calle Los Cerros Dr & Baseline Rd
- Arizona Grand Pkwy & Baseline Rd
- Wendler Dr & Baseline Rd
- I-10 South & Baseline Rd
- I-10 North & Baseline Rd
- Arizona Mills & Baseline Rd
- Priest Dr & Baseline Rd

The field review audits were held on May 5, 2023 and May 11, 2023. The field review process consisted of measuring the lengths, distances, and grades at each corner of each study intersection, as well as walking the full sidewalk length of the corridor on both sides of Baseline Road to identify any deficiencies. The measurements were recorded and reviewed to see if they met the desired specifications of the MUTCD, ADA, and 2013 PROWAG guidelines.

Identified Deficiencies

The locations and features that are not in compliance with the study's guidelines and standards are shown below in **Table 1**.

Table 1: ADA Deficiencies at Study Intersections

Intersection	Deficiencies
Calle Los Cerros Dr & Baseline Road	• NWC – Maximum grade within turning space at NS ramp – 3.20% (ADA 406.4 & 2013 PROWAG R304.2.1) • NWC – Maximum counterslope of adjoining gutter at NS/EW ramps – 12.35%/6.25% (ADA 406.2) • NWC – NS ramp turning space – 47" (2013 PROWAG R304.2.1) • NWC – Distance between the push button and the crosswalk line – 7' (MUTCD 4E.08.04-C) • NWC – Maximum slope of ramp side flares – 10.20% (ADA 406.3) • NWC – Continuous clear width – 47" NS ramp (2013 PROWAG R302.3) • NWC – Turning space at the top of NS ramp – 48"x47" (2013 PROWAG R304.2.1) • NEC – Maximum cross slope of EW ramp – 2.25% (ADA 405.3) • NEC – Maximum grade within turning space at NS/EW ramps – 2.70%/2.25% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • SWC – NS ramp turning space – 47" (2013 PROWAG R304.2.1) • SWC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • SWC – Continuous clear width – 47" NS ramp (2013 PROWAG R302.3) • SWC – Turning space at the top of both ramps – 48"x47" (2013 PROWAG R304.2.1)

Intersection	Deficiencies
	• SEC – Maximum counterslope of adjoining gutter at NS ramp – 8.80% (ADA 406.2) • SEC – Maximum grade within turning space at NS ramp – 2.35% (ADA 406.4 & 2013 PROWAG R304.2.1) • SEC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • East and West Crosswalks – Pedestrian clearance time (MUTCD 4E.06) • All corners – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209)
Arizona Grand Pkwy & Baseline Road	• NWC – Maximum grade at NS sidewalk – 10.30% (2013 PROWAG R302.5) • NWC – Insufficient clear space at push buttons (2013 PROWAG R404.3) • NEC – Maximum cross slope of EW ramp – 2.25% (ADA 405.3) • NEC – Distance between the push button and the crosswalk line – 70" (MUTCD 4E.08.04-C) • NEC – Distance between the push button and the edge of the curb – 12' (MUTCD 4E.08.04-D) • NEC – Maximum grade within turning space at NS/EW ramps – 2.25%/2.25% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Continuous clear width – 46" both ramps (2013 PROWAG R302.3) • NEC – Turning space at the top of both ramps – 48"x46" (2013 PROWAG R304.2.1) • SWC – Maximum grade at south sidewalk – 6.70% (2013 PROWAG R302.5) • SEC – Maximum counterslope of adjoining gutter at perpendicular ramp – 20.50% (ADA 406.2) • SEC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • SEC – Maximum running slope of parallel ramp (right run)– 10.40% (ADA 405.2) • SEC – Maximum grade at south sidewalk – 5.20% (2013 PROWAG R302.5) • East and West Crosswalks – Pedestrian clearance time (MUTCD 4E.06) • All corners – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209)
Wendler Dr & Baseline Road	• NEC – Maximum counterslope of adjoining gutter at the ramp – 6.60% (ADA 406.2) • NEC – Maximum grade within turning space – 2.95% (ADA 406.4 & 2013 PROWAG R304.2.1)
I-10 South & Baseline Road	• NWC – Maximum grade within turning space at NS/EW ramps – 7.50%/8.00% (ADA 406.4 & 2013 PROWAG R304.2.1)

Intersection	Deficiencies
	• NWC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • NWC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • NEC – Maximum cross slope of the ramp – 4.60% (ADA 405.3) • NEC – Maximum grade within turning space – 5.05% (ADA 406.4 & 2013 PROWAG R304.2.1) • SWC – Maximum cross slope of EW ramp – 3.40% (ADA 405.3) • SWC – Distance between the push button and the crosswalk line – 11' (MUTCD 4E.08.04-C) • SWC – Distance between the push button and the edge of the curb – 13' (MUTCD 4E.08.04-D) • SWC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • SEC – Maximum grade within turning space – 3.55% (ADA 406.4 & 2013 PROWAG R304.2.1) • SEC – Continuous clear width – 3' ramp (2013 PROWAG R302.3) • SEC – Turning space at the top of ramp – 36" (2013 PROWAG R304.2.1) • Pedestrian Island – Pedestrian island dimensions – 55" wide, no detectable warnings (R305.2.4) • Pedestrian Island – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • West Crosswalks North and South of Pedestrian Island – Pedestrian clearance time (MUTCD 4E.06) • All corners – Detectable warnings are not present at ramps (ADA 406.8 & R305.1.4) • All corners – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209)
I-10 North & Baseline Road	• NWC – Maximum grade within turning space – 5.50% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Maximum grade within turning space at NS/EW ramps – 5.75%/5.85% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Distance between the push button and the crosswalk line – greater than 15' (MUTCD 4E.08.04-C) • NEC – Distance between the push button and the edge of the curb – 11' (MUTCD 4E.08.04-D) • NEC – Insufficient clear space at push buttons (2013 PROWAG R404.3) • NEC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • SWC – Maximum grade within turning space – 4.85% (ADA 406.4 & 2013 PROWAG R304.2.1)

Intersection	Deficiencies
	• SEC – Maximum grade within turning space at NS ramp – 3.80% (ADA 406.4 & 2013 PROWAG R304.2.1) • SEC – Wheelchair push button access is obstructed and the accessible route from the push button to the ramp is insufficient (MUTCD 4E.09-A) • SEC – Distance between the push button and the edge of the curb – greater than 15' (MUTCD 4E.08.04-D) • SEC – Insufficient clear space at push buttons (2013 PROWAG R404.3) • SEC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • Pedestrian Island – Pedestrian island dimensions – 57" wide, no detectable warnings (R305.2.4) • Pedestrian Island – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • East Crosswalks North and South of Pedestrian Island – Pedestrian clearance time (MUTCD 4E.06) • All corners – Detectable warnings are not present at ramps (ADA 406.8 & R305.1.4)
Arizona Mills & Baseline Road	• NWC – Maximum grade within turning space – 8.70% (ADA 406.4 & 2013 PROWAG R304.2.1) • NWC – Maximum counterslope of adjoining gutter at the ramp – 7.65% (ADA 406.2) • NWC – Detectable warning is not present at the ramp (ADA 406.8 & R305.1.4) • NWC – Maximum grade at NS sidewalk – 5.60% (2013 PROWAG R302.5) • NWC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • NEC – Maximum grade within turning space – 7.30% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Distance between the push button and the edge of the curb – greater than 16' (MUTCD 4E.08.04-D) • NEC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • NEC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • NEC – Single diagonal ramp provided for both pedestrian street crossings (2013 PROWAG R207.1) • SEC – Maximum counterslope of adjoining gutter at the ramp – 7.05% (ADA 406.2) • SEC – Distance between the push button and the crosswalk line – 10' (MUTCD 4E.08.04-C)

Intersection	Deficiencies
	• SEC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • SEC – Turning space at the top of ramp – 48"x46" (2013 PROWAG R304.2.1) • SEC – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209) • East Crosswalk – Pedestrian clearance time (MUTCD 4E.06)
Priest Dr & Baseline Road	• NWC – Maximum grade within turning space – 3.80% (ADA 406.4 & 2013 PROWAG R304.2.1) • NWC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • NWC – Continuous clear width – 46" ramp (2013 PROWAG R302.3) • NWC – Turning space at the top of ramp – 46" (2013 PROWAG R304.2.1) • NWC – Detectable warning is not present at ramp (ADA 406.8 & R305.1.4) • NWC – Single diagonal ramp provided for both pedestrian street crossings (2013 PROWAG R207.1) • NEC – Maximum grade within turning space – 2.60% (ADA 406.4 & 2013 PROWAG R304.2.1) • NEC – Maximum counterslope of adjoining gutter at the ramp – 9.50% (ADA 406.2) • NEC – Wheelchair push button access is obstructed and the accessible route from the push button to the ramp is insufficient (MUTCD 4E.09-A) • NEC – Distance between the EW push button and the crosswalk line – greater than 10' (MUTCD 4E.08.04-C) • NEC – Distance between the EW push button and the edge of the curb – 16' (MUTCD 4E.08.04-D) • NEC – Continuous clear width – 43" ramp (2013 PROWAG R302.3) • NEC – Turning space at the top of ramp – 43" (2013 PROWAG R304.2.1) • NEC – Detectable warning is not present at ramps (ADA 406.8 & R305.1.4) • NEC – Single diagonal ramp provided for both pedestrian street crossings (2013 PROWAG R207.1) • SWC – Maximum grade within turning space at NS/EW ramp – 2.50%/3.05% (ADA 406.4 & 2013 PROWAG R304.2.1) • SWC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • SWC – Maximum grade at connecting sidewalks – 12.70%/10.20% (2013 PROWAG R302.5) • SWC – Continuous clear width – 42" ramp (2013 PROWAG R302.3) • SWC – Turning space at the top of both ramps – 42" (2013 PROWAG R304.2.1) • SWC – Detectable warning is not present at ramps (ADA 406.8 & R305.1.4) • SEC – Push button height at NS push button – 53" (ADA 308.3)

Intersection	Deficiencies
	• SEC – Maximum running slope of ramps – 8.65%/9.25% (ADA 405.2 & 2013 PROWAG R304.2.2) • SEC – Maximum cross slope of the ramp – 2.40% (ADA 405.3) • SEC – Maximum slope of ramp side flares at both ramps – 11.00%/10.05% (ADA 406.3) • SEC – Maximum grade within turning space at NS/EW ramp – 2.40%/2.25%/2.70% (ADA 406.4 & 2013 PROWAG R304.2.1) • SEC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • SEC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • SEC – Continuous clear width – 43" ramps (2013 PROWAG R302.3) • SEC – Turning space at the top of both ramps – 48"x43" (2013 PROWAG R304.2.1) • SEC – Insufficient clear space at push buttons (2013 PROWAG R404.3) • East and West Crosswalks – Pedestrian clearance time (MUTCD 4E.06) • All corners – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209)

IMPROVEMENTS NEEDED

Intersections

The deficiencies shown in **Table 1** were used to determine if improvements were needed at the study intersections to meet ADA requirements. These improvements were separated into categories described below.

Curb Ramp Reconstruction

The reconstruction of a curb ramp at an intersection would require the removal of the existing curb ramp that does not meet ADA and 2013 PROWAG requirements and guidelines. The reconstructed curb ramp will feature slopes and lengths that meet the minimum ADA and PROWAG requirements. These measurements include the cross slope, running slope, side flare slopes, and turning space of the curb ramp. Additionally, the curb ramps must feature detectable warning surfaces. An example of a curb ramp that does not meet the current criteria is shown in **Figure 3**.

Figure 3: Curb Ramp without Detectable Warning Surface – NWC of I-10 South & Baseline Road

Sidewalk Approach Reconstruction

Figure 4: Sidewalk Approach with Steep Slope – NWC of Arizona Grand Parkway & Baseline Road

The reconstruction of a sidewalk approach to one of the corners of an intersection would require the complete removal of the existing sidewalk pavement and replacement sidewalk pavement to be installed. The slabs that do not meet the necessary slope and vertical clearance requirements would need to be removed separately, but neighboring slabs that meet the criteria would not need to be affected. Figure 4 shows a sidewalk approach to the corner of an intersection that does not meet 2013 PROWAG requirements because its slope is too steep.

Push Button Assembly Upgrade

The push button assembly refers to the push button, the hardware surrounding the button, and the accompanying pedestrian crossing sign. Pedestrian push button upgrades are recommended where ADA standards, MUTCD standards, or 2013 PROWAG elements are not currently satisfied. Upgrades are recommended to involve replacing the push button assembly entirely with a new assembly that meets the audio and tactile needs of the PROWAG push buttons. An example of a push button assembly that does not meet ADA standards can be seen in Figure 5.

Figure 5: Push Button Assembly that does not meet 2013 PROWAG guidance– SWC of Priest Drive & Baseline Road

Figure 6: Push Button Pole/Foundation Too Far from Edge of Curb – NEC of Priest Drive & Baseline Road

New Push Button/Foundation

The installation of a new push button pole and foundation would be required where the existing pole/foundation does not meet the minimum distances from the edge of the curb and crosswalk line per MUTCD requirements, or if insufficient space exists between two pushbuttons. A new push button pole and foundation would require a clear space on the sidewalk that meets MUTCD requirements. Additionally, a new pole would require the accompanied new control units where necessary, and any required wiring changes included with that. Figure 6 shows a push button pole/foundation that would require replacement due to its proximity to the edge of the curb.

Gutter/Apron Improvements to Curb Ramps

Improvements to the gutter or apron of curb ramps are recommended to improve the counterslope of the curb ramp. A counterslope of the gutter/apron that does not meet ADA standards would need to be replaced. This would include replacing any pavement that is too steep to match the required minimum slope outlined in the ADA standards. An example of a gutter/apron that is too steep can be seen in Figure 7.

Figure 7: Gutter/Apron Area with Steep Slope – NEC of Priest Drive & Baseline Road

The proposed recommendations at each corner of each study intersection are shown in Table 2.

Table 2: Proposed Recommendations at the Study Intersections

		Curb Ramp Reconstruction	Sidewalk Approach Reconstruction	Push Button Assembly Upgrade	New Push Button Pole/Foundation	Gutter/Apron Improvements to Curb Ramp
Calle Los Cerros Dr	NWC	2	0	1	0	2
	NEC	2	0	1	0	0
	SWC	1	0	1	0	0
	SEC	1	0	1	1	1
Arizona Grand Pkwy	NWC	0	1	1	0	0
	NEC	2	0	1	1	0
	SWC	0	1	1	0	0
	SEC	1	1	1	1	1
Wendler Dr	NWC	0	0	0	0	0
	NEC	1	0	0	0	1
	SWC	N/A	N/A	N/A	N/A	N/A
	SEC	N/A	N/A	N/A	N/A	N/A
I-10 South	NWC	2	0	1	1	0
	NEC	1	0	0	0	0
	SWC	2	0	1	1	0
	SEC	1	0	0	0	0
	Pedestrian Island	2	0	1	0	0
I-10 North	NWC	1	0	0	0	0
	NEC	2	0	1	1	0
	SWC	1	0	0	0	0
	SEC	2	0	1	1	0
	Pedestrian Island	2	0	1	0	0
Arizona Mills	NWC	1	1	0	0	1
	NEC	1	0	1	1	0
	SWC	N/A	N/A	N/A	N/A	N/A
	SEC	1	0	1	1	1
Priest Dr	NWC	1	0	1	0	0
	NEC	1	0	1	1	1
	SWC	2	1	1	0	0
	SEC	2	0	1	1	0
TOTAL		**35**	**5**	**20**	**11**	**8**

Segments

The sidewalks and driveway transitions along Baseline Road were analyzed and reviewed to see if they met ADA and 2013 PROWAG standards and guidance. The study corridor was divided into five segments for this analysis:

- Calle Los Cerros Drive to Arizona Grand Parkway
- Arizona Grand Parkway to Wendler Drive
- Wendler Drive to Interstate 10 (I-10)
- Interstate 10 to Arizona Mills
- Arizona Mills to Priest Drive

Recommended improvements to the sidewalks and driveways within the study corridor are described in the categories below.

Driveway Curb Ramp Reconstruction

The curb ramps at a driveway that do not meet ADA and 2013 PROWAG requirements and guidelines would require reconstruction. A similar process to the reconstruction of curb ramps at intersections would need to be carried out. The existing curb ramp would need to be completely replaced with a new ramp that meets the minimum ADA/PROWAG criteria. Driveway curb ramps with deficient measurements can be seen in **Figure 8**.

Figure 8: Driveway Curb Ramp with Steep Slopes – Between Calle Los Cerros Drive & Arizona Grand Parkway on Baseline Road

Figure 9: Driveway with Steep Slopes – Between Interstate 10 (I-10) and Arizona Mills on Baseline Road

Full Driveway Reconstruction

Driveways with steep slopes would be required to be reconstructed to match the standards set by ADA and PROWAG. This includes the running slopes on the sides of the driveway opening and the cross slope of the apron area of the driveway. Reconstruction would require the replacement of existing sidewalk sections to improve accessibility at the driveway. **Figure 9** shows a driveway that does not meet the necessary ADA/PROWAG criteria.

Sidewalk Section Reconstruction

Sidewalks that do not have the required minimum measurements or have vertical surface change issues will need to be removed and replaced. The entire deficient sidewalk section is recommended to be removed and reconstructed with ADA/ PROWAG standards met. The neighboring sidewalk sections would be unaffected as long as they meet the necessary criteria. An example of sidewalk pavement that does not meet ADA/PROWAG requirements is shown in **Figure 10**.

Figure 10: Sidewalk Pavement with Vertical Surface Change Deficiency – Between I-10 North & Arizona Mills on Baseline Road

The proposed recommendations for each segment are shown in **Table 3**.

Table 3: Proposed Recommendations along the Study Corridor

	Driveway Curb Ramp Reconstruction	Full Driveway Reconstruction	Sidewalk Section Reconstruction
Calle Los Cerros Dr to Arizona Grand Pkwy	2	0	0
Arizona Grand Pkwy to Wendler Dr	0	3	0
Wendler Dr to I-10	0	1	0
I-10 to Arizona Mills	0	6	3
Arizona Mills to Priest Dr	2	5	2
TOTAL	**4**	**15**	**5**

The number of deficiencies at the study intersections totals 79 deficiencies spread across the five improvement categories. The greatest frequency of deficiencies was in the intersection curb ramps, as they do not meet the current standards/guidance for running slope, cross-slope, flare slope, landing area, or counterslope. The southwest corner of Arizona Mills/Baseline Road and northwest corner of Wendler Drive/Baseline Road were both found to meet all necessary ADA standards. Calle Lose Cerros Drive/Baseline Road and Priest Drive/Baseline Road were the intersections with the greatest number of deficiencies.

A total of 24 deficiencies were identified along the study corridor between the study intersections, on either sidewalk sections or driveway transitions. Many of the deficiencies were observed at driveways along the south side of Baseline Road. 15 driveways in total were identified as deficient, not meeting ADA requirements. The area with the most deficiencies was identified from the I-10 to Arizona Mills on the south side of Baseline Road. This area was identified with nine deficiencies, with six being driveway deficiencies and three being sidewalk vertical surface change deficiencies. The locations of the driveway and sidewalk deficiencies are shown in **Figure 11**.

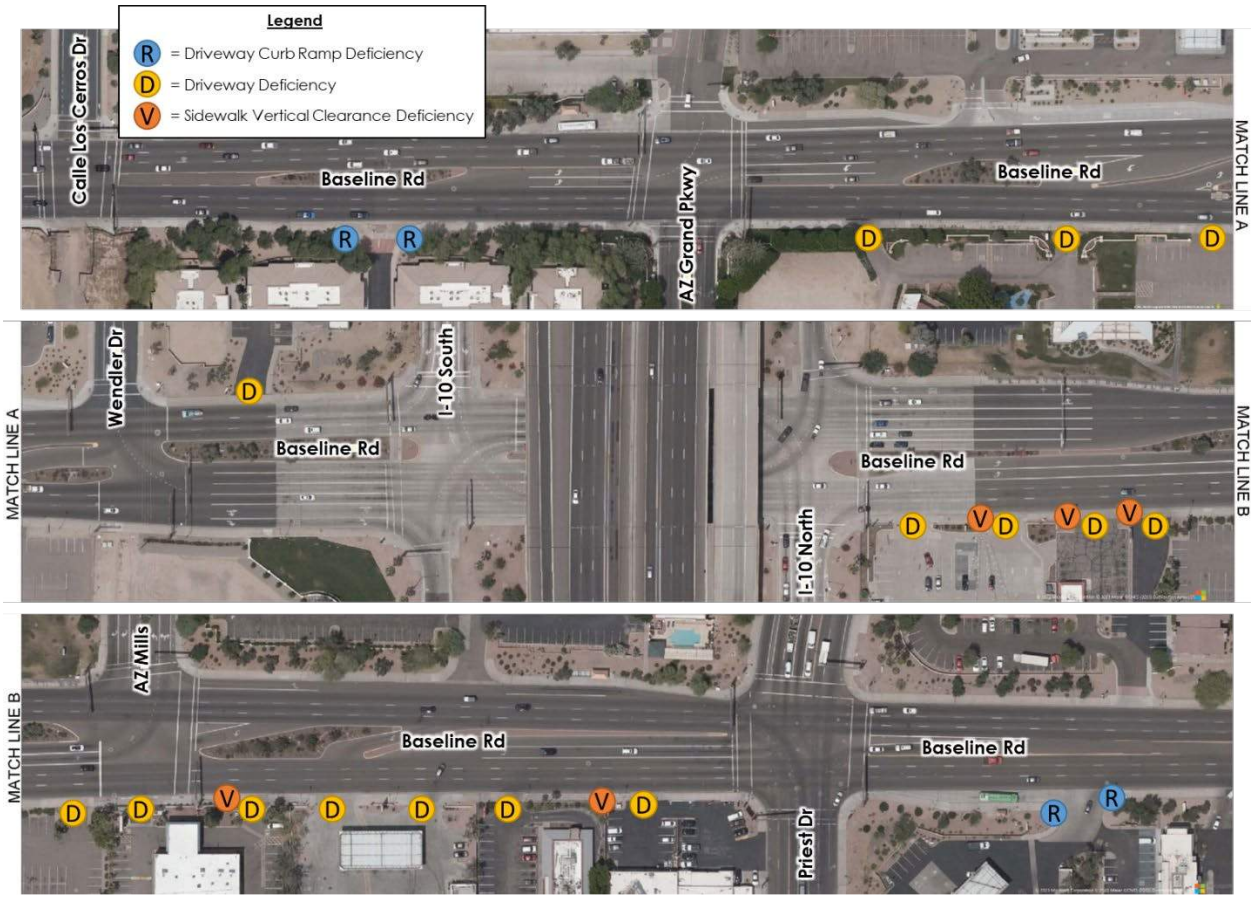

Figure 11: Location of Sidewalk/Driveway Deficiencies along the Study Corridor

CONCLUDING REMARKS

A significant number of deficiencies were identified and analyzed within the project limits of new construction. The audit identified 79 deficiencies at the 7 specified intersections and 24 deficiencies at sidewalk sections and driveway transitions between the intersections. Every corner at each of the study intersections would have to be reconstructed in order to be made ADA/MUTCD/PROWAG-compliant, with a few exceptions. These exceptions include the southwest corner of Arizona Mills/Baseline Road, the northwest corner of Wendler Drive/Baseline Road, and the northwest and southwest corners of Arizona Grand Parkway/Baseline Road. 15 driveways within the study area were identified with deficiencies and would require reconstruction. The area east of the I-10 freeway on the south side of Baseline Road was found to require the most amount of reconstruction. Overall, a significant amount of reconstruction is expected within the project limits with the implementation of an updated traffic interchange for the I-10 on Baseline Road.

Appendix C – Final Traffic Report

Jacobs

I-10 and Baseline Road TI DCR (F0523 01L)

Final Traffic Report

EXPIRES 3/31/2025

December 2024

Jacobs

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Appendix A: Traffic Counts

1. Introduction and Background

This report provides a summary of the methods and assumptions employed in the traffic operations analysis conducted for the I-10 and Baseline Road Traffic Interchange. It includes an examination of both the existing (2023) and projected no-build future year (2050) traffic conditions. It is important to note that this report and analysis are components of a larger Design Concept Report (DCR) initiated by the Arizona Department of Transportation (ADOT). Consequently, the report will be updated in the future to incorporate a broader contextual analysis of the need and proposed solutions to improve traffic operations and safety.

1.1 Study Area

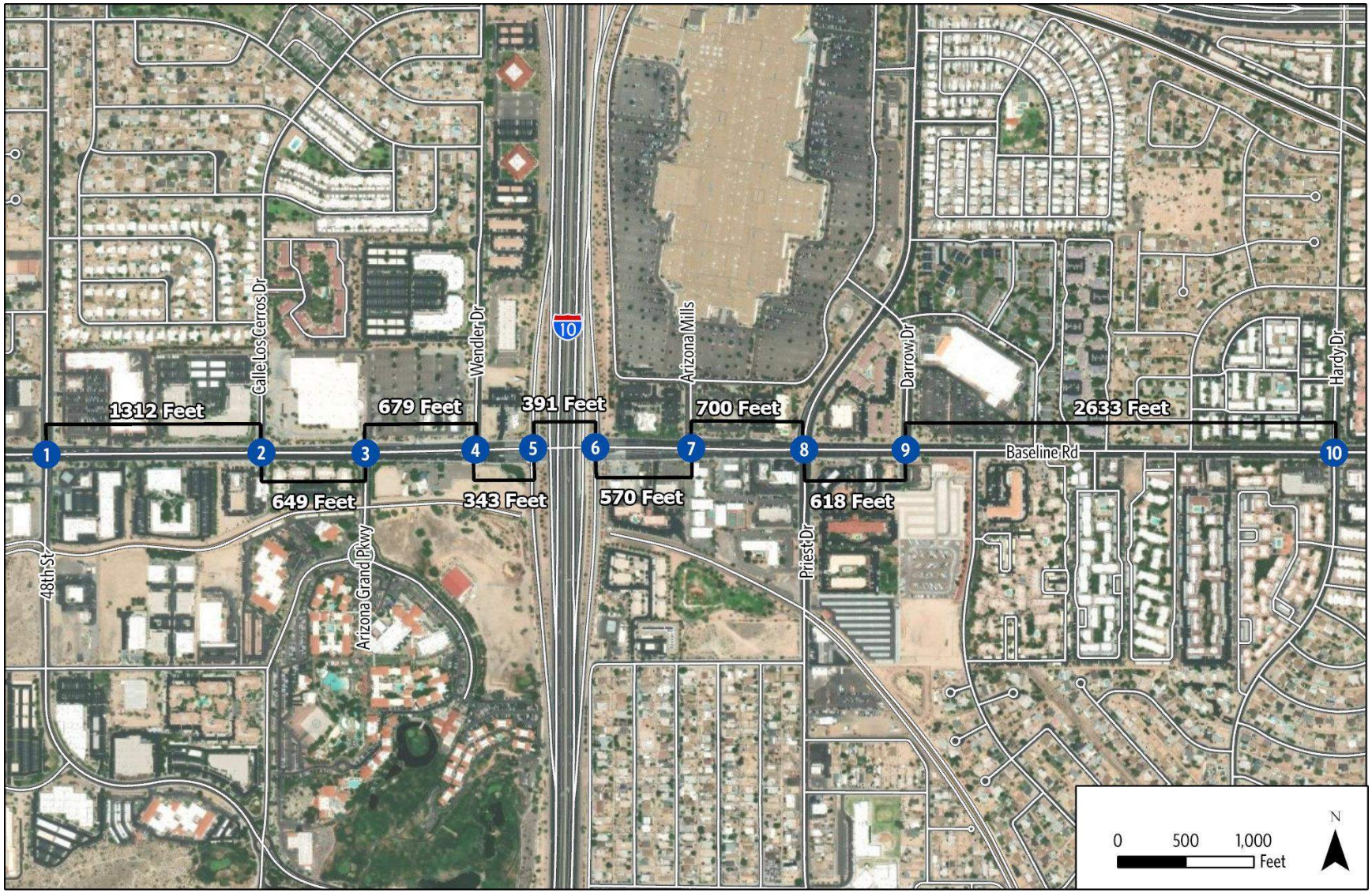
The existing I-10 and Baseline Road interchange is in Tempe, AZ. The Baseline Road arterial serves approximately 55,000 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments. The I-10 Baseline Road interchange is currently configured as a standard diamond interchange.

The Study Area is shown in Figure 1-1 and consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

1. South 48th Street
2. South Calle Los Cerros Drive
3. Arizona Grand Parkway
4. South Wendler Drive
5. I-10 Eastbound Ramps
6. I-10 Westbound Ramps
7. Arizona Mills South
8. South Priest Drive
9. South Darrow Drive
10. Hardy Drive

The intersections shown in Figure 1-1 were analyzed for traffic operations for Existing (2023) and future No-Build (2050) conditions. Figure 1-1 also includes the spacing between the signalized intersections along the corridor. The relatively short spacing between the signalized intersections along the corridor amplifies queueing issues during peak hours. As traffic accumulates on Baseline Road, occupying the spaces between signalized intersections, vehicles from side streets and numerous driveways experience extended wait times spanning multiple signal cycles as they attempt to enter Baseline Road.

Figure 1-1: Study Area Map



2. Existing Conditions

This section of the study summarizes the existing traffic conditions along Baseline Road and the data used to perform the traffic analysis.

2.1 Existing Configuration

Baseline Road is a six-lane arterial with 3 lanes on each direction and a posted speed of 45 miles per hour. There are two-way left-turn lanes along the corridor with medians at the intersection approaches. Figure 2-2 identifies all the signalized intersections along Baseline Road. Baseline Road along this stretch has commercial establishments on either side; driveways that serve these commercial establishments intersect Baseline Road between the signalized intersection. Most of the traffic along Baseline Road in this stretch is pass through with origins and destinations located outside the immediate influence area of the corridor. This is illustrated in Figure 2-1 which shows the travel shed for Baseline Road in the study corridor; much of the traffic disperses to areas outside the immediate influence area of the corridor.

Figure 2-1. Study Corridor Travel Shed

Baseline Road is the *last* east-west roadway before South Mountain and a terminus point of nearly all north-south roads west of the I-10. A few exceptions extend into residential communities at the base of the mountain. The first north south connection west of the I-10 and Baseline Road TI is 48th Street. 48th Street becomes South Pointe Parkway south of Baseline Road and connects through to Elliot Road. South Pointe Parkway is a two-lane residential road with posted speeds of 25 mph and is not designed to carry heavy through traffic.

Between 48th Street and Hardy Drive, Baseline Road touches four jurisdictions: Phoenix, Tempe, Guadalupe, and ADOT. Phoenix maintains the intersection of 48th Street and Baseline Road. Tempe maintains Baseline Road from 48th Street to Hardy Drive, including the signals at the interchange, while ADOT maintains the entrance and exit ramps to I-10 as well as the bridge overpass. Guadalupe's northern-most limits are between the I-10 and Avenida del Yaqui on the south side of Baseline Road.

2.2 Traffic Volumes

The traffic counts along the corridor and the 10 study intersections were collected in March 2023. These counts were 24-hour segment counts between signalized intersections and 8-hour (7-10 AM, 12- 2 PM, and 3-6 PM) turning movement counts at the signalized intersections. The study team recognizes that the I-10 and Broadway Curve construction project is underway during the timeframe of data collection period for this study. The team ensured that none of the ramps to I-10 in the vicinity of the I-10 and Baseline Road TI were closed during the data collection period. The field collected traffic counts are included in Appendix A. The intersection configurations and peak hour turning movement counts are summarized in Figure 2-2. The ADTs along the corridor are the highest at the Traffic Interchange at 55,000 vpd. The ADTs over the rest of the corridor are generally around 45,000 per day west of the interchange and around 33,000 east of the interchange. The corridor ADTs are summarized in Figure 2-3.

2.3 Signal Timings

The signal timing plans used in this study were obtained from the City of Phoenix and City of Tempe. From these signal timing plans the respective phasing, splits, cycle lengths, and additional signal settings for the peak Hours were used. The signal timing plans for intersections between Calle Los Cerros Drive and Priest Drive currently use Adaptive signal control logic, whereas the intersections of 48th Street, Darrow Drive and Hardy Drive use Actuated signal control logic.

2.4 Travel Times

Travel times were extracted from the INRIX platform. Table 2-1 below provides a breakdown of the average travel times observed along Baseline Road. A comparison to the free-flow travel times, included in the table, illustrates the level of congestion in this short stretch of the road.

Figure 2-2: Existing Conditions Turning Movement Counts for AM and PM peak hours

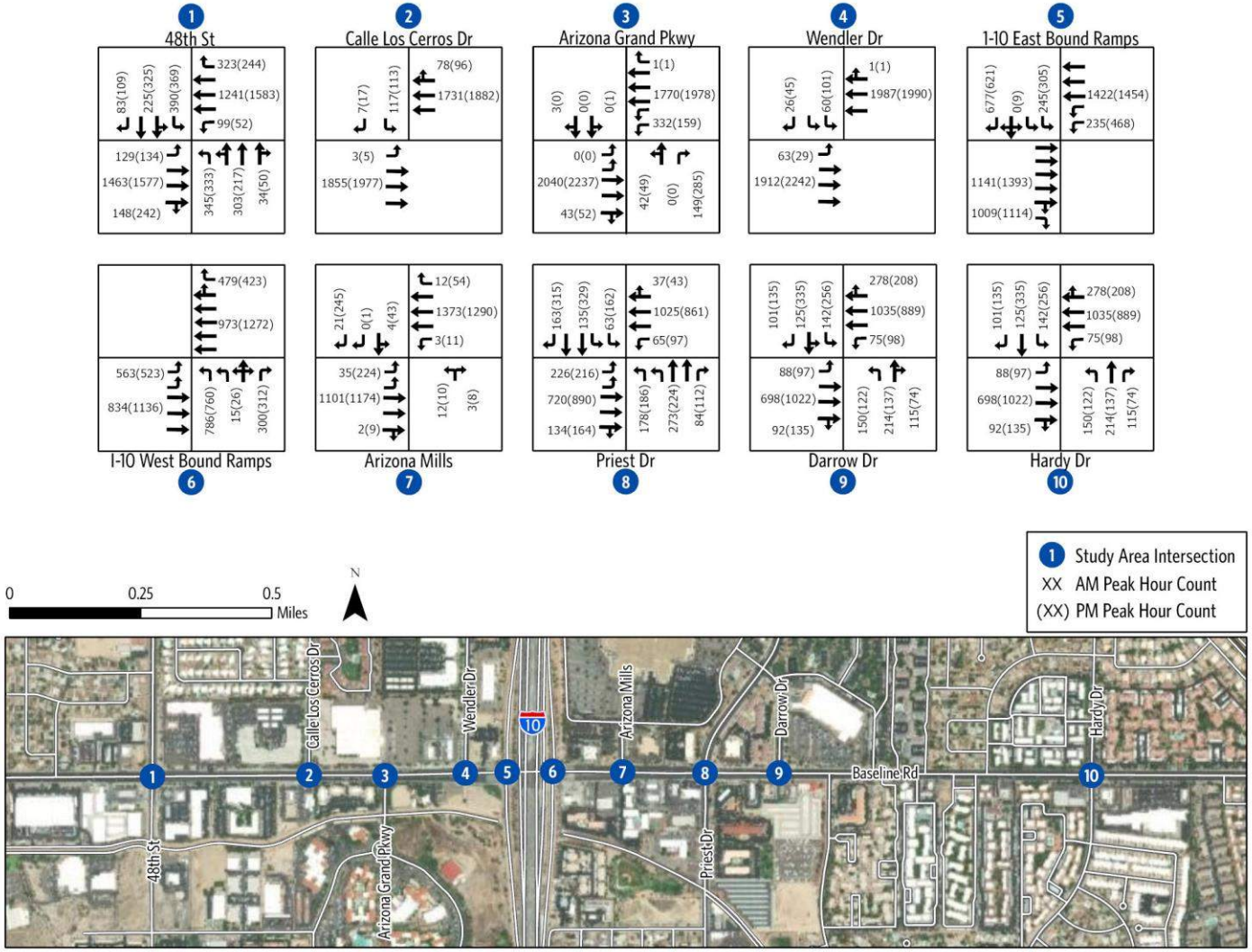


Figure 2-3: 2023 ADTs in the Study Corridor

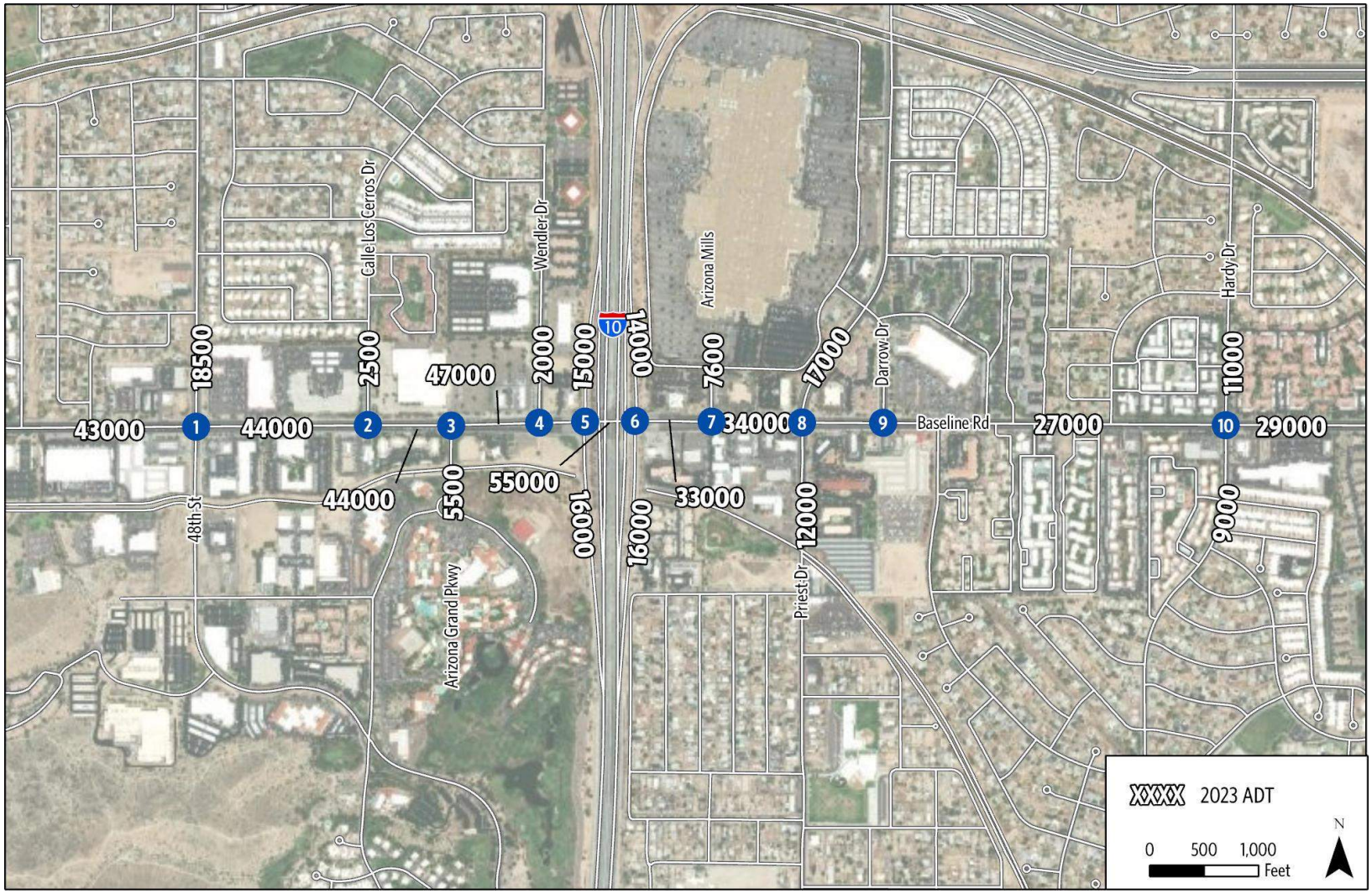


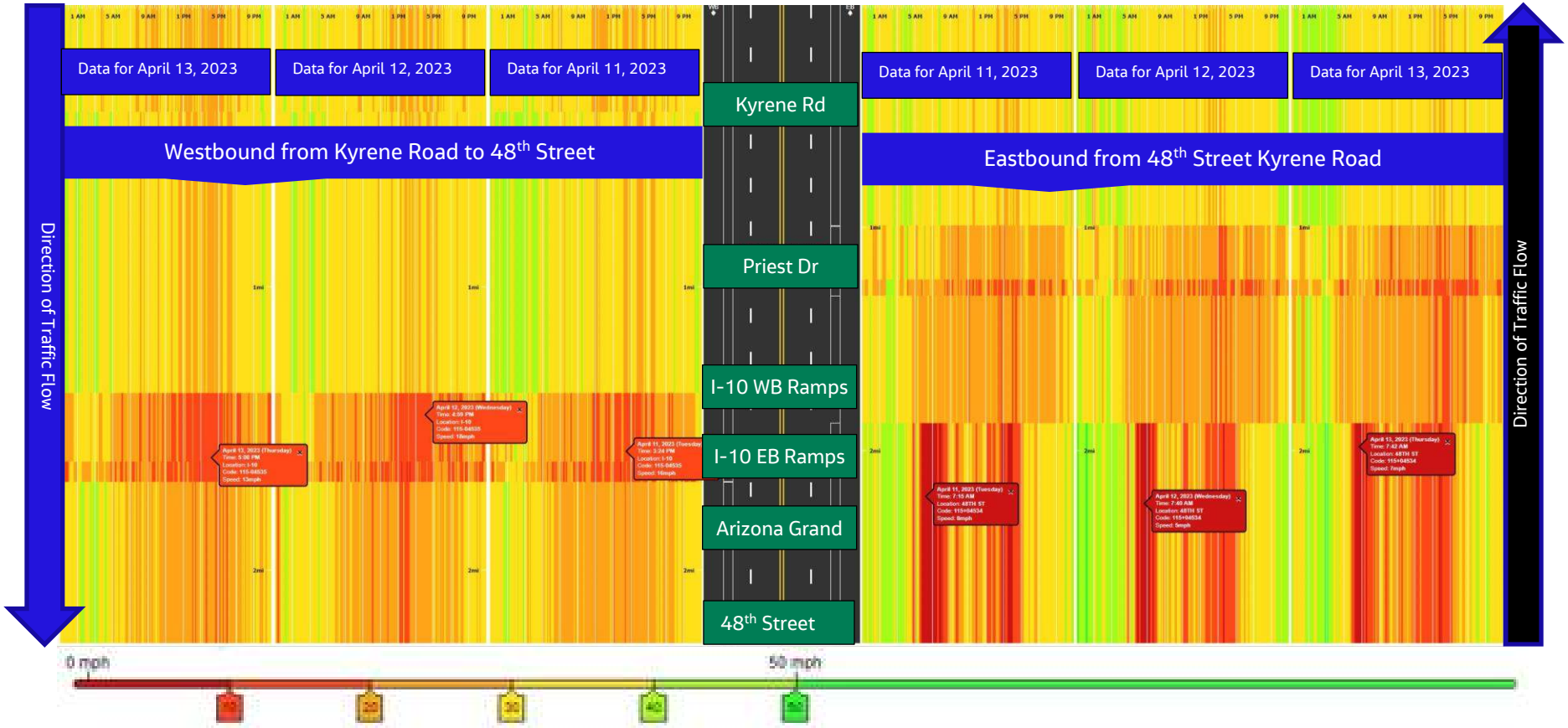
Table 2-1. Travel Times in the Study Corridor

Segment Between	Distance (ft)	Free flow Travel Time (mins)	Eastbound Observed (mins)		Westbound Observed (mins)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
48th Street and I-10	3,000	1.0	2.5	4.0	2.1	2.8
I-10 and Hardy Drive	4,500	1.3	2.0	2.6	2.3	2.2

2.5 Congestion Maps

Traffic congestion maps illustrate a speed profile of the corridor. These maps provide an overview of travel speeds as one traverses along the corridor in either direction. The congestion profiles were obtained from the INRIX platform. These maps are included in Figure 2-4. As inferred from the map, the corridor experiences slow speeds during the peak hours. During the peak 15-minute intervals the speeds drop to as low as 8mph west of the traffic interchange. The map further illustrates recurring congestion patterns across three days.

Figure 2-4: Speed Profiles and Congestion Map along Baseline Road



3. Traffic Forecasts

MAG Travel Demand Model data was obtained for the Study Area for existing (2023) and future year (2050) scenarios. The data provided the existing and future 24 hour estimates necessary for traffic forecasting. Review of the forecasts from MAG suggested that model estimates for the existing conditions were at least 10 to 15 percent different from observed counts. As a result, a post-processing methodology was applied to refine the model estimates in the future.

3.1 Traffic Forecasting

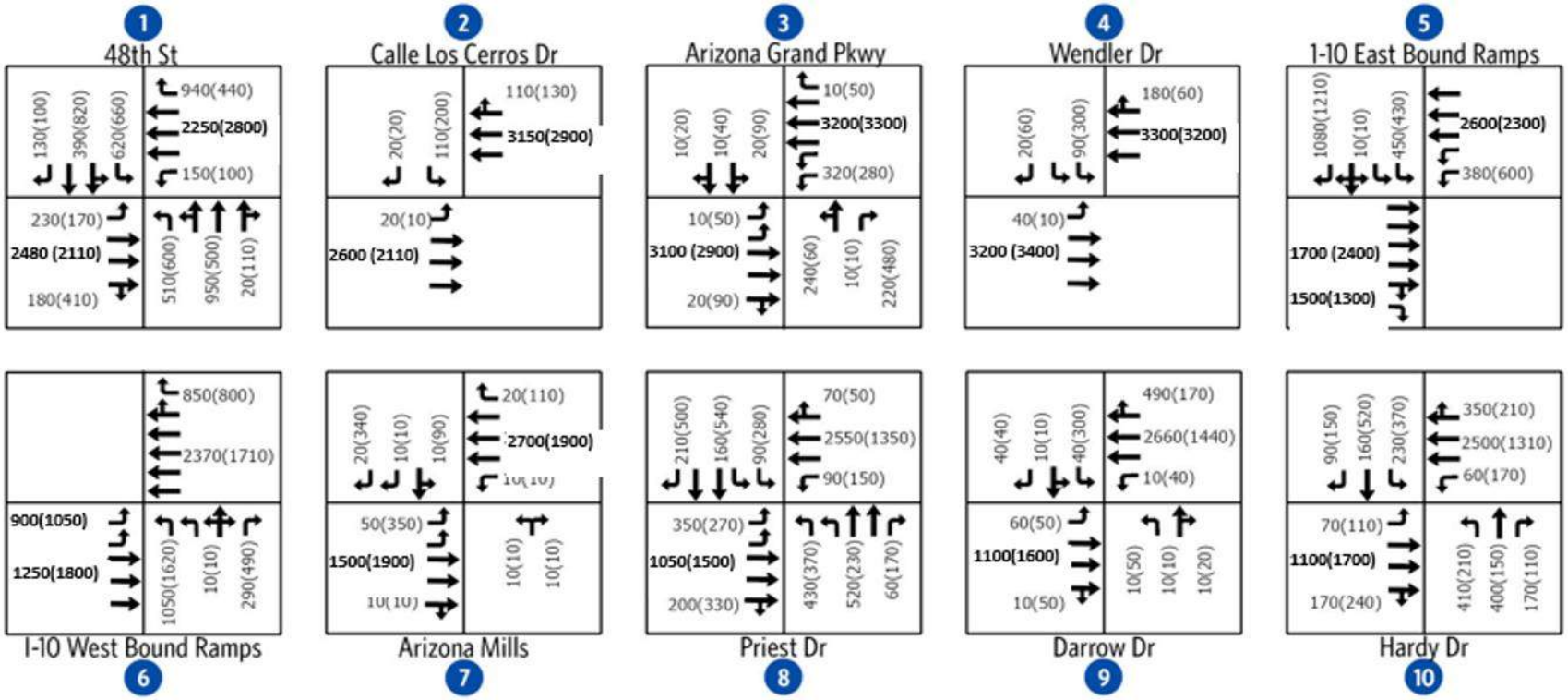
Future ADT and turning movement volumes for the Study Area were projected using forecasting methodology presented in NCHRP 765 Report: Analytical Travel Forecasting Approaches for Project-Level Planning and Design. The specific procedure used in the current study is an iterative turning movement estimation method which uses the combined Factoring Procedures for Ratio and Difference Methods in the NCHRP 765 Report. The inputs required for post-processing model estimates using this method are:

- Base year traffic counts
- Base year regional TDM estimates
- Future year regional TDM forecasts and.
- Design hour 30th highest K-factor.

The procedure adjusts the model forecasted link volumes using an iterative method to determine future turning movement volumes, using existing turning movement counts as a basis. A tolerance of 10 percent was used to determine the convergence of the iterative method. The iterative process is designed to minimize the errors identified in the existing year model estimates when compared to the observed traffic counts.

The refined future year turning movement forecasts are presented in Figure 3-1.

Figure 3-1: Projected Turning Movement Volumes



4. Microsimulation Models Development

VISSIM (version 22) software was selected as the tool for the development of the microsimulation models and to investigate detailed geometric and traffic operational issues. The VISSIM model development involves a number of steps, including model area, analysis years, analysis peak periods, data input, base model development, and model calibration and validation. Establishing the model area, analysis years, analysis peak periods, data input, and base model development are discussed below.

The microsimulation model was developed to include the ten intersections showed in Figure 1-1. For this study the 2023 year was used as Existing conditions year. The geometry information was collected from satellite images and field visits. The traffic counts from March 2023 were used as the input volumes for the models for the AM and PM peak hours.

Review of the timing plans provided by the City of Tempe suggested that the cycle length and splits at each of these intersections adjusts every two minutes. The cycle lengths vary between 120 to 140 seconds; and average around 130 second cycle lengths for the peak hour. Adaptive strategies use custom algorithms and detection settings to optime traffic signals and improve progression. As a result, it is difficult to emulate the settings and the algorithm in a simulation environment. The study reviewed the maximum splits and clearance interval from the field implementation and applied those settings in the models used for the study.

4.1 Models Calibration

A microsimulation model is a detailed model, able to depict lanes, turn bays, parking, crosswalks, ramp meters, signals, and other physical characteristics of a network as one might see them in aerial imagery. For the Baseline Road model, a calibration based on traffic flows and travel times was performed.

The calibration criteria and targets for traffic flows are presented in the Table 4-1. VISSIM models rely on random numbers to release vehicles, assign vehicle type, and determine their behavior thought the network. Multiple runs using different random seed numbers are required to achieve a proper confidence level on the results. For this study the number of runs was selected as 10. The results summarized throughout the report are the average of these runs. A statistic termed GEH-statistic is used to ensure model calibration. Travel time results were used to validate the models.

GEH statistic is based on an empirical formula that has proven useful for a variety of traffic analysis purposes.

The formula for the "GEH Statistic" is:

$$GEH = \sqrt{\frac{2(M-C)^2}{M+C}}$$

Where M is the hourly traffic volume from the traffic model and C is the real-world hourly traffic count.

Table 4-1: Calibration Targets

Criteria/Measurement	Acceptance Target
Individual Hourly Link Flows	
GEH <5 for individual link volumes	>85% of cases
Within 100 vph, for flow < 700 vph	>85% of cases
Within 15%, for 700 vph < flow < 2,700 vph	>85% of cases
Within 400 vph, for flow > 2,700 vph	>85% of cases
Sum of all link volumes	Within 5% of sum of all link counts
GEH for sum of all flows	GEH < 4 for sum of all link counts

Table 4-2 shows the calibration results for the AM and PM peak hours of the models.

Table 4-2 GEH and Flow Calibration Summary per Approach

Criteria/Measurement	AM Scenario	PM Scenario	Calibration Target	AM Calibration Matched?	PM Calibration Matched?
GEH < 5	100%	100%	85%	Yes	Yes
Flow < 700 (+/- 100vph)	100%	100%	85%	Yes	Yes
<700<Flow<2700 (+/- 15%)	100%	100%	85%	Yes	Yes
Flow >2700 (+/- 400 vph)	NA	NA	85%	NA	NA
Sum of all link volumes	0.1%	-1.3%	5%	Yes	Yes
GEH for sum of all flows	0.2	2.6	4	Yes	Yes

The calibration targets were met for both AM and PM peak period models. It is noted that there were no existing volumes higher than 2,700 vehicles per hour and therefore this criterion does not apply to the models.

In addition, GEH and flow calibration criteria were evaluated for all the movements at the intersections in the study are. Table 4-3 summarizes the results of this calibration.

Table 4-3 GEH and Flow Calibration Summary per Movement

Criteria/Measurement	AM Scenario	PM Scenario	Calibration Target	AM Calibration Matched?	PM Calibration Matched?
GEH < 5	98%	98%	85%	Yes	Yes
Flow < 700 (+/- 100vph)	99%	99%	85%	Yes	Yes
<700<Flow<2700 (+/- 15%)	95%	100%	85%	Yes	Yes
Flow >2700 (+/- 400 vph)	NA	NA	85%	NA	NA

In addition to the calibration based on traffic flows, travel time data was collected from the INRIX platform for the same days as the traffic counts were collected. Table 4-4 and Table 4-5 show the field data from the collection, the model travel times, and the difference between the travel times. It was observed that the travel times follow the same patterns as the field data and are within acceptable ranges considering the study area is a short corridor.

Table 4-4 Eastbound Travel Time Calibration Summary

Segment	Location		AM			PM		
	From	To	Field (min)	Model (min)	Difference	Field (min)	Model (min)	Difference
Total	48th St	Hardy St	4.5	4.5	0.0	6.6	6.6	0.0
Segment 1	48th St	I-10 NB Terminal	2.5	2.4	-0.1	4.0	4.1	-0.1
Segment 2	I-10 NB Terminal	Hardy Dr	2.0	2.1	0.1	2.6	2.5	0.1

Table 4-5 Westbound Travel Time Calibration Summary

Segment	Location		AM			PM		
	From	To	Field (min)	Model (min)	Difference	Field (min)	Model (min)	Difference
Total	Hardy St	48th St	4.4	4.5	-0.1	5.0	5.0	0
Segment 1	I-10 NB Terminal	48th St	2.1	2.2	-0.1	2.8	2.7	0.1
Segment 2	Hardy Dr	I-10 NB Terminal	2.3	2.3	0.0	2.2	2.3	-0.1

5. Operations Analysis

5.1 Existing Conditions Operational Analysis

Figure 5-1 shows the Level of Service (LOS) per approach for the intersections within the study area for the AM peak hour and Figure 5-2 shows the LOS for the PM peak hour. Several approaches at the intersections at I-10 ramp terminals and Wendler Drive operate at a LOS E in the existing conditions. The poor operations at these intersections also exacerbate the queue lengths and worsen travel times along the corridor. The intersections while operating at an overall acceptable LOS in the existing conditions do experience multiple movement failures and approach failures. Any additional traffic to the current volume levels will result in excessive queueing and a grid lock situation.

5.2 Future No-Build Conditions Operational Analysis

Figure 5-3 shows the Level of Service (LOS) per approach for the intersections within the study area for the AM peak hour and Figure 5-4 shows the LOS for the PM peak hour for the horizon year (2050) no build condition. Several approaches at the intersections at all the study intersections operate at a LOS F in the horizon. Without improvements to manage the traffic accessing I-10 at this location traffic at the interchange can impede operations along I-10 mainline and at several intersections upstream along Baseline Road.

Table 5-1 and Table 5-2 depict the anticipated travel time differences between the existing and 2050 no-build conditions. Without improvements, travel times in the study corridor will deteriorate substantially. The projected travel times in the 1.5 mile stretch of baseline will be 20 mins in the 2050 AM Peak Hour and 25 mins in the 2050 PM Peak Hour.

Figure 5-1: Existing (2023) AM Peak Hour LOS

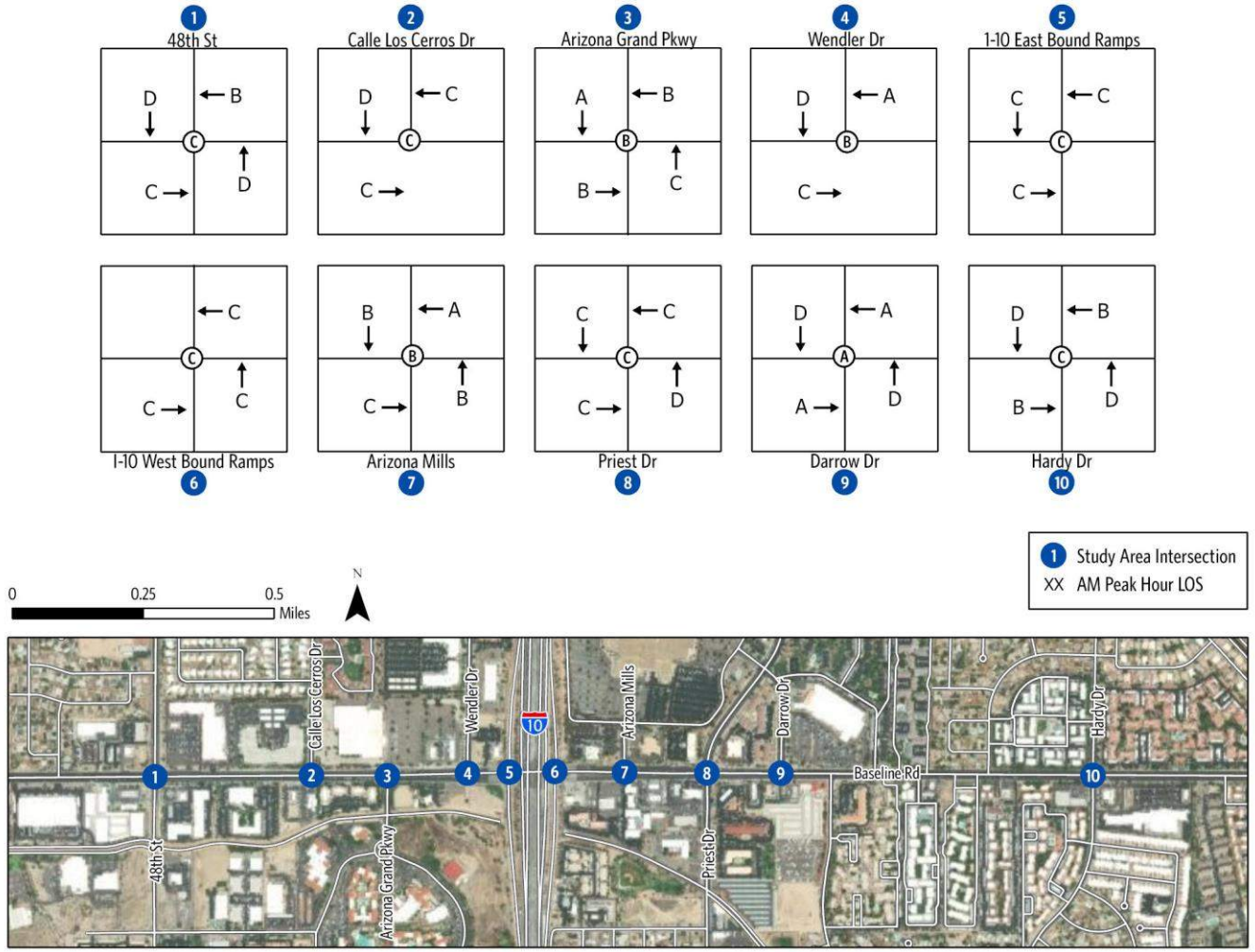


Figure 5-2: Existing (2023) PM Peak Hour LOS

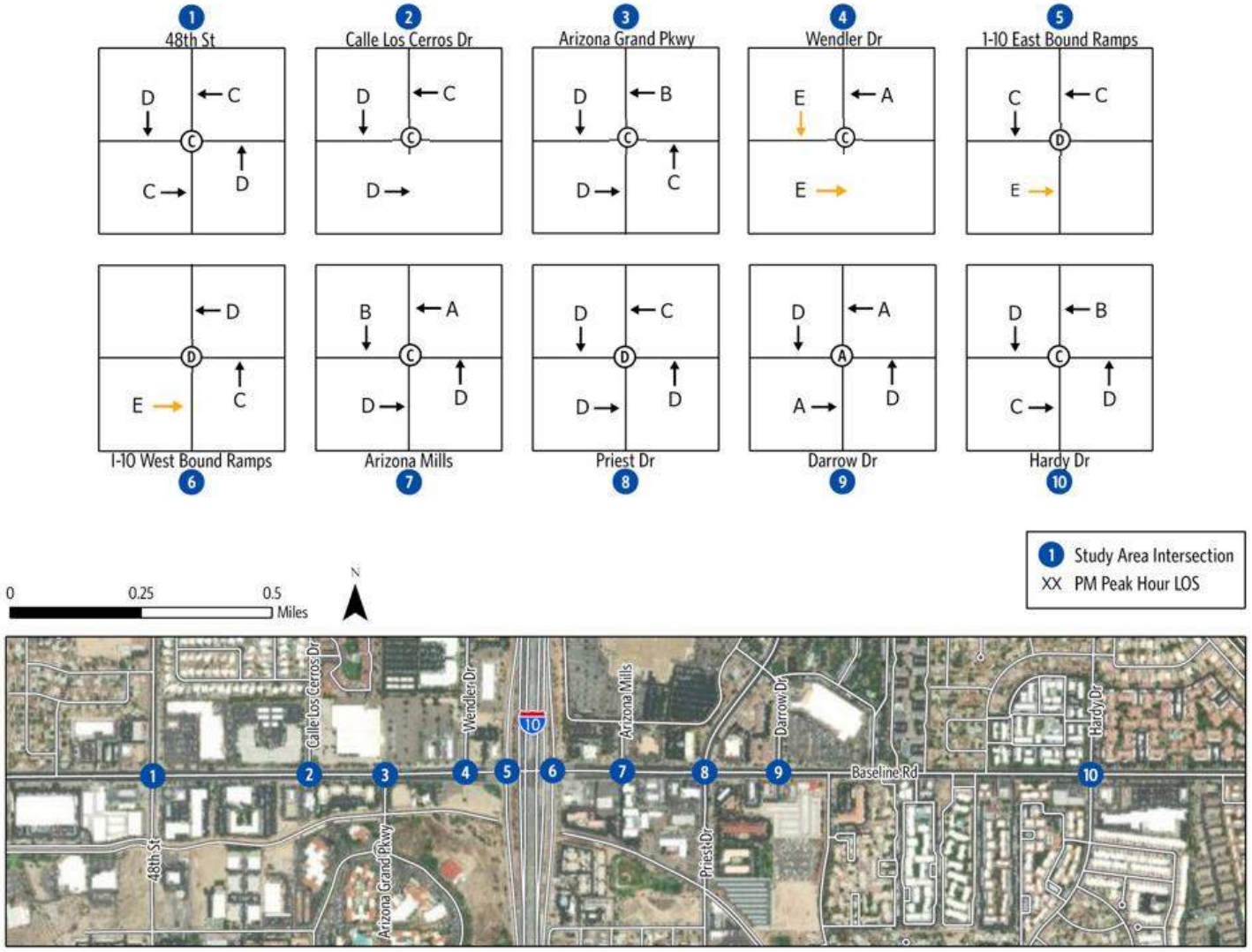


Figure 5-3: 2050 NB LOS Estimates AM Peak Hour

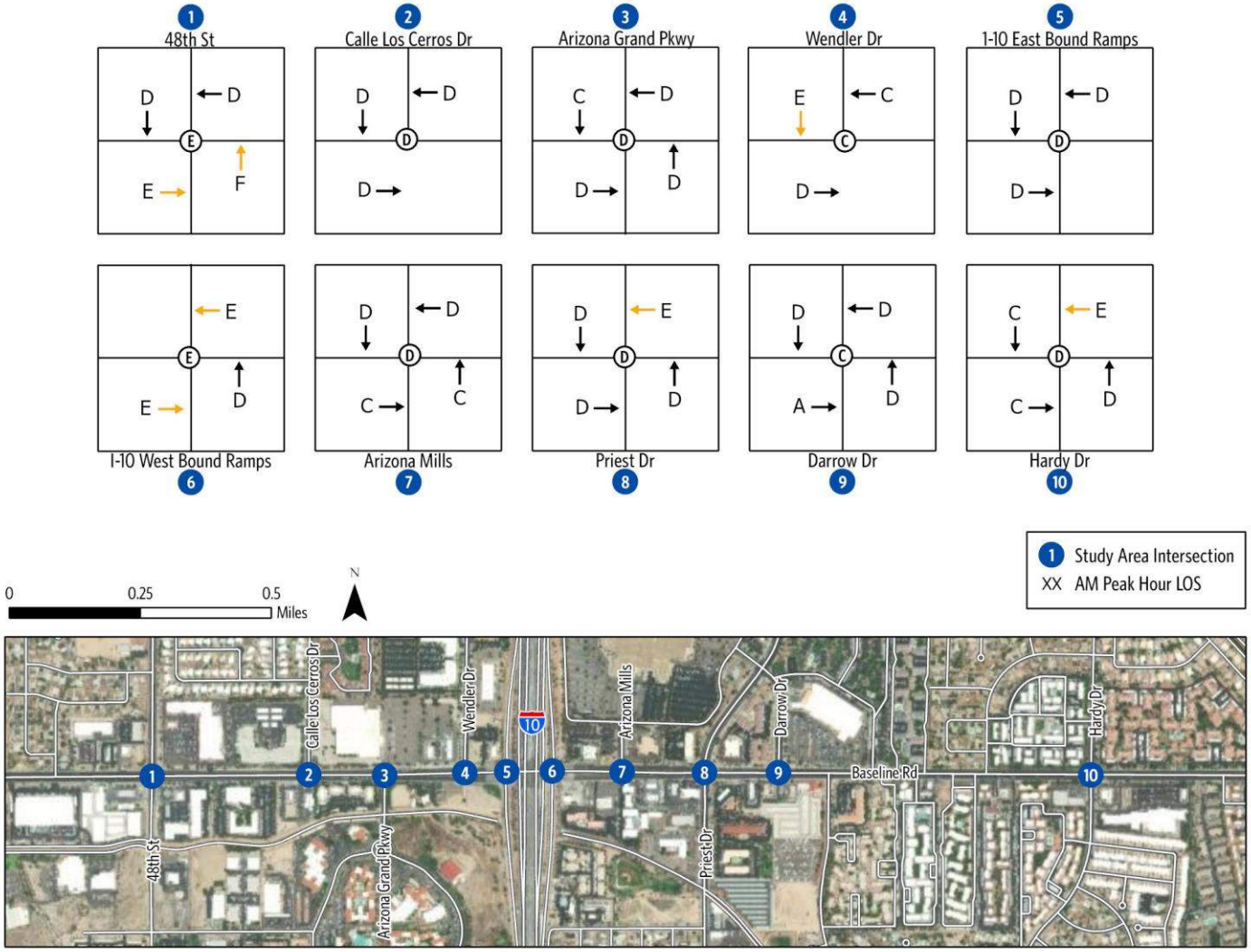


Figure 5-4: 2050 NB LOS Estimates PM Peak Hour

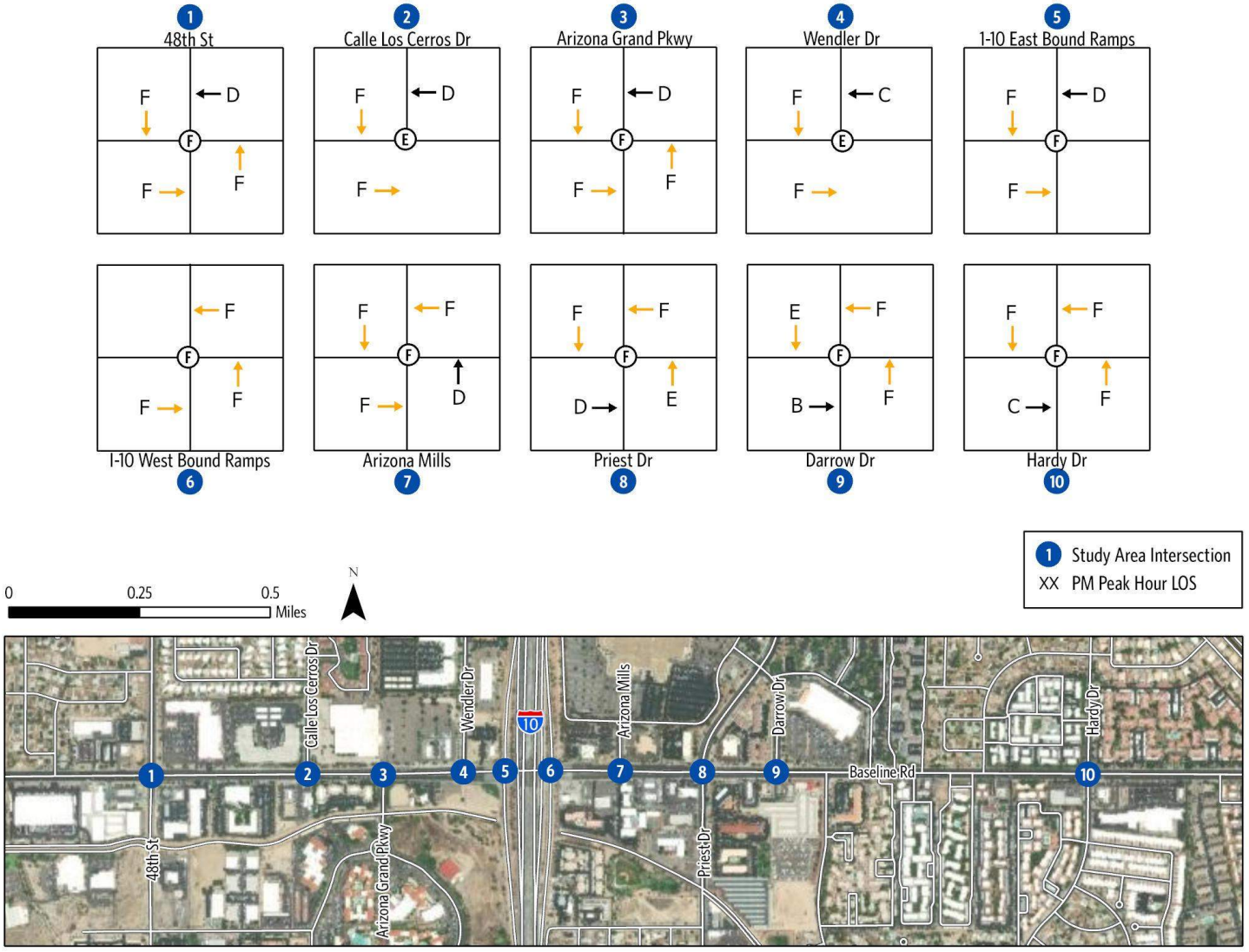


Table 5-1: Eastbound Travel Time 2023 Existing vs 2050 No-Build

Segment	Location		AM			PM		
	From	To	Existing (min)	No-Build (min)	Difference	Existing (min)	No-Build (min)	Difference
Total Travel Time	48th St	Hardy Dr	4.5	7.8	3.3	6.6	25.2	18.6
Segment 1	48th St	I-10 WB Ramp	2.5	4.8	2.3	4.0	18.7	14.7
Segment 2	I-10 WB Ramp	Hardy Dr	2.0	3.0	1.0	2.6	6.5	3.9

Table 5-2 Westbound Travel Time 2023 Existing vs 2050 No-Build

Segment	Location		AM			PM		
	From	To	Existing (min)	No-Build (min)	Difference	Existing (min)	No-Build (min)	Difference
Total Travel Time	Hardy Dr	48th St	4.4	10.8	6.2	5.0	20.2	15.2
Segment 1	Hardy Dr	I-10 WB Ramp	2.1	3.7	2.2	2.8	7.2	4.4
Segment 2	I-10 WB Ramp	48th St	2.3	4.1	2.8	2.2	13.0	10.8

5.3 Alternatives Designs

The Baseline Road/I-10 traffic interchange and surrounding area includes several closely spaced intersections and driveways from 48th Street to Hardy Drive. The project limits along the study corridor are between Arizona Grand Parkway and Priest Drive, thus the alternative designs will be focused in this area. The alternatives analyzed include the No-Build alternative, MDI alternative, and DDI alternative. This section provides short descriptions of the alternatives analyzed as a part of the study.

- 2050 No-Build Conditions
    - For comparison purposes only – no capacity or operational adjustments
    - Includes signal timing and phasing optimization.
- MDI Build Alternative
    - Removed signalized intersection at Wendler Drive and replace with Right in-Right out configuration, increasing length of storage lanes along Baseline Road at I-10; allow U-turns, for passenger cars, at the intersections of Arizona Grand and Arizona Mills to serve as indirect left turns for Wendler Road; prohibit right-turn-on-red operations from minor streets when U-turns are allowed on Baseline Road.
    - I-10 Eastbound Ramp intersection features the following lane configurations:
        - 5 eastbound through lanes and 2 eastbound free-flow right turn lanes
        - 1 southbound left turn lane, 1 southbound shared left/through lane, 1 southbound shared through/right lane, 2 southbound right turn lanes
        - 2 westbound left turn lanes, 3 westbound through lanes
    - I-10 Westbound Ramp intersection features the following lane configurations:
        - 2 northbound left turn lanes, 1 northbound shared left/through lane, 1 northbound shared through/right lane, 1 northbound right turn lane
        - 2 eastbound left turn lanes, 3 eastbound through lanes
        - 4 westbound through lanes, 1 shared westbound through/right lane, 1 westbound right turn lane
    - Includes signal timing and phasing optimization.
- DDI Build Alternative
    - Remove signalized intersection at Wendler Drive and replace with Right in-Right out configuration with increased storage lanes along Baseline Road at I-10 Eastbound Ramp intersection; ; allow U-turns, for passenger cars, at the intersections of Arizona Grand and Arizona Mills to serve as indirect left turns for Wendler Road; prohibit right-turn-on-red operations from minor streets when U-turns are allowed on Baseline Road. prohibit right-turn-on-red operations from minor streets when U-turns are allowed on Baseline Road.
    - At traffic interchange, SBR and NBR movements will be signalized with no right-turn-on-red (RTOR) movements permitted and WBL and EBL movements will be free
    - I-10 Eastbound Ramp intersection features altered lane configurations
        - 3 eastbound through lanes and 2 eastbound right turn lanes (EBR are free movements)
        - 2 southbound left turn lanes, 2 southbound right turn lanes

        - 1 westbound left turn lanes, 3 westbound through lanes
    - I-10 Westbound Ramp intersection features altered lane configurations
        - 2 northbound left turn lanes, 2 northbound right turn lanes
        - 1 eastbound left turn lane, 3 eastbound through lanes
        - 3 westbound through lanes, 1 WBT/R lane, 1 WBR lane (WBR is free movement)
    - Includes signal timing and phasing optimization

5.3.1 Alternatives Design Operations Metrics

Figure 5-5 shows the Level of Service (LOS) per approach for the intersections within the study area for the AM peak hour and Figure 5-6 shows the LOS for the PM peak hour for the horizon year (2050) MDI build alternative.

Figure 5-7 shows the Level of Service (LOS) per approach for the intersections within the study area for the AM peak hour and Figure 5-8 shows the LOS for the PM peak hour for the horizon year (2050) DDI build alternative.

Figure 5-5:2050 AM Peak Level of Service with MDI Configuration

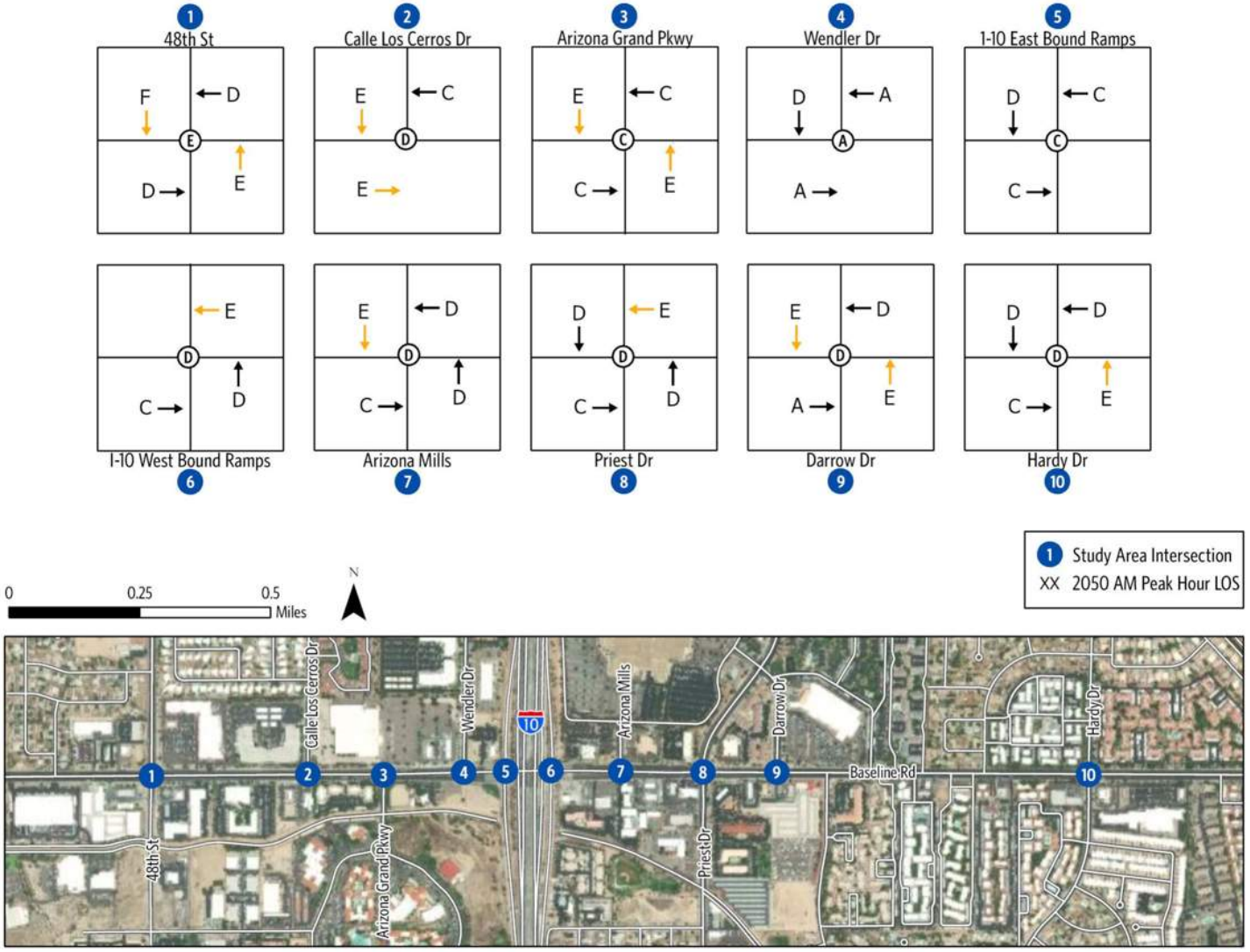


Figure 5-6: 2050 PM Peak Hour Level of Service with MDI Configuration

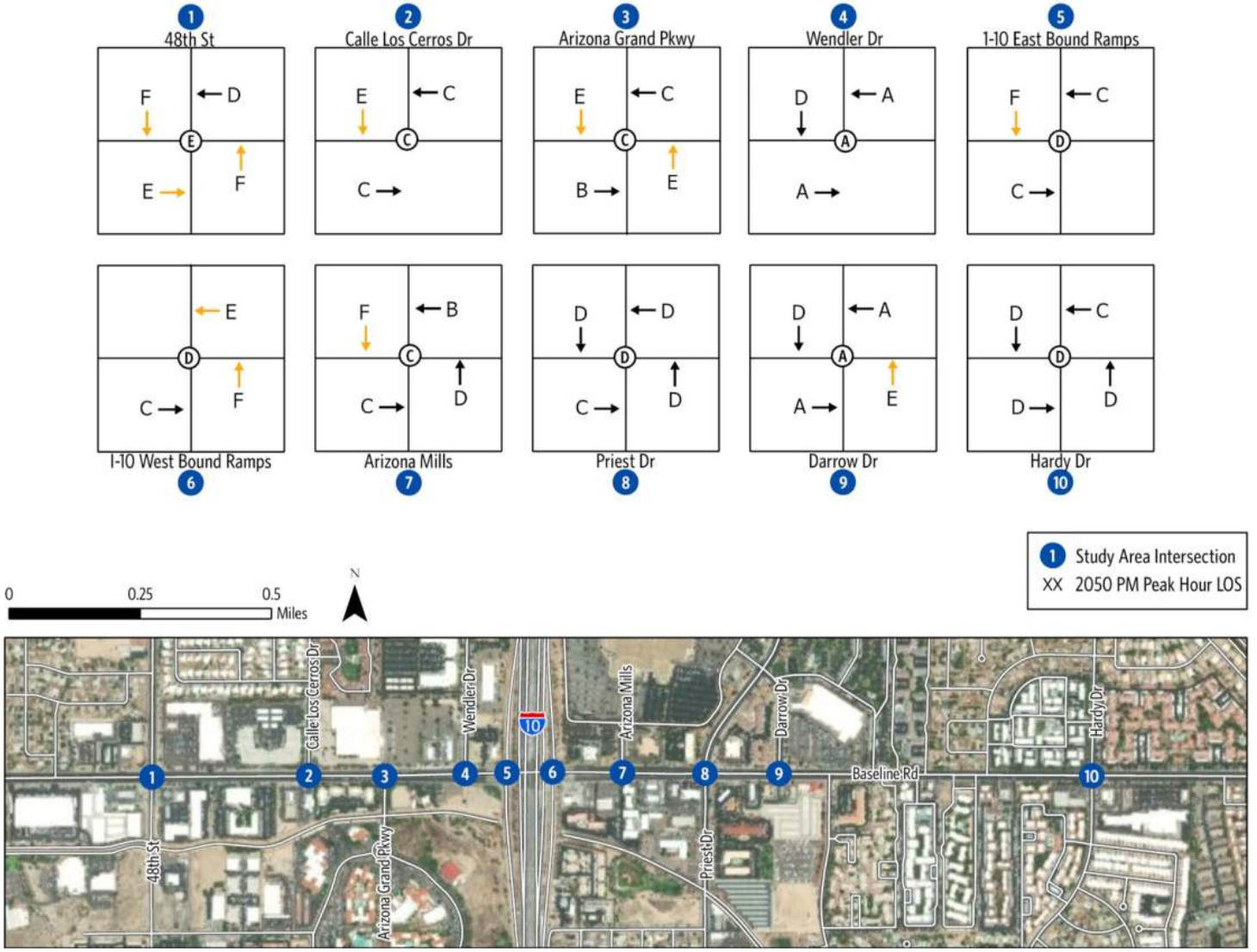


Figure 5-7: 2050 AM Peak Hour Level of Service with DDI Configuration

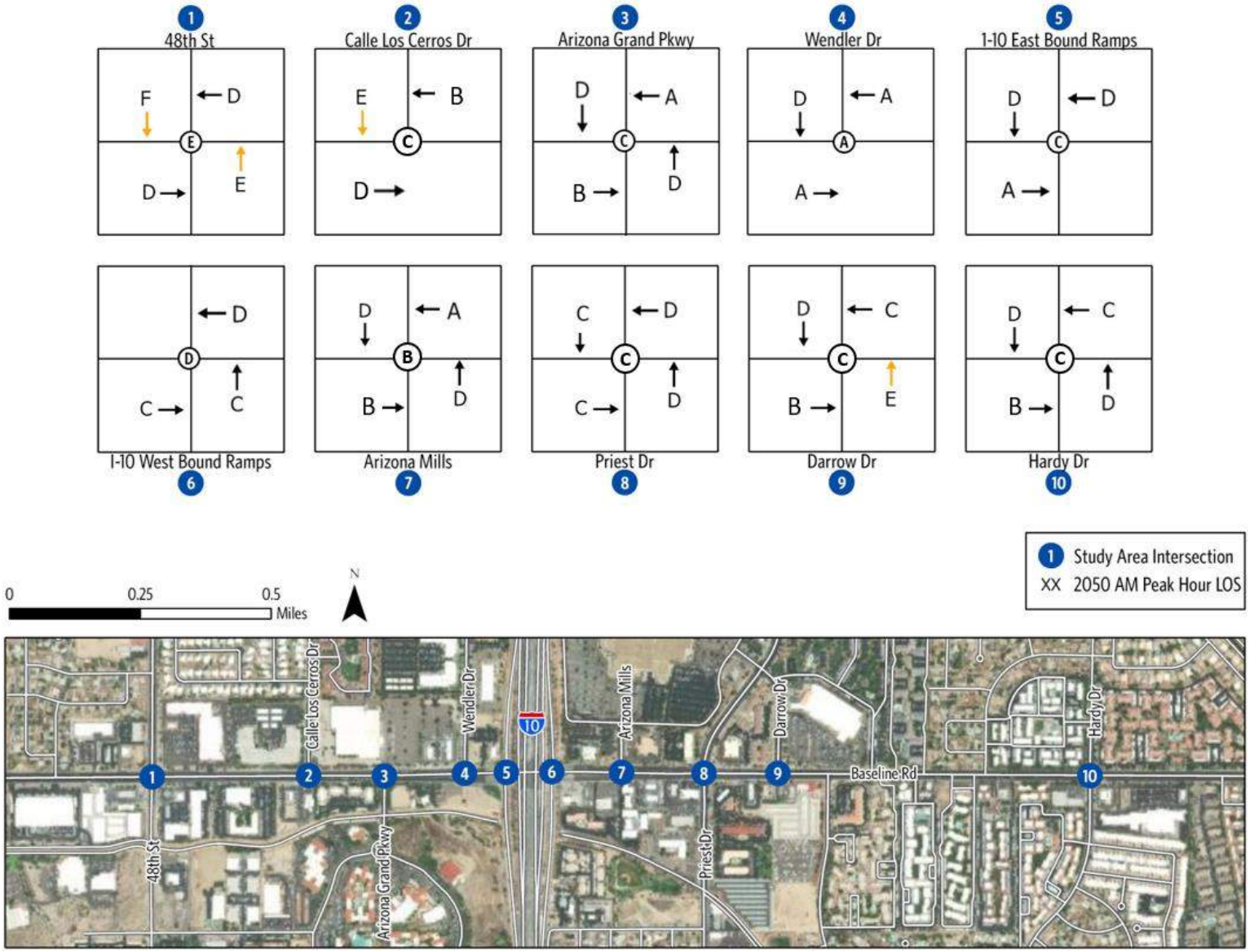
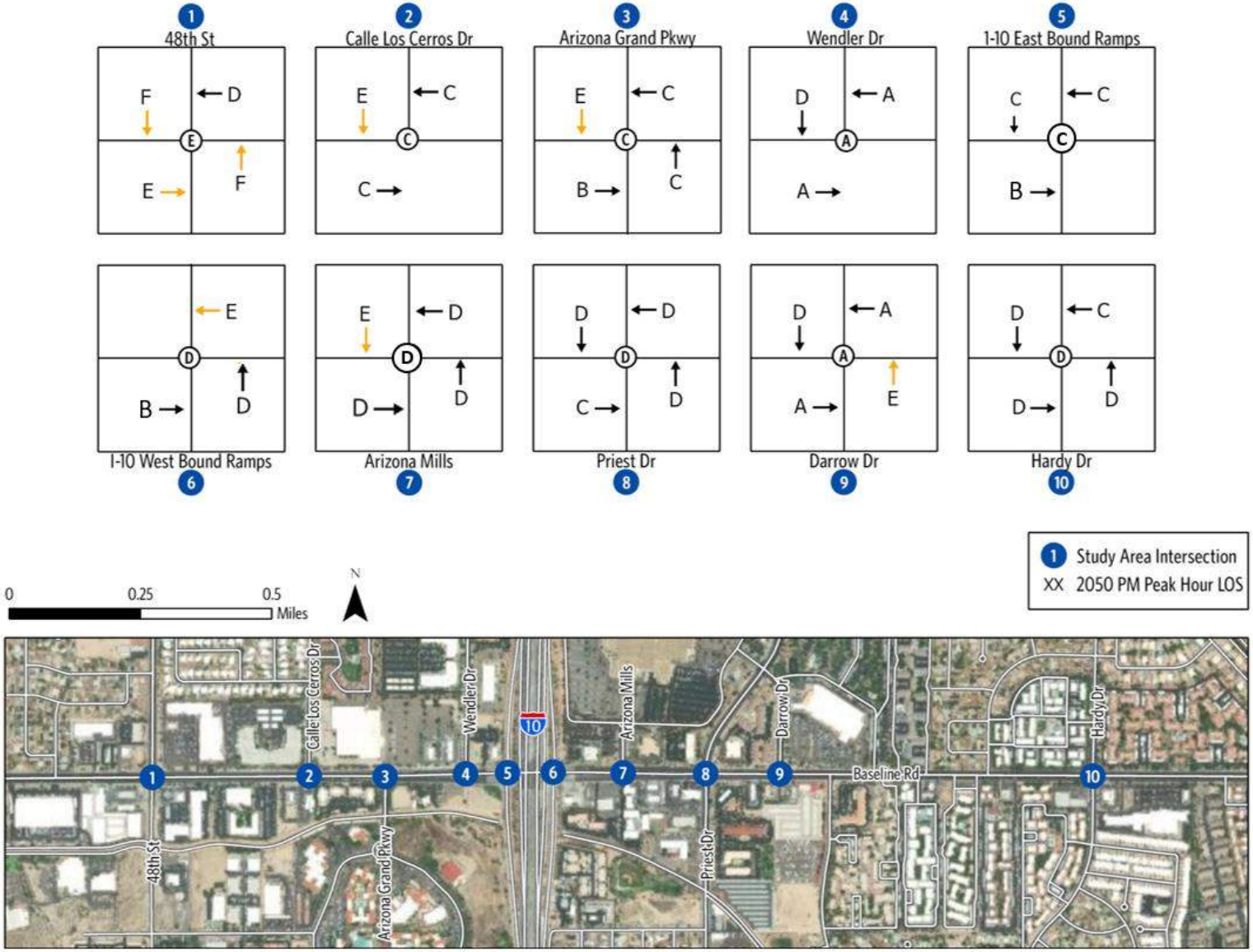


Figure 5-8: 2050 PM Peak Hour Level of Service with DDI Configuration



5.3.2 Delay Level of Service Metrics by Approach

Table 5-3 summarizes the AM peak hour Level of Service (LOS) and delay metrics for the existing conditions, and for the 2050 No-Build, MDI and DDI alternative concepts.

Table 5-4 summarizes the PM peak hour Level of Service (LOS) and delay metrics for the existing conditions, and for the 2050 No-Build, MDI and DDI alternative concepts.

The summary results indicated the TI improvements and side street improvements will reduce traffic congestion along the corridor. Overall delays will reduce with improvements associated with the MDI and DDI concept

Table 5-3: Delay and Level of Service (LOS) for AM Peak Hour

Intersection	Approach	Existing				No-Build				Tight Diamond Interchange				Diverging Diamond Interchange			
		Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS
Baseline Road and 48th Street	SB	36.9	D	30.9	C	45.4	D	64.0	E	76.2	F	59.8	E	65.7	F	59.0	E
	WB	19.8	B			46.8	D			38.1	D			38.3	D		
	NB	51.0	D			130.0	F			58.9	E			59.2	E		
	EB	27.8	C			64.5	E			53.3	D			49.3	D		
Baseline Road and Calle Los Cerros Drive	SB	48.3	D	31.2	C	60.1	E	38.9	D	57.2	E	45.2	D	58.1	E	41.8	D
	WB	29.7	C			37.3	D			29.4	C			18.1	B		
	NB	32.0	C			-	-			-	-			-	-		
	EB	33.2	C			40.1	D			63.1	E			44.1	D		
Baseline Road and Arizona Grand Parkway	SB	10.2	A	12.1	B	24.7	C	39.6	D	57.6	E	32.1	C	53.1	D	23.5	C
	WB	15.2	B			40.5	D			29.1	C			9.8	A		
	NB	21.6	C			50.9	D			60.1	E			48.2	D		
	EB	7.9	B			36.9	D			23.8	C			18.2	B		
Baseline Road and Wendler Drive	SB	46.5	D	11.4	B	72.3	E	32.6	C	28.2	D	4.3	A	26.4	D	6.2	A
	WB	4.5	A			23.2	C			-	A			-	A		
	EB	16.9	C			40.8	D			-	A			-	A		
Baseline Road and I-10 Eastbound Ramp	SB	21.6	C	30.5	C	54.2	D	43.2	D	51.9	D	34.5	C	40.3	D	21.2	C
	WB	34.3	C			38.9	D			31.3	C			38.5	D		
	EB	25.5	C			40.8	D			28.8	C			9.3	A		
Baseline Road and I-10 Westbound Ramp	WB	26.3	C	33.1	C	76.9	E	63.3	E	55.5	E	42.6	D	53.4	D	38.3	D
	NB	33.2	C			51.8	D			49.8	D			36.2	D		
	EB	32.7	C			58.5	E			22.4	C			20.6	C		
Baseline Road and Arizona Mills Circle	SB	11.5	B	19.9	B	35.3	D	43.9	D	55.6	E	37.0	D	54.9	D	18.8	B
	WB	3.4	A			53.2	D			41.5	D			10.0	A		
	NB	19.4	B			26.6	C			36.3	D			37.1	D		
	EB	33.2	C			33.2	C			29.1	C			28.9	B		
Baseline Road and Priest Drive	SB	34.5	C	31.9	C	45.7	D	52.0	D	39.7	D	47.8	D	40.1	C	38.1	D
	WB	28.4	C			77.5	E			63.5	E			53.2	D		
	NB	48.7	D			39.7	D			40.2	D			30.5	C		
	EB	28.2	C			36.7	D			27.3	C			44.5	D		
Baseline Road and Darrow Drive	SB	40.3	D	9.9	A	51.3	D	27.7	C	55.5	E	38.3	D	54.6	D	31.6	C
	WB	9.8	A			39.5	D			38.2	D			30.2	C		
	NB	42.0	D			53.0	D			55.2	E			55.2	E		
	EB	8.8	A			6.7	A			7.7	A			16.6	B		
Baseline Road and Hardy Drive	SB	39.1	D	28.0	C	31.3	C	45.5	D	46.2	D	41.7	D	46.3	D	34.2	C
	WB	18.5	B			56.6	E			46.3	D			26.1	C		
	NB	42.0	D			51.2	D			57.3	E			54.2	D		
	EB	19.9	B			27.1	C			21.8	C			20.0	B		

Table 5-4: Delay and Level of Service (LOS) for PM Peak Hour

Intersection	Approach	Existing				No-Build				Tight Diamond Interchange				Diverging Diamond Interchange			
		Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS	Average Delay (s)	LOS	Intersection Delay (s)	Intersection LOS
Baseline Road and 48th Street	SB	42.9	D	32.9	C	154.6	F	114.0	F	90.7	F	66.7	E	95.2	F	64.2	E
	WB	27.4	C			47.9	D			38.9	D			39.5	D		
	NB	49.8	D			149.5	F			87.8	F			88.7	F		
	EB	29.2	C			254.4	F			55.1	E			58.3	E		
Baseline Road and Calle Los Cerros Drive	SB	45.2	D	22.5	C	179.7	F	75.4	E	61.2	E	31.9	C	67.8	E	32.1	C
	WB	22.2	C			49.8	D			30.8	C			31.6	C		
	NB	36.1	D			-	F			-	-			-	-		
	EB	38.9	D			130.5	F			30.6	C			30.3	C		
Baseline Road and Arizona Grand Parkway	SB	52.6	D	30.5	C	148.7	F	83.7	F	60.6	E	33.2	C	59.7	E	25.6	C
	WB	15.5	B			43.2	D			28.2	C			22.7	C		
	NB	26.3	C			185.8	F			60.9	E			28.2	C		
	EB	38.7	D			154.7	F			18.2	B			19.2	B		
Baseline Road and Wendler Drive	SB	56.4	E	21.2	C	353.8	F	79.7	E	25.8	D	5.0	A	26.8	D	6.8	A
	WB	9.6	A			27.8	C			-	A			-	A		
	EB	57.5	E			146.9	F			-	A			-	A		
Baseline Road and I-10 Eastbound Ramp	SB	28.8	C	46.8	D	216.7	F	101.9	F	82.6	F	43.8	D	33.9	C	36.5	C
	WB	23.1	C			39.6	D			28.4	C			22.8	C		
	EB	62.6	E			89.8	F			33.9	C			21.2	B		
Baseline Road and I-10 Westbound Ramp	WB	45.1	D	49.9	D	142.1	F	116.6	F	57.2	E	51.2	D	59.5	E	44.8	D
	NB	27.2	C			100.9	F			92.0	F			40.4	D		
	EB	59.4	E			113.1	F			22.1	C			19.8	B		
Baseline Road and Arizona Mills Circle	SB	17.6	B	32.4	C	155.7	F	160.9	F	86.6	F	28.2	C	69.6	E	42.8	D
	WB	9.1	A			189.7	F			14.0	B			39.2	D		
	NB	41.9	D			35.5	D			35.6	D			43.5	D		
	EB	48.6	D			116.9	F			32.1	C			38.6	D		
Baseline Road and Priest Drive	SB	38.6	D	39.5	D	135.5	F	127.1	F	42.9	D	38.1	D	37.5	D	35.0	D
	WB	34.4	C			189.0	F			48.7	D			34.4	D		
	NB	45.0	D			69.5	E			42.2	D			49.6	D		
	EB	48.1	D			51.0	D			24.9	C			27.0	C		
Baseline Road and Darrow Drive	SB	52.4	D	8.8	A	63.2	E	113.7	F	52.4	D	9.1	A	46.0	D	8.6	A
	WB	8.2	A			86.3	F			5.6	A			5.0	A		
	NB	42.0	D			118.7	F			55.1	E			49.9	E		
	EB	8.1	A			12.6	B			2.3	A			1.4	A		
Baseline Road and Hardy Drive	SB	41.1	D	30.1	C	109.6	F	93.9	F	45.6	D	36.7	D	43.0	D	37.5	D
	WB	20.0	B			174.1	F			27.4	C			28.1	C		
	NB	39.3	D			140.4	F			50.5	D			49.1	D		
	EB	31.2	C			31.4	C			36.9	D			37.8	D		

Jacobs

APPENDIX A

Traffic Counts

United Civil Group

Project No: TC23029

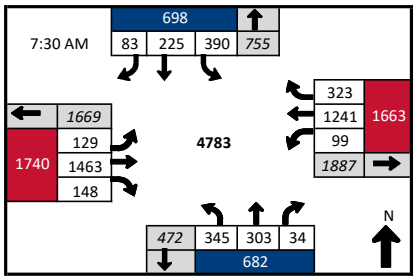
Location: 48th Street and Baseline Road

Intersection Configuration: Signalized

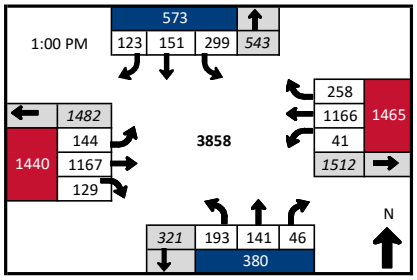
March 7, 2023 (Tuesday)

Turning Movement Count

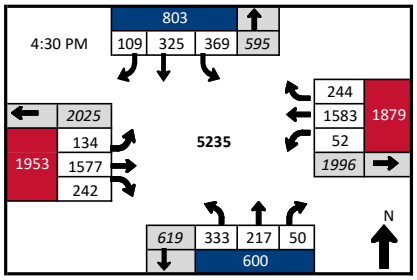
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	45	1	1	1	1			
Southbound	45	1	1	1		1		
Eastbound	45	1		2	1			
Westbound	45	1		3		1		



	48th Street Northbound				48th Street Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	56	38	12	1	72	48	27	0	27	356	39	0	19	220	61	0
7:15 AM	61	57	11	0	87	40	11	1	37	382	37	2	20	277	59	0
7:30 AM	73	75	6	0	105	53	24	1	38	377	35	1	20	288	70	0
7:45 AM	93	80	6	0	141	65	18	1	27	368	28	0	23	286	94	0
8:00 AM	95	75	8	2	83	56	17	0	33	362	41	1	27	351	78	1
8:15 AM	84	73	14	0	61	51	24	1	31	356	44	0	29	316	81	0
8:30 AM	58	49	15	0	80	43	30	0	32	361	38	0	21	275	59	0
8:45 AM	56	43	15	8	58	52	36	3	37	357	37	2	12	268	65	1
9:00 AM	39	37	11	0	48	39	16	2	32	253	25	0	15	259	41	0
9:15 AM	36	33	15	0	48	38	19	4	37	262	29	3	11	233	39	0
9:30 AM	35	25	11	0	79	37	24	1	43	322	37	1	12	211	41	0
9:45 AM	37	36	14	1	24	24	21	1	33	306	20	1	11	254	52	0
Peak Hour Total	**345**	**303**	**34**	**2**	**390**	**225**	**83**	**3**	**129**	**1463**	**148**	**2**	**99**	**1241**	**323**	**1**



	48th Street Northbound				48th Street Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	33	34	10	1	59	58	26	5	35	280	24	3	13	277	52	0
12:15 PM	66	24	4	4	74	36	39	2	40	268	33	0	20	284	66	0
12:30 PM	55	37	8	0	65	36	29	5	40	297	33	3	14	285	64	0
12:45 PM	39	37	17	5	72	32	21	3	36	320	34	2	12	276	71	0
1:00 PM	46	28	14	0	78	42	28	4	33	272	25	2	11	269	67	0
1:15 PM	46	36	10	0	81	27	32	1	31	299	34	1	6	288	65	1
1:30 PM	46	29	10	2	72	44	25	2	39	276	30	3	15	282	65	0
1:45 PM	55	48	12	2	68	38	38	1	41	320	40	2	9	327	61	0
Peak Hour Total	**193**	**141**	**46**	**4**	**299**	**151**	**123**	**8**	**144**	**1167**	**129**	**8**	**41**	**1166**	**258**	**1**



	48th Street Northbound				48th Street Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	80	40	22	0	98	66	33	3	40	338	45	1	9	356	76	1
3:15 PM	78	53	10	4	97	65	38	4	37	360	43	5	10	399	62	0
3:30 PM	88	49	15	2	103	62	37	4	34	438	47	7	5	405	51	0
3:45 PM	68	42	14	1	113	60	39	2	38	406	63	1	10	443	56	0
4:00 PM	78	69	18	2	92	74	31	3	39	315	44	1	15	384	77	0
4:15 PM	98	47	16	0	86	73	23	1	39	308	47	1	9	410	61	0
4:30 PM	74	67	17	9	82	80	29	6	34	378	68	3	13	405	66	1
4:45 PM	89	45	10	1	89	87	27	2	29	414	53	5	9	388	52	0
5:00 PM	84	54	12	2	107	76	26	2	28	401	56	3	17	398	65	0
5:15 PM	86	51	11	2	91	82	27	0	43	384	65	2	13	392	61	0
5:30 PM	77	49	19	2	105	85	39	1	34	340	59	1	9	406	49	1
5:45 PM	65	42	6	0	97	79	33	0	35	314	51	0	11	350	62	0
Peak Hour Total	**333**	**217**	**50**	**14**	**369**	**325**	**109**	**10**	**134**	**1577**	**242**	**13**	**52**	**1583**	**244**	**1**

United Civil Group

Project No: TC23029

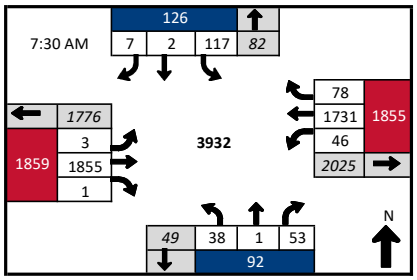
Location: Calle Los Ceros and Baseline Road

Intersection Configuration: Signalized

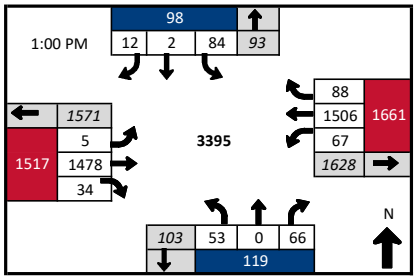
March 7, 2023 (Tuesday)

Turning Movement Count

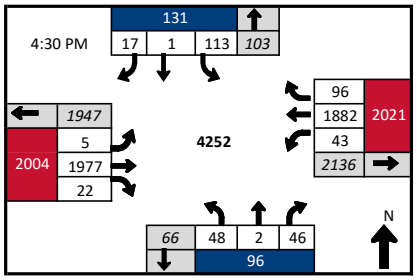
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	15	1				1		
Southbound	25	1			1			
Eastbound	45	1		3				
Westbound	45			2	1			



	Calle Los Ceros				Calle Los Ceros				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	7	0	9	2	24	2	3	0	3	419	0	1	8	312	9	0
7:15 AM	14	0	7	0	23	0	3	0	2	470	3	0	10	385	12	0
7:30 AM	9	0	15	0	37	0	2	1	1	475	0	1	12	387	16	0
7:45 AM	12	0	14	2	32	0	3	1	0	514	0	1	14	426	19	0
8:00 AM	7	0	9	1	32	2	2	1	1	459	0	0	11	475	15	0
8:15 AM	10	1	15	0	16	0	0	0	1	407	1	0	9	443	28	0
8:30 AM	4	0	11	2	18	0	1	1	0	406	0	0	11	362	17	0
8:45 AM	9	0	13	5	14	4	4	3	3	462	1	0	14	357	20	3
9:00 AM	7	0	9	0	17	1	3	0	2	288	1	1	8	300	12	0
9:15 AM	5	0	10	5	19	0	5	2	1	323	1	5	11	298	14	0
9:30 AM	8	0	12	1	18	0	3	1	0	416	4	0	10	270	5	1
9:45 AM	7	0	6	4	18	1	3	2	1	362	5	4	8	337	12	0
Peak Hour Total	**38**	**1**	**53**	**3**	**117**	**2**	**7**	**3**	**3**	**1855**	**1**	**2**	**46**	**1731**	**78**	**0**



	Calle Los Ceros				Calle Los Ceros				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	14	0	15	1	19	0	1	0	1	329	9	1	16	338	14	0
12:15 PM	17	1	16	4	17	3	5	1	3	361	12	7	20	388	21	0
12:30 PM	20	1	15	4	19	1	3	0	1	341	9	0	9	353	15	2
12:45 PM	7	0	15	1	15	2	4	1	3	392	11	0	13	361	19	2
1:00 PM	13	0	15	2	19	1	4	5	2	358	11	3	16	358	26	0
1:15 PM	12	0	12	7	21	1	3	2	2	374	7	8	26	364	17	0
1:30 PM	22	0	24	2	24	0	2	1	1	354	10	2	13	361	20	0
1:45 PM	6	0	15	2	20	0	3	0	0	392	6	1	12	423	25	0
Peak Hour Total	**53**	**0**	**66**	**13**	**84**	**2**	**12**	**8**	**5**	**1478**	**34**	**14**	**67**	**1506**	**88**	**0**



	Calle Los Ceros				Calle Los Ceros				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	8	0	7	2	16	0	2	1	2	471	7	0	8	450	23	1
3:15 PM	7	0	12	2	18	0	3	0	0	446	7	1	11	473	23	0
3:30 PM	11	0	10	2	26	0	3	1	2	498	3	0	5	479	23	0
3:45 PM	6	0	11	2	30	0	1	5	2	500	5	0	8	481	25	0
4:00 PM	12	0	9	1	35	0	4	1	1	358	1	3	9	480	25	2
4:15 PM	14	0	8	5	25	2	1	1	1	417	6	4	14	474	33	0
4:30 PM	14	2	13	0	35	0	5	2	0	470	6	0	11	469	23	1
4:45 PM	8	0	10	3	33	0	6	1	3	512	7	1	10	461	21	0
5:00 PM	10	0	14	1	23	1	1	3	0	492	4	0	8	501	19	1
5:15 PM	16	0	9	2	22	0	5	1	2	503	5	0	14	451	33	1
5:30 PM	10	0	13	3	32	2	2	1	0	457	7	0	5	469	36	0
5:45 PM	14	2	13	0	18	0	6	0	4	471	3	0	11	420	25	0
Peak Hour Total	**48**	**2**	**46**	**6**	**113**	**1**	**17**	**7**	**5**	**1977**	**22**	**1**	**43**	**1882**	**96**	**3**

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Turning Movement Count

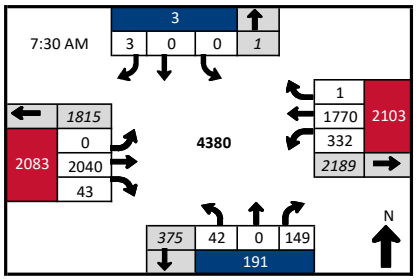
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	25		1			1		
Southbound								
Eastbound	45			2	1			
Westbound	45	2		3				

Project No: TC23029

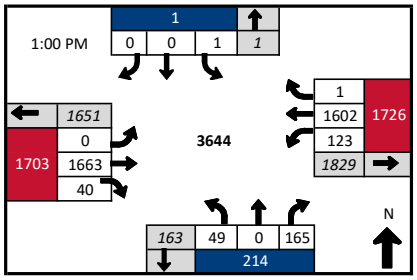
March 7, 2023 (Tuesday)

Location: Arizona Grand Parkway and Baseline Road

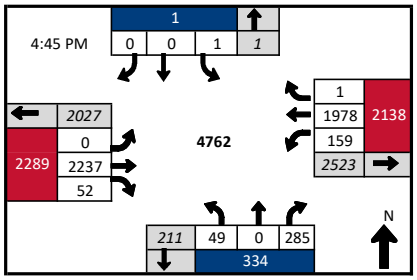
Intersection Configuration: Signalized



	Arizona Grand Parkway				Arizona Grand Parkway				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	6	0	41	1	0	0	0	0	0	442	13	1	49	317	2	1
7:15 AM	10	0	37	0	0	0	0	0	0	488	11	0	57	384	0	0
7:30 AM	9	0	37	0	0	0	2	3	0	541	10	2	66	399	0	1
7:45 AM	10	0	42	1	0	0	0	1	0	577	11	0	81	444	0	0
8:00 AM	8	0	32	3	0	0	0	3	0	518	9	1	92	490	0	1
8:15 AM	15	0	38	0	0	0	1	1	0	404	13	2	93	437	1	0
8:30 AM	10	0	29	0	0	0	0	1	0	468	13	1	62	386	0	0
8:45 AM	11	0	21	2	0	0	0	1	0	501	12	0	65	379	0	0
9:00 AM	10	0	31	0	0	0	0	1	0	325	4	1	48	311	0	0
9:15 AM	10	0	40	0	0	0	0	1	0	365	7	0	54	313	0	0
9:30 AM	12	0	31	0	0	0	0	1	0	419	12	0	63	279	0	0
9:45 AM	10	0	43	0	0	0	0	2	0	385	8	1	61	331	0	0
Peak Hour Total	**42**	**0**	**149**	**4**	**0**	**0**	**3**	**8**	**0**	**2040**	**43**	**5**	**332**	**1770**	**1**	**2**



	Arizona Grand Parkway				Arizona Grand Parkway				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	8	0	54	1	1	0	1	1	0	378	13	1	38	375	1	1
12:15 PM	9	0	42	3	0	0	0	2	0	378	11	1	34	414	0	1
12:30 PM	13	0	38	1	0	0	0	1	0	383	7	0	44	359	0	0
12:45 PM	5	0	44	1	0	0	0	2	0	387	8	1	42	375	0	1
1:00 PM	12	0	42	1	0	0	0	0	0	412	13	0	31	390	0	0
1:15 PM	12	0	39	0	0	0	0	2	0	406	8	0	36	398	0	0
1:30 PM	11	0	40	0	1	0	0	1	0	393	10	0	30	395	1	0
1:45 PM	14	0	44	1	0	0	0	1	0	452	9	0	26	419	0	1
Peak Hour Total	**49**	**0**	**165**	**2**	**1**	**0**	**0**	**4**	**0**	**1663**	**40**	**0**	**123**	**1602**	**1**	**1**



	Arizona Grand Parkway				Arizona Grand Parkway				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	9	0	63	0	0	0	1	2	0	507	11	1	37	451	1	0
3:15 PM	9	0	54	0	0	0	0	1	0	502	12	1	25	513	0	0
3:30 PM	12	0	71	1	0	0	0	0	0	555	9	1	36	500	0	0
3:45 PM	4	0	72	3	0	0	0	3	0	591	9	0	36	491	0	0
4:00 PM	19	0	146	0	0	0	1	0	0	416	14	2	43	498	1	0
4:15 PM	15	0	109	1	0	0	0	2	0	483	19	1	33	509	0	0
4:30 PM	10	0	75	1	0	0	0	2	0	503	17	3	40	471	0	0
4:45 PM	12	0	56	1	1	0	0	3	0	594	22	2	36	488	1	0
5:00 PM	17	0	101	0	0	0	0	2	0	531	8	1	34	497	0	0
5:15 PM	13	0	72	1	0	0	0	3	0	593	16	0	39	483	0	0
5:30 PM	7	0	56	1	0	0	0	0	0	519	6	0	50	510	0	0
5:45 PM	10	0	35	0	0	0	0	0	0	500	16	0	47	455	0	0
Peak Hour Total	**49**	**0**	**285**	**3**	**1**	**0**	**0**	**8**	**0**	**2237**	**52**	**3**	**159**	**1978**	**1**	**0**

UCG
United Civil Group

Project No: TC23029

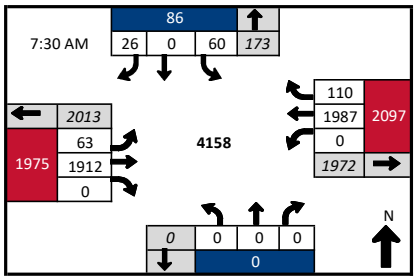
Location: Wendler Drive
and Baseline Road

Intersection Configuration: Signalized

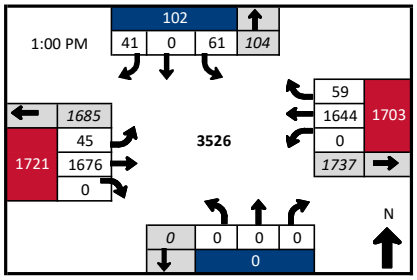
Turning Movement Count

	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound								
Southbound	25	2				1		
Eastbound	45	1		3				
Westbound	45			2	1			

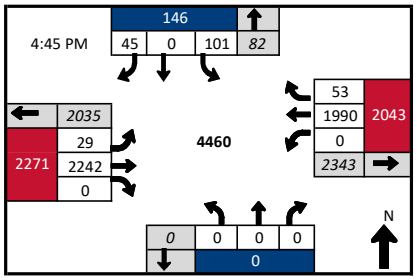
March 7, 2023 (Tuesday)



	Wendler Drive				Wendler Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	0	0	0	0	11	0	5	0	19	425	0	0	0	367	43	0
7:15 AM	0	0	0	0	17	0	2	1	15	489	0	0	0	427	31	0
7:30 AM	0	0	0	0	11	0	2	0	9	504	0	0	0	455	34	0
7:45 AM	0	0	0	0	15	0	11	1	25	524	0	0	0	473	39	0
8:00 AM	0	0	0	0	24	0	9	0	16	465	0	0	0	534	23	0
8:15 AM	0	0	0	0	10	0	4	0	13	419	0	0	0	525	14	0
8:30 AM	0	0	0	0	9	0	3	0	8	454	0	1	0	388	26	0
8:45 AM	0	0	0	0	14	0	9	0	19	466	0	0	0	409	34	0
9:00 AM	0	0	0	0	17	0	7	0	12	347	0	0	0	346	11	0
9:15 AM	0	0	0	0	8	0	4	2	12	375	0	0	0	351	10	0
9:30 AM	0	0	0	0	14	0	8	1	8	436	0	0	0	319	17	0
9:45 AM	0	0	0	0	14	0	7	0	7	406	0	0	0	368	16	0
Peak Hour Total	**0**	**0**	**0**	**0**	**60**	**0**	**26**	**1**	**63**	**1912**	**0**	**0**	**0**	**1987**	**110**	**0**



	Wendler Drive				Wendler Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	0	0	0	0	40	0	13	0	18	380	0	0	0	379	13	0
12:15 PM	0	0	0	0	18	0	14	2	20	390	0	0	0	420	15	0
12:30 PM	0	0	0	0	21	0	10	1	15	384	0	0	0	377	16	0
12:45 PM	0	0	0	0	7	0	8	1	11	410	0	1	0	375	22	0
1:00 PM	0	0	0	0	13	0	14	0	13	412	0	0	0	389	15	0
1:15 PM	0	0	0	0	16	0	12	3	8	422	0	0	0	410	10	0
1:30 PM	0	0	0	0	26	0	10	0	14	406	0	0	0	407	19	0
1:45 PM	0	0	0	0	6	0	5	0	10	436	0	0	0	438	15	0
Peak Hour Total	**0**	**0**	**0**	**0**	**61**	**0**	**41**	**3**	**45**	**1676**	**0**	**0**	**0**	**1644**	**59**	**0**



	Wendler Drive				Wendler Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	0	0	0	0	12	0	10	1	5	518	0	0	0	474	6	0
3:15 PM	0	0	0	0	12	0	4	0	7	468	0	0	0	516	10	0
3:30 PM	0	0	0	0	14	0	8	1	4	535	0	0	0	521	12	0
3:45 PM	0	0	0	0	21	0	5	2	3	564	0	0	0	501	14	0
4:00 PM	0	0	0	0	49	0	13	0	5	476	0	0	0	529	13	0
4:15 PM	0	0	0	0	14	0	9	2	10	520	0	0	0	519	9	0
4:30 PM	0	0	0	0	32	0	7	1	8	524	0	0	0	491	13	0
4:45 PM	0	0	0	0	15	0	7	4	5	603	0	0	0	484	15	0
5:00 PM	0	0	0	0	50	0	20	1	11	523	0	0	0	496	11	0
5:15 PM	0	0	0	0	17	0	11	2	7	609	0	0	0	473	16	0
5:30 PM	0	0	0	0	19	0	7	1	6	507	0	0	0	537	11	0
5:45 PM	0	0	0	0	14	0	4	0	3	498	0	0	0	480	12	0
Peak Hour Total	**0**	**0**	**0**	**0**	**101**	**0**	**45**	**8**	**29**	**2242**	**0**	**0**	**0**	**1990**	**53**	**0**

UCG
United Civil Group

Project No: TC23029

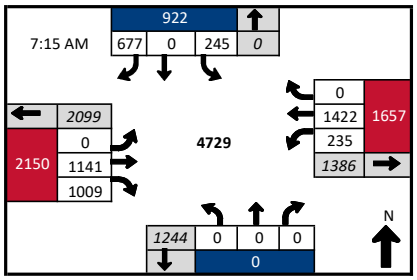
Location: I-10 SB Ramps and Baseline Road

Intersection Configuration: Signalized

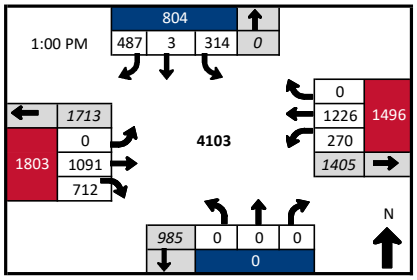
March 7, 2023 (Tuesday)

Turning Movement Count

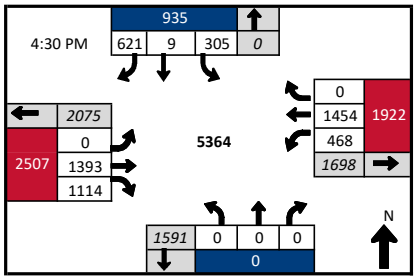
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound								
Southbound	65	2				1	1	
Eastbound	45			4	1	1		
Westbound	45	2		3				



	I-10 SB Ramps				I-10 SB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	0	0	0	0	50	0	158	0	0	270	186	0	45	255	0	0
7:15 AM	0	0	0	0	49	0	170	1	0	309	234	0	52	318	0	0
7:30 AM	0	0	0	0	79	0	159	1	0	294	243	0	74	332	0	0
7:45 AM	0	0	0	0	59	0	146	2	0	281	293	0	59	379	0	0
8:00 AM	0	0	0	0	58	0	202	1	0	257	239	0	50	393	0	0
8:15 AM	0	0	0	0	69	0	194	0	0	274	174	0	48	359	0	0
8:30 AM	0	0	0	0	68	0	128	1	0	277	181	0	59	306	0	0
8:45 AM	0	0	0	0	74	1	147	0	0	277	232	0	59	326	0	0
9:00 AM	0	0	0	0	62	0	115	0	0	206	166	0	42	267	0	0
9:15 AM	0	0	0	0	68	0	128	1	0	235	143	0	43	232	0	0
9:30 AM	0	0	0	0	85	0	120	2	0	291	173	0	41	238	0	0
9:45 AM	0	0	0	0	87	0	133	1	0	236	192	0	37	264	0	0
Peak Hour Total	**0**	**0**	**0**	**0**	**245**	**0**	**677**	**5**	**0**	**1141**	**1009**	**0**	**235**	**1422**	**0**	**0**



	I-10 SB Ramps				I-10 SB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	0	0	0	0	120	0	121	1	0	249	177	0	69	292	0	0
12:15 PM	0	0	0	0	121	0	134	5	0	266	159	0	66	308	0	0
12:30 PM	0	0	0	0	109	0	121	3	0	251	135	0	72	276	0	0
12:45 PM	0	0	0	0	90	0	103	2	0	296	162	0	68	326	0	0
1:00 PM	0	0	0	0	80	1	106	0	0	262	177	0	55	311	0	0
1:15 PM	0	0	0	0	67	0	134	3	0	257	181	0	63	274	0	0
1:30 PM	0	0	0	0	78	1	113	0	0	292	171	0	83	307	0	0
1:45 PM	0	0	0	0	89	1	134	6	0	280	183	0	69	334	0	0
Peak Hour Total	**0**	**0**	**0**	**0**	**314**	**3**	**487**	**9**	**0**	**1091**	**712**	**0**	**270**	**1226**	**0**	**0**



	I-10 SB Ramps				I-10 SB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	0	0	0	0	68	0	149	1	0	329	215	0	102	350	0	0
3:15 PM	0	0	0	0	79	0	156	2	0	292	199	0	91	388	0	0
3:30 PM	0	0	0	0	95	0	167	1	0	325	262	0	114	382	0	0
3:45 PM	0	0	0	0	77	0	179	1	0	331	275	0	117	359	0	0
4:00 PM	0	0	0	0	71	1	178	5	0	325	251	0	95	385	0	0
4:15 PM	0	0	0	0	68	0	161	6	0	324	238	0	116	381	0	0
4:30 PM	0	0	0	0	59	2	141	0	0	345	257	0	117	384	0	0
4:45 PM	0	0	0	0	84	0	170	2	0	344	290	0	123	348	0	0
5:00 PM	0	0	0	0	93	0	146	1	0	344	272	0	117	369	0	0
5:15 PM	0	0	0	0	69	7	164	3	0	360	295	0	111	353	0	0
5:30 PM	0	0	0	0	85	2	162	1	0	309	248	0	84	378	0	0
5:45 PM	0	0	0	0	82	1	177	0	0	303	241	0	88	318	0	0
Peak Hour Total	**0**	**0**	**0**	**0**	**305**	**9**	**621**	**6**	**0**	**1393**	**1114**	**0**	**468**	**1454**	**0**	**0**

United Civil Group

Project No: TC23029

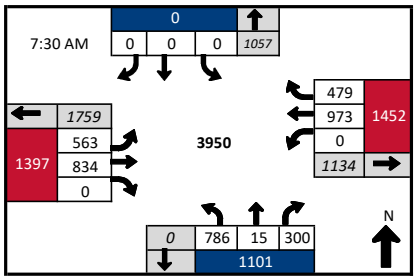
Location: I-10 NB Ramps and Baseline Road

Intersection Configuration: Signalized

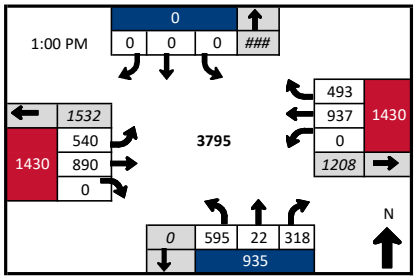
March 7, 2023 (Tuesday)

Turning Movement Count

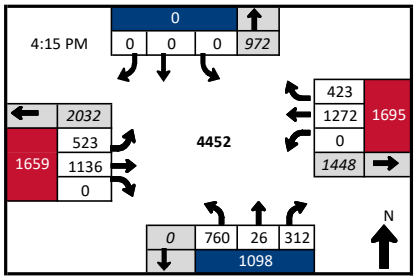
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	65	2				1	1	
Southbound								
Eastbound	45	2		3				
Westbound	45			4	1	1		



	I-10 NB Ramps				I-10 NB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	150	1	77	3	0	0	0	0	152	153	0	0	0	148	139	0
7:15 AM	181	3	60	1	0	0	0	0	153	206	0	0	0	191	126	0
7:30 AM	199	2	92	2	0	0	0	0	155	225	0	0	0	228	143	0
7:45 AM	198	4	73	1	0	0	0	0	136	205	0	0	0	259	106	0
8:00 AM	209	5	67	0	0	0	0	0	127	204	0	0	0	250	114	0
8:15 AM	180	4	68	2	0	0	0	0	145	200	0	0	0	236	116	0
8:30 AM	176	3	57	0	0	0	0	0	146	205	0	0	0	205	100	2
8:45 AM	180	4	67	2	0	0	0	0	121	207	0	0	0	221	82	0
9:00 AM	136	2	66	0	0	0	0	0	112	161	0	0	0	160	94	0
9:15 AM	128	2	82	1	0	0	0	0	134	176	0	0	0	160	90	0
9:30 AM	129	2	61	0	0	0	0	0	139	213	0	0	0	156	93	0
9:45 AM	116	3	66	0	0	0	0	0	126	204	0	0	0	185	91	1
Peak Hour Total	**786**	**15**	**300**	**5**	**0**	**0**	**0**	**0**	**563**	**834**	**0**	**0**	**0**	**973**	**479**	**0**



	I-10 NB Ramps				I-10 NB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	155	7	77	2	0	0	0	0	110	217	0	0	0	206	94	0
12:15 PM	160	1	91	2	0	0	0	0	110	245	0	0	0	218	119	0
12:30 PM	130	3	83	2	0	0	0	0	122	261	0	0	0	220	117	2
12:45 PM	167	9	64	0	0	0	0	0	114	257	0	0	0	244	110	1
1:00 PM	137	7	86	0	0	0	0	0	133	224	0	0	0	234	111	0
1:15 PM	122	6	83	2	0	0	0	0	122	218	0	0	0	226	130	0
1:30 PM	168	8	72	2	0	0	0	0	141	229	0	0	0	228	122	0
1:45 PM	168	1	77	1	0	0	0	0	144	219	0	0	0	249	130	0
Peak Hour Total	**595**	**22**	**318**	**5**	**0**	**0**	**0**	**0**	**540**	**890**	**0**	**0**	**0**	**937**	**493**	**0**



	I-10 NB Ramps				I-10 NB Ramps				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	199	10	77	1	0	0	0	0	108	270	0	0	0	247	110	0
3:15 PM	188	3	85	0	0	0	0	0	128	252	0	0	0	299	117	0
3:30 PM	189	8	79	1	0	0	0	0	139	285	0	0	0	293	142	0
3:45 PM	195	3	68	4	0	0	0	0	123	293	0	0	0	294	95	0
4:00 PM	197	5	87	0	0	0	0	0	139	263	0	0	0	296	108	0
4:15 PM	193	4	82	1	0	0	0	0	137	261	0	0	0	328	98	0
4:30 PM	204	4	69	2	0	0	0	0	131	274	0	0	0	313	120	0
4:45 PM	171	9	83	2	0	0	0	0	132	303	0	0	0	309	93	1
5:00 PM	192	9	78	0	0	0	0	0	123	298	0	0	0	322	112	0
5:15 PM	199	7	72	1	0	0	0	0	131	300	0	0	0	276	94	0
5:30 PM	198	6	84	2	0	0	0	0	130	265	0	0	0	284	114	0
5:45 PM	191	4	81	1	0	0	0	0	132	272	0	0	0	231	95	0
Peak Hour Total	**760**	**26**	**312**	**5**	**0**	**0**	**0**	**0**	**523**	**1136**	**0**	**0**	**0**	**1272**	**423**	**1**

United Civil Group

Project No: TC23029

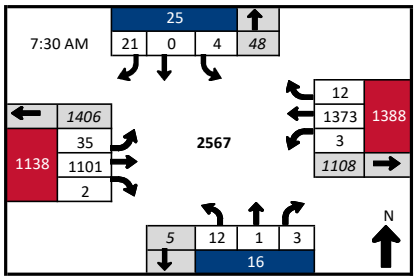
Location: Arizona Mills and Baseline Road

Intersection Configuration: Signalized

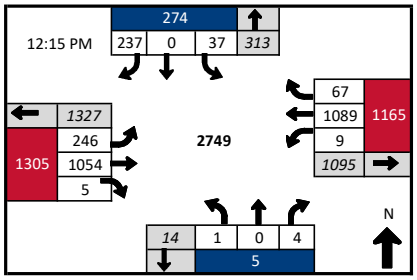
March 7, 2023 (Tuesday)

Turning Movement Count

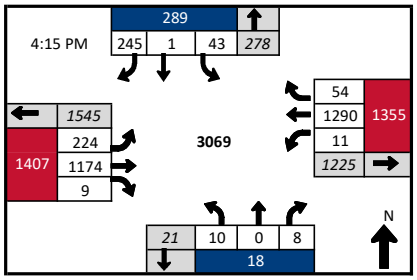
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	25						1	
Southbound	25		1			2		
Eastbound	45	2		2	1			
Westbound	45	1		3		1		



	Arizona Mills				Arizona Mills				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	0	0	1	1	0	0	3	0	9	230	0	0	0	273	0	0
7:15 AM	2	0	1	5	0	0	5	2	6	262	1	0	1	299	0	5
7:30 AM	4	0	2	2	0	0	4	0	6	304	1	0	0	356	2	1
7:45 AM	4	1	0	2	2	0	3	1	7	277	0	1	1	357	0	0
8:00 AM	4	0	1	1	1	0	6	0	8	265	0	0	1	334	6	0
8:15 AM	0	0	0	2	1	0	8	0	14	255	1	0	1	326	4	0
8:30 AM	4	0	0	4	4	1	10	0	16	237	0	0	2	280	7	1
8:45 AM	3	0	1	5	1	0	14	1	27	249	2	0	1	270	5	1
9:00 AM	0	0	2	0	2	0	13	1	18	209	1	0	1	224	8	0
9:15 AM	2	0	2	0	1	0	11	1	25	243	0	0	1	230	8	0
9:30 AM	0	0	2	0	2	1	10	0	33	238	0	1	1	228	6	2
9:45 AM	3	1	0	3	3	0	12	1	50	215	2	0	0	253	17	2
Peak Hour Total	**12**	**1**	**3**	**7**	**4**	**0**	**21**	**1**	**35**	**1101**	**2**	**1**	**3**	**1373**	**12**	**1**



	Arizona Mills				Arizona Mills				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	2	1	1	2	5	0	58	0	72	233	2	0	3	254	12	1
12:15 PM	0	0	0	3	15	0	46	1	71	262	1	0	0	248	15	2
12:30 PM	0	0	1	6	9	0	61	0	61	278	1	0	3	282	10	4
12:45 PM	1	0	2	5	6	0	71	0	64	265	1	0	0	262	19	1
1:00 PM	0	0	1	1	7	0	59	0	50	249	2	0	6	297	23	3
1:15 PM	1	0	0	3	5	0	73	0	51	230	2	0	4	265	13	0
1:30 PM	1	1	3	2	9	0	75	1	55	240	0	0	4	276	14	6
1:45 PM	0	0	1	1	13	0	46	0	68	230	0	0	3	306	10	4
Peak Hour Total	**1**	**0**	**4**	**15**	**37**	**0**	**237**	**1**	**246**	**1054**	**5**	**0**	**9**	**1089**	**67**	**10**



	Arizona Mills				Arizona Mills				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	5	0	1	2	14	1	41	2	53	310	1	0	0	317	11	6
3:15 PM	4	0	1	0	7	0	75	1	51	285	1	0	0	312	13	13
3:30 PM	2	0	0	2	5	0	57	1	47	313	2	0	2	370	23	3
3:45 PM	1	1	3	2	6	1	48	0	62	286	3	0	0	306	19	5
4:00 PM	3	0	2	4	11	1	46	6	48	277	3	0	1	334	12	8
4:15 PM	4	0	1	1	9	0	61	0	53	279	0	0	3	314	14	3
4:30 PM	1	0	1	2	6	0	65	1	50	278	3	0	1	339	14	0
4:45 PM	3	0	4	0	11	0	64	0	59	321	5	0	4	292	16	4
5:00 PM	2	0	2	1	17	1	55	1	62	296	1	0	3	345	10	2
5:15 PM	3	0	2	1	9	0	52	1	43	291	7	0	4	285	21	8
5:30 PM	3	0	1	1	17	0	85	0	71	293	2	0	1	273	15	0
5:45 PM	4	1	0	0	14	0	51	0	47	283	2	0	3	263	12	2
Peak Hour Total	**10**	**0**	**8**	**4**	**43**	**1**	**245**	**2**	**224**	**1174**	**9**	**0**	**11**	**1290**	**54**	**9**

United Civil Group

Turning Movement Count

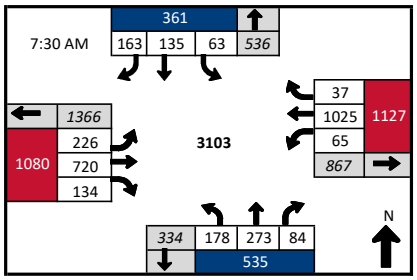
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	45	2		2		1		
Southbound	45	2		2		1		
Eastbound	45	2		2	1			
Westbound	45	1		2	1			

Project No: TC23029

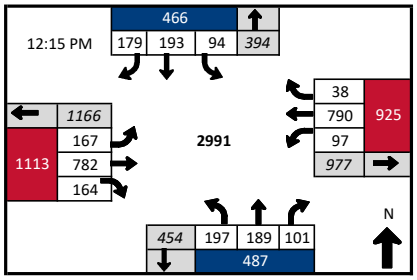
March 7, 2023 (Tuesday)

Location: Priest Drive and Baseline Road

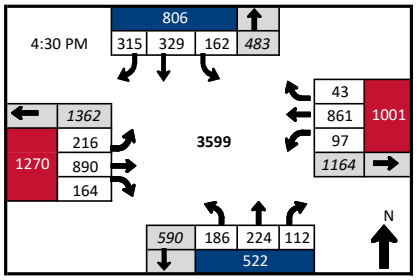
Intersection Configuration: Signalized



	Priest Drive Northbound				Priest Drive Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	39	50	12	0	12	28	28	2	44	153	17	1	11	211	3	1
7:15 AM	32	46	20	1	12	44	24	2	66	151	47	2	13	240	11	1
7:30 AM	51	75	36	3	14	33	45	2	46	191	42	0	14	258	6	4
7:45 AM	38	69	14	2	13	25	46	1	66	183	39	1	22	269	7	2
8:00 AM	44	70	16	1	20	33	38	2	52	174	31	0	18	264	15	2
8:15 AM	45	59	18	2	16	44	34	0	62	172	22	0	11	234	9	0
8:30 AM	35	41	16	2	14	37	43	0	44	174	24	1	16	220	8	3
8:45 AM	36	32	10	6	12	30	41	1	35	203	20	1	18	192	6	5
9:00 AM	35	32	12	1	24	30	31	5	39	156	24	1	17	168	13	4
9:15 AM	26	34	10	2	10	35	23	2	44	161	22	1	13	199	9	1
9:30 AM	29	51	13	2	14	27	32	1	46	169	30	1	15	170	10	1
9:45 AM	33	38	15	0	5	23	30	3	32	166	28	5	10	205	11	2
Peak Hour Total	**178**	**273**	**84**	**8**	**63**	**135**	**163**	**5**	**226**	**720**	**134**	**1**	**65**	**1025**	**37**	**8**



	Priest Drive Northbound				Priest Drive Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	41	52	29	1	20	46	54	6	39	163	30	8	23	176	15	3
12:15 PM	41	45	27	9	19	42	52	1	51	194	34	14	26	193	7	2
12:30 PM	61	46	24	2	33	49	46	1	46	190	46	3	25	181	9	2
12:45 PM	37	43	20	4	28	55	40	3	34	216	40	2	26	200	9	3
1:00 PM	58	55	30	5	14	47	41	4	36	182	44	4	20	216	13	3
1:15 PM	43	57	34	4	12	60	42	2	35	170	43	3	18	201	8	0
1:30 PM	54	50	26	2	31	33	62	7	44	160	47	4	21	192	7	6
1:45 PM	38	41	29	3	24	49	57	1	40	172	35	0	27	221	13	0
Peak Hour Total	**197**	**189**	**101**	**20**	**94**	**193**	**179**	**9**	**167**	**782**	**164**	**23**	**97**	**790**	**38**	**10**



	Priest Drive Northbound				Priest Drive Southbound				Baseline Road Eastbound				Baseline Road Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	31	48	20	2	36	57	73	2	48	222	49	2	23	229	11	3
3:15 PM	57	45	28	3	32	75	63	6	54	198	46	3	22	221	10	4
3:30 PM	58	60	31	6	42	70	74	1	52	230	34	4	28	258	11	1
3:45 PM	54	53	25	1	25	76	93	2	32	162	31	1	21	193	7	5
4:00 PM	44	58	26	4	31	87	78	3	54	208	28	2	21	233	6	3
4:15 PM	43	50	33	2	37	76	85	2	60	175	33	1	26	219	5	4
4:30 PM	39	54	28	5	42	84	74	3	58	211	31	2	27	235	15	3
4:45 PM	57	51	27	2	46	86	76	2	56	234	48	9	20	180	9	3
5:00 PM	46	64	35	2	32	85	84	3	45	235	45	10	30	233	5	3
5:15 PM	44	55	22	3	42	74	81	5	57	210	40	7	20	213	14	3
5:30 PM	36	51	19	2	38	86	45	1	41	232	46	6	18	205	9	5
5:45 PM	36	49	14	7	36	71	75	0	43	207	42	8	15	168	8	4
Peak Hour Total	**186**	**224**	**112**	**12**	**162**	**329**	**315**	**13**	**216**	**890**	**164**	**28**	**97**	**861**	**43**	**12**

UCG
United Civil Group

Project No: TC23029

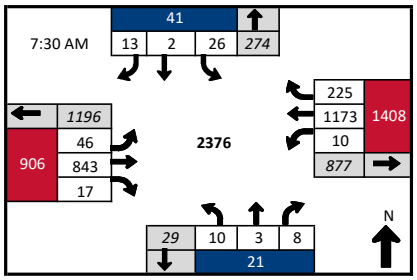
Location: Darrow Drive
and Baseline Road

Intersection Configuration: Signalized

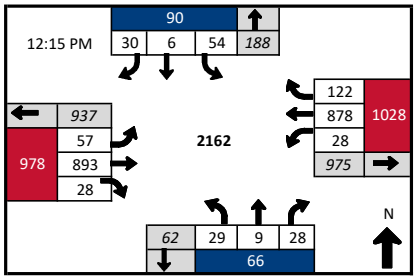
March 7, 2023 (Tuesday)

Turning Movement Count

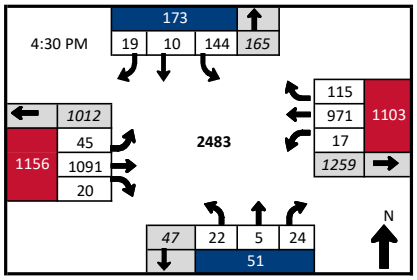
	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	15	1			1			
Southbound	35	1	1			1		
Eastbound	45	1		2	1			
Westbound	45	1		2	1			



	Darrow Drive				Darrow Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	2	1	0	1	6	1	2	0	7	172	1	0	0	227	24	0
7:15 AM	1	0	1	1	1	0	6	1	12	166	0	0	1	269	35	1
7:30 AM	1	0	0	2	9	0	4	1	10	238	4	0	3	298	62	3
7:45 AM	2	0	2	1	4	1	2	1	11	216	2	0	2	303	76	0
8:00 AM	4	1	2	3	7	0	1	0	19	198	4	0	3	306	50	0
8:15 AM	3	2	4	2	6	1	6	0	6	191	7	0	2	266	37	1
8:30 AM	4	1	3	2	9	1	6	1	7	190	7	0	2	227	51	0
8:45 AM	3	1	5	2	5	1	7	2	15	205	4	2	3	225	35	0
9:00 AM	0	2	6	0	6	0	8	1	17	172	4	0	0	194	31	0
9:15 AM	2	1	3	3	8	2	7	0	9	171	2	1	4	212	29	0
9:30 AM	4	0	2	1	4	0	8	0	12	173	5	0	2	193	21	0
9:45 AM	8	1	1	1	18	0	9	0	15	161	8	0	4	201	24	0
Peak Hour Total	**10**	**3**	**8**	**8**	**26**	**2**	**13**	**2**	**46**	**843**	**17**	**0**	**10**	**1173**	**225**	**4**



	Darrow Drive				Darrow Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	5	1	8	0	10	1	4	0	8	196	3	0	11	207	31	2
12:15 PM	11	1	2	7	16	1	10	0	17	221	7	0	7	212	28	0
12:30 PM	8	1	6	5	13	5	7	1	12	227	7	1	7	200	25	1
12:45 PM	5	6	14	2	13	0	8	1	15	228	5	0	8	231	35	2
1:00 PM	5	1	6	2	12	0	5	0	13	217	9	0	6	235	34	0
1:15 PM	6	0	7	1	18	0	5	3	11	191	11	0	6	226	26	0
1:30 PM	6	5	10	4	17	1	7	0	9	202	7	0	5	235	33	0
1:45 PM	3	0	6	3	18	1	7	2	10	210	8	2	3	243	25	0
Peak Hour Total	**29**	**9**	**28**	**16**	**54**	**6**	**30**	**2**	**57**	**893**	**28**	**1**	**28**	**878**	**122**	**3**



	Darrow Drive				Darrow Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	2	2	5	3	23	2	5	0	10	257	7	1	5	258	32	2
3:15 PM	3	3	8	1	32	1	6	2	13	252	6	0	10	244	24	1
3:30 PM	8	7	4	3	30	3	7	0	8	268	9	2	6	284	32	1
3:45 PM	5	5	7	0	33	3	5	1	7	220	9	0	5	210	39	2
4:00 PM	6	4	3	2	36	3	4	2	7	264	3	1	2	255	41	0
4:15 PM	3	2	3	3	38	0	8	0	14	227	9	0	2	241	33	2
4:30 PM	8	0	5	0	24	2	6	3	9	257	6	1	3	277	28	2
4:45 PM	5	2	5	4	32	4	5	0	9	294	3	1	4	212	31	0
5:00 PM	4	2	7	2	46	3	3	0	9	285	5	1	4	262	34	2
5:15 PM	5	1	7	3	42	1	5	1	18	255	6	1	6	220	22	0
5:30 PM	3	1	4	2	38	2	7	0	11	276	5	1	2	234	30	0
5:45 PM	6	2	5	1	33	1	3	0	5	253	6	0	7	213	30	0
Peak Hour Total	**22**	**5**	**24**	**9**	**144**	**10**	**19**	**4**	**45**	**1091**	**20**	**4**	**17**	**971**	**115**	**4**

United Civil Group

Project No: TC23029

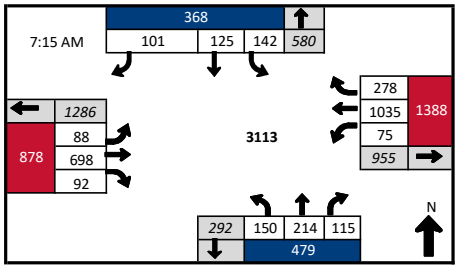
Location: Hardy Drive and Baseline Road

Intersection Configuration: Signalized

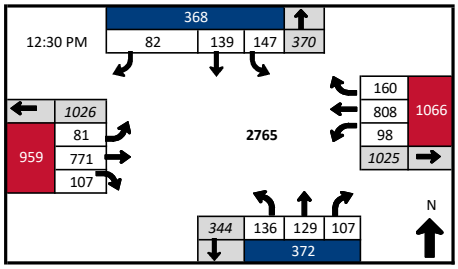
Turning Movement Count

	Speed Limit	Lt	Lt\T	T	T/Rt	Rt	Lt/T/Rt	Lt/Rt
Northbound	30	1		1		1		
Southbound	30	1		1		1		
Eastbound	45	1		2	1			
Westbound	45	1		2	1			

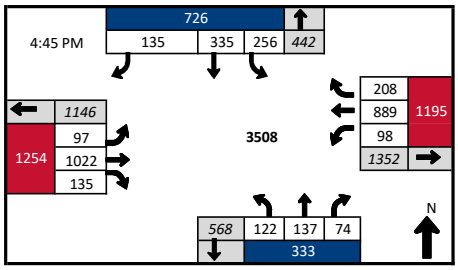
March 7, 2023 (Tuesday)



	Hardy Drive				Hardy Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
7:00 AM	34	38	17	1	40	19	23	3	15	143	17	1	23	156	33	3
7:15 AM	36	46	24	3	35	26	30	1	16	143	23	2	24	203	57	2
7:30 AM	49	59	26	1	40	42	28	1	24	185	35	1	30	235	70	1
7:45 AM	37	65	40	2	33	33	22	1	24	183	22	2	13	322	91	1
8:00 AM	28	44	25	0	34	24	21	0	24	187	12	0	8	275	60	0
8:15 AM	20	39	10	1	35	27	21	0	13	149	20	1	19	263	43	0
8:30 AM	32	35	25	2	41	40	23	1	16	185	19	0	12	213	49	1
8:45 AM	25	33	14	0	39	26	28	0	25	162	21	0	14	190	40	1
9:00 AM	35	22	22	2	27	16	12	2	16	149	14	1	12	165	47	0
9:15 AM	37	30	14	1	33	30	13	2	20	139	25	1	15	172	32	2
9:30 AM	18	20	6	4	29	21	13	1	16	142	22	2	19	167	43	0
9:45 AM	24	32	16	2	28	24	21	1	13	160	18	1	11	170	35	0
Peak Hour Total	**150**	**214**	**115**	**6**	**142**	**125**	**101**	**3**	**88**	**698**	**92**	**5**	**75**	**1035**	**278**	**4**



	Hardy Drive				Hardy Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
12:00 PM	24	30	7	6	42	35	24	1	18	177	16	0	13	194	41	1
12:15 PM	21	13	22	1	45	29	22	1	20	178	27	0	17	197	30	2
12:30 PM	28	30	24	4	41	29	23	1	20	193	35	1	16	176	41	0
12:45 PM	29	23	25	3	37	28	21	1	21	215	31	2	33	219	43	2
1:00 PM	44	48	37	7	34	46	17	0	20	196	17	1	26	212	34	0
1:15 PM	35	28	21	0	35	36	21	1	20	167	24	3	23	201	42	1
1:30 PM	42	23	16	4	35	28	29	2	21	165	22	0	15	197	44	1
1:45 PM	36	28	13	2	42	35	18	1	11	202	30	3	16	204	46	0
Peak Hour Total	**136**	**129**	**107**	**14**	**147**	**139**	**82**	**3**	**81**	**771**	**107**	**7**	**98**	**808**	**160**	**3**



	Hardy Drive				Hardy Drive				Baseline Road				Baseline Road			
	Northbound				Southbound				Eastbound				Westbound			
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
3:00 PM	35	24	8	3	57	56	22	0	20	203	24	0	23	248	40	2
3:15 PM	38	39	18	4	57	53	21	2	31	235	31	1	20	235	47	1
3:30 PM	31	25	18	4	58	73	41	1	18	217	31	2	25	239	38	1
3:45 PM	36	43	27	3	47	79	32	4	12	245	21	6	14	190	47	3
4:00 PM	42	33	21	7	65	70	31	4	27	232	31	6	20	218	40	4
4:15 PM	28	29	22	7	46	83	39	2	26	209	28	2	26	217	45	2
4:30 PM	30	31	14	3	62	70	43	1	18	234	29	3	37	225	42	3
4:45 PM	30	34	15	3	68	78	26	1	22	257	39	5	15	204	50	3
5:00 PM	31	33	23	5	55	91	33	3	25	260	33	4	31	245	46	4
5:15 PM	32	37	21	4	70	92	33	1	26	247	24	1	28	231	59	3
5:30 PM	29	33	15	5	63	74	43	4	24	258	39	5	24	209	53	2
5:45 PM	32	36	21	6	54	66	28	0	28	210	42	4	26	202	39	3
Peak Hour Total	**122**	**137**	**74**	**17**	**256**	**335**	**135**	**9**	**97**	**1022**	**135**	**15**	**98**	**889**	**208**	**12**

Start Time	48th Street				Calle Los Ceros				Arizona Grand Parkway				Wendler Drive				I-10 SB Ramps			
	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound
7:00 AM	103	140	407	291	16	28	408	322	44	0	441	361	0	16	428	399	0	203	445	289
7:15 AM	126	135	447	337	21	26	466	390	44	0	490	424	0	18	491	437	0	210	529	357
7:30 AM	152	173	437	367	24	39	462	403	44	2	539	453	0	12	497	478	0	235	521	388
7:45 AM	177	220	408	390	26	35	502	447	52	0	577	515	0	26	537	502	0	202	562	426
8:00 AM	176	149	424	440	16	34	443	494	39	0	512	570	0	33	464	544	0	254	481	428
8:15 AM	168	131	421	404	26	16	396	458	52	1	403	511	0	14	415	515	0	258	433	385
8:30 AM	120	149	425	338	15	19	395	379	37	0	471	438	0	12	448	399	0	194	446	347
8:45 AM	112	142	418	325	21	21	452	380	32	0	498	431	0	22	471	426	0	211	496	375
9:00 AM	86	101	301	303	16	21	280	313	41	0	316	355	0	24	341	347	0	174	358	296
9:15 AM	82	102	319	272	15	24	318	313	50	0	363	357	0	12	375	350	0	186	370	265
9:30 AM	67	133	388	252	20	19	403	272	43	0	415	332	0	22	426	320	0	198	450	265
9:45 AM	85	67	346	309	13	22	356	346	50	0	380	387	0	20	397	374	0	214	412	294
12:00 PM	76	141	331	330	29	20	333	359	60	2	386	404	0	53	389	379	0	232	422	346
12:15 PM	94	146	336	363	34	25	368	417	51	0	382	436	0	31	401	419	0	245	415	365
12:30 PM	96	125	363	357	35	23	342	367	51	0	379	393	0	30	389	383	0	222	379	334
12:45 PM	90	122	377	348	21	21	389	382	45	0	379	409	0	15	401	388	0	189	439	385
1:00 PM	84	143	323	338	27	24	364	392	53	0	418	410	0	27	415	393	0	181	431	356
1:15 PM	87	136	356	344	24	25	374	393	50	0	406	421	0	28	419	403	0	192	428	331
1:30 PM	85	134	339	351	46	24	354	384	51	1	390	414	0	35	405	409	0	188	452	372
1:45 PM	111	140	390	389	21	23	387	448	57	0	453	434	0	11	431	443	0	220	450	396
3:00 PM	141	192	418	434	15	18	471	470	71	1	509	480	0	22	513	469	0	214	537	439
3:15 PM	132	194	431	463	19	21	442	499	62	0	503	532	0	14	463	516	0	235	479	468
3:30 PM	149	199	513	448	21	28	493	494	81	0	554	523	0	22	526	519	0	258	576	485
3:45 PM	123	212	500	503	17	31	501	508	75	0	595	523	0	26	558	510	0	252	598	469
4:00 PM	161	194	389	466	21	38	351	502	164	1	421	534	0	62	470	531	0	248	569	470
4:15 PM	159	181	391	477	22	28	417	515	122	0	493	538	0	23	518	521	0	229	554	491
4:30 PM	155	188	473	476	29	40	470	495	84	0	515	506	0	37	522	498	0	201	594	493
4:45 PM	143	202	489	442	18	39	517	485	68	1	611	519	0	22	602	491	0	253	630	462
5:00 PM	148	204	475	476	24	25	483	523	118	0	526	527	0	70	521	501	0	237	604	477
5:15 PM	148	198	485	464	25	27	503	498	85	0	603	521	0	28	608	488	0	239	648	463
5:30 PM	144	228	432	460	23	36	459	506	63	0	521	557	0	26	504	542	0	244	551	457
5:45 PM	113	207	395	417	29	24	475	451	45	0	512	499	0	18	495	488	0	260	540	399

Start Time	I-10 NB Ramps				Arizona Mills				Priest Drive				Darrow Drive				Hardy Drive			
	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound	Northbound	Southbound	Eastbound	Westbound
7:00 AM	218	0	295	276	1	3	226	262	94	63	202	218	3	7	172	243	85	80	167	203
7:15 AM	238	0	350	296	3	5	259	279	94	73	252	247	2	7	170	289	101	89	173	268
7:30 AM	282	0	368	353	6	4	299	341	159	82	269	267	1	13	246	353	132	105	237	325
7:45 AM	263	0	333	355	5	4	276	351	120	76	277	291	4	5	222	374	139	87	222	414
8:00 AM	267	0	316	343	5	7	254	321	125	85	236	279	5	6	211	338	96	76	214	325
8:15 AM	237	0	335	327	0	9	254	310	118	86	239	240	9	13	196	287	68	74	175	305
8:30 AM	223	0	340	288	4	14	238	271	88	87	232	231	7	14	198	269	90	95	211	266
8:45 AM	238	0	315	294	4	14	261	268	76	75	242	211	9	13	212	256	72	90	198	235
9:00 AM	193	0	263	239	2	15	213	218	73	81	204	189	8	13	185	214	76	53	172	215
9:15 AM	200	0	295	231	4	10	248	223	67	61	211	211	6	16	171	237	79	73	173	212
9:30 AM	180	0	339	242	2	12	262	228	90	66	234	191	6	12	185	211	43	60	175	218
9:45 AM	175	0	319	262	4	15	254	258	85	52	211	213	10	27	177	218	63	70	182	207
12:00 PM	231	0	314	281	4	62	292	253	115	111	223	208	14	14	202	240	57	94	204	239
12:15 PM	243	0	339	319	0	60	323	245	107	104	262	213	14	23	237	233	54	96	213	231
12:30 PM	209	0	374	315	1	69	329	278	127	119	272	206	15	24	240	223	77	92	244	226
12:45 PM	236	0	356	337	3	73	320	267	96	116	279	217	25	20	242	265	75	83	255	287
1:00 PM	219	0	351	333	1	65	288	316	138	96	249	245	12	15	232	269	121	93	225	265
1:15 PM	204	0	334	346	1	77	273	276	130	111	240	222	13	20	209	249	83	91	202	258
1:30 PM	242	0	360	331	5	81	286	278	124	121	245	208	19	22	214	262	78	89	202	247
1:45 PM	240	0	357	364	1	59	291	307	105	124	239	249	9	24	224	259	73	88	234	254
3:00 PM	277	0	374	343	6	55	356	318	92	160	311	262	8	29	270	290	64	132	242	309
3:15 PM	269	0	371	405	5	81	330	315	124	167	291	240	14	38	265	266	89	128	288	291
3:30 PM	272	0	419	425	2	62	357	384	147	182	310	288	19	39	284	315	74	170	265	296
3:45 PM	260	0	408	384	5	54	342	320	130	187	217	217	17	39	231	248	99	157	274	247
4:00 PM	283	0	396	395	5	58	318	337	124	191	282	256	13	42	269	293	93	165	283	275
4:15 PM	267	0	390	421	5	70	325	328	123	193	261	246	8	45	246	272	79	165	257	282
4:30 PM	272	0	395	425	2	70	321	345	117	192	292	274	13	30	265	305	73	173	273	300
4:45 PM	255	0	434	398	7	75	383	308	134	202	333	208	12	39	303	247	79	172	314	269
5:00 PM	273	0	414	421	4	73	352	349	143	198	317	263	13	52	295	295	86	173	311	317
5:15 PM	276	0	423	368	5	61	333	308	120	190	299	246	13	47	274	247	90	193	293	317
5:30 PM	285	0	387	392	4	102	357	283	105	165	314	229	8	46	285	264	76	177	315	284
5:45 PM	269	0	403	320	5	63	330	276	99	177	290	189	13	37	264	248	89	148	280	264

United Civil Group

2803 N. 7th Avenue

Street : 48th Street
Location : N of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

NB

Interval Start			Interval Start		
11:00	96	504	23:00	25	97
11:15	124		23:15	33	
11:30	143		23:30	23	
11:45	141		23:45	16	
12:00	150	669	3/7/2023 00:00	19	56
12:15	186		00:15	16	
12:30	176		00:30	13	
12:45	157		00:45	8	
13:00	126	484	01:00	5	24
13:15	107		01:15	8	
13:30	136		01:30	6	
13:45	115		01:45	5	
14:00	104	469	02:00	5	22
14:15	109		02:15	6	
14:30	124		02:30	7	
14:45	132		02:45	4	
15:00	124	561	03:00	3	28
15:15	139		03:15	6	
15:30	150		03:30	9	
15:45	148		03:45	10	
16:00	162	665	04:00	12	110
16:15	170		04:15	18	
16:30	170		04:30	34	
16:45	163		04:45	46	
17:00	163	627	05:00	30	254
17:15	169		05:15	53	
17:30	149		05:30	70	
17:45	146		05:45	101	
18:00	138	539	06:00	84	397
18:15	134		06:15	93	
18:30	136		06:30	96	
18:45	131		06:45	124	
19:00	105	382	07:00	116	627
19:15	91		07:15	142	
19:30	97		07:30	181	
19:45	89		07:45	188	
20:00	112	359	08:00	178	633
20:15	80		08:15	168	
20:30	83		08:30	147	
20:45	84		08:45	140	
21:00	94	279	09:00	118	458
21:15	67		09:15	104	
21:30	66		09:30	106	
21:45	52		09:45	130	
22:00	52	175	10:00	80	383
22:15	45		10:15	104	
22:30	43		10:30	110	
22:45	35		10:45	89	

24 Hour Total
8802

00:00 - 12:00

12 Hour Count	3496
Peak Hour	07:30
Peak Volume	715
Factor	0.95

12:00 - 00:00

12 Hour Count	5306
Peak Hour	12:00
Peak Volume	669

Factor 0.90

United Civil Group

2803 N. 7th Avenue

Street : 48th Street
Location : N of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

SB

Interval Start			Interval Start		
11:00	135	548	23:00	55	175
11:15	150		23:15	48	
11:30	140		23:30	47	
11:45	123		23:45	25	
12:00	142	540	3/7/2023 00:00	39	99
12:15	136		00:15	28	
12:30	126		00:30	18	
12:45	136		00:45	14	
13:00	140	583	01:00	18	66
13:15	144		01:15	16	
13:30	149		01:30	14	
13:45	150		01:45	18	
14:00	133	661	02:00	17	68
14:15	140		02:15	20	
14:30	190		02:30	14	
14:45	198		02:45	17	
15:00	203	643	03:00	10	80
15:15	230		03:15	15	
15:30	146		03:30	33	
15:45	64		03:45	22	
16:00	86	678	04:00	40	189
16:15	203		04:15	43	
16:30	198		04:30	61	
16:45	191		04:45	45	
17:00	121	645	05:00	50	270
17:15	149		05:15	52	
17:30	198		05:30	94	
17:45	177		05:45	74	
18:00	139	558	06:00	68	443
18:15	171		06:15	98	
18:30	129		06:30	121	
18:45	119		06:45	156	
19:00	103	370	07:00	128	657
19:15	90		07:15	173	
19:30	92		07:30	188	
19:45	85		07:45	168	
20:00	92	350	08:00	135	577
20:15	94		08:15	149	
20:30	78		08:30	152	
20:45	86		08:45	141	
21:00	101	354	09:00	103	424
21:15	101		09:15	113	
21:30	79		09:30	106	
21:45	73		09:45	102	
22:00	66	242	10:00	85	393
22:15	61		10:15	94	
22:30	63		10:30	106	
22:45	52		10:45	108	

24 Hour Total
9613

00:00 - 12:00

12 Hour Count	3814
Peak Hour	07:15
Peak Volume	664
Factor	0.88

12:00 - 00:00

12 Hour Count	5799
Peak Hour	14:30
Peak Volume	821

Factor 0.89

United Civil Group

2803 N. 7th Avenue

Street : 48th Street
Location : S of Baseline Road
Lat, Long : 33.377280, -111.978432

Site: TC23029
4/25/2023
Tuesday

24 Hour Volume

Interval Start	NB		SB		Combined	
12:00	136	490	55	265	191	755
12:15	93		68		161	
12:30	144		56		200	
12:45	117		86		203	
13:00	143	518	61	265	204	783
13:15	113		55		168	
13:30	108		82		190	
13:45	154		67		221	
14:00	190	746	53	286	243	1032
14:15	183		75		258	
14:30	197		67		264	
14:45	176		91		267	
15:00	208	773	74	263	282	1036
15:15	183		71		254	
15:30	199		59		258	
15:45	183		59		242	
16:00	206	788	58	301	264	1089
16:15	232		77		309	
16:30	196		68		264	
16:45	154		98		252	
17:00	205	690	76	285	281	975
17:15	188		71		259	
17:30	148		59		207	
17:45	149		79		228	
18:00	111	437	87	272	198	709
18:15	126		64		190	
18:30	99		66		165	
18:45	101		55		156	
19:00	103	362	47	186	150	548
19:15	92		43		135	
19:30	97		52		149	
19:45	70		44		114	
20:00	118	322	36	154	154	476
20:15	79		42		121	
20:30	71		44		115	
20:45	54		32		86	
21:00	86	235	26	108	112	343
21:15	56		25		81	
21:30	40		26		66	
21:45	53		31		84	
22:00	56	150	25	81	81	231
22:15	46		19		65	
22:30	25		18		43	
22:45	23		19		42	
23:00	27	80	21	57	48	137
23:15	18		15		33	
23:30	18		11		29	
23:45	17		10		27	

Interval Start	NB		SB		Combined	
4/26/2023 00:00	10	50	6	33	16	83
00:15	9		10		19	
00:30	14		7		21	
00:45	17		10		27	
01:00	18	38	4	16	22	54
01:15	6		5		11	
01:30	6		5		11	
01:45	8		2		10	
02:00	2	20	0	13	2	33
02:15	8		5		13	
02:30	5		1		6	
02:45	5		7		12	
03:00	3	41	6	36	9	77
03:15	15		7		22	
03:30	9		7		16	
03:45	14		16		30	
04:00	11	90	15	118	26	208
04:15	21		18		39	
04:30	30		32		62	
04:45	28		53		81	
05:00	33	178	38	168	71	346
05:15	42		35		77	
05:30	41		41		82	
05:45	62		54		116	
06:00	46	313	40	223	86	536
06:15	61		59		120	
06:30	93		51		144	
06:45	113		73		186	
07:00	167	784	86	331	253	1115
07:15	168		93		261	
07:30	206		74		280	
07:45	243		78		321	
08:00	232	739	70	283	302	1022
08:15	180		74		254	
08:30	159		64		223	
08:45	168		75		243	
09:00	136	438	63	236	199	674
09:15	130		55		185	
09:30	75		56		131	
09:45	97		62		159	
10:00	117	405	67	238	184	643
10:15	95		63		158	
10:30	94		59		153	
10:45	99		49		148	
11:00	117	453	47	207	164	660
11:15	86		38		124	
11:30	131		56		187	
11:45	119		66		185	

Volume Totals

	NB	SB	Combined
00:00 - 12:00	3549	1902	5451
	(65.1%)	(34.9%)	
12:00 - 00:00	5591	2523	8114
	(68.9%)	(31.1%)	
24 Hours	9140	4425	13565
	(67.4%)	(32.6%)	

Peak Hours

00:00 - 12:00

	NB	SB	Combined
Started	07:30	07:00	07:15
Volume	861	331	1164
Factor	0.89	0.89	0.91

12:00 - 00:00

	NB	SB	Combined
Started	15:30	16:15	16:15
Volume	820	319	1106
Factor	0.88	0.81	0.89

United Civil Group

2803 N. 7th Avenue

Street : Arizona Grand Parkway
Location : S of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

NB

Interval Start			Interval Start		
13:00	43	188	01:00	3	20
13:15	48		01:15	5	
13:30	49		01:30	5	
13:45	48		01:45	7	
14:00	45	181	02:00	5	16
14:15	40		02:15	4	
14:30	50		02:30	4	
14:45	46		02:45	3	
15:00	59	206	03:00	1	10
15:15	54		03:15	3	
15:30	48		03:30	3	
15:45	45		03:45	3	
16:00	61	242	04:00	1	18
16:15	60		04:15	4	
16:30	67		04:30	6	
16:45	54		04:45	7	
17:00	83	263	05:00	5	52
17:15	61		05:15	9	
17:30	72		05:30	14	
17:45	47		05:45	24	
18:00	53	204	06:00	15	91
18:15	46		06:15	15	
18:30	41		06:30	33	
18:45	64		06:45	28	
19:00	38	145	07:00	46	167
19:15	33		07:15	40	
19:30	35		07:30	38	
19:45	39		07:45	43	
20:00	40	150	08:00	38	160
20:15	30		08:15	45	
20:30	35		08:30	40	
20:45	45		08:45	37	
21:00	13	81	09:00	36	171
21:15	27		09:15	46	
21:30	23		09:30	43	
21:45	18		09:45	46	
22:00	27	77	10:00	50	176
22:15	27		10:15	43	
22:30	8		10:30	41	
22:45	15		10:45	42	
23:00	5	37	11:00	39	171
23:15	13		11:15	38	
23:30	11		11:30	48	
23:45	8		11:45	46	
3/7/2023 00:00	13	30	12:00	57	195
00:15	9		12:15	47	
00:30	7		12:30	48	
00:45	1		12:45	43	

24 Hour Total
3051

00:00 - 12:00

12 Hour Count	1082
Peak Hour	09:15
Peak Volume	185
Factor	0.93

12:00 - 00:00

12 Hour Count	1969
Peak Hour	16:45
Peak Volume	270

Factor 0.81

United Civil Group

2803 N. 7th Avenue

Street : Arizona Grand Parkway
Location : S of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

SB

Interval Start			Interval Start		
13:00	44	173	01:00	3	17
13:15	44		01:15	7	
13:30	39		01:30	4	
13:45	46		01:45	3	
14:00	32	171	02:00	2	5
14:15	43		02:15	1	
14:30	37		02:30	1	
14:45	59		02:45	1	
15:00	53	162	03:00	1	8
15:15	33		03:15	1	
15:30	38		03:30	3	
15:45	38		03:45	3	
16:00	43	187	04:00	2	40
16:15	47		04:15	9	
16:30	48		04:30	9	
16:45	49		04:45	20	
17:00	48	196	05:00	12	61
17:15	51		05:15	14	
17:30	51		05:30	14	
17:45	46		05:45	21	
18:00	40	149	06:00	27	121
18:15	42		06:15	19	
18:30	36		06:30	28	
18:45	31		06:45	47	
19:00	35	129	07:00	52	227
19:15	28		07:15	39	
19:30	35		07:30	62	
19:45	31		07:45	74	
20:00	28	115	08:00	60	257
20:15	26		08:15	71	
20:30	29		08:30	67	
20:45	32		08:45	59	
21:00	22	95	09:00	47	220
21:15	28		09:15	50	
21:30	24		09:30	55	
21:45	21		09:45	68	
22:00	15	57	10:00	25	130
22:15	14		10:15	39	
22:30	14		10:30	30	
22:45	14		10:45	36	
23:00	16	39	11:00	25	135
23:15	10		11:15	38	
23:30	9		11:30	36	
23:45	4		11:45	36	
3/7/2023 00:00	8	20	12:00	55	163
00:15	8		12:15	30	
00:30	2		12:30	37	
00:45	2		12:45	41	

24 Hour Total
2877

00:00 - 12:00

12 Hour Count	1241
Peak Hour	07:45
Peak Volume	272
Factor	0.92

12:00 - 00:00

12 Hour Count	1636
Peak Hour	16:45
Peak Volume	199
Factor	0.98

United Civil Group

2803 N. 7th Avenue

Street : AZ Mills South
Location : N of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume (Volume factor 0.5)

Interval Start	NB		SB		Combined	
14:00	102	355	60	312	162	667
14:15	83		81		164	
14:30	98		85		183	
14:45	72		86		158	
15:00	76	310	90	313	166	623
15:15	88		78		166	
15:30	76		70		146	
15:45	70		75		145	
16:00	92	395	80	302	172	697
16:15	100		74		174	
16:30	122		74		196	
16:45	81		74		155	
17:00	91	329	66	330	157	659
17:15	70		88		158	
17:30	86		80		166	
17:45	82		96		178	
18:00	107	368	68	294	175	662
18:15	80		76		156	
18:30	90		72		162	
18:45	91		78		169	
19:00	81	284	75	289	156	573
19:15	96		60		156	
19:30	58		68		126	
19:45	49		86		135	
20:00	34	162	110	418	144	580
20:15	56		134		190	
20:30	38		102		140	
20:45	34		72		106	
21:00	28	86	55	157	83	243
21:15	29		42		71	
21:30	16		34		50	
21:45	13		26		39	
22:00	17	36	15	67	32	103
22:15	6		11		17	
22:30	10		16		26	
22:45	3		25		28	
23:00	12	24	10	53	22	77
23:15	6		23		29	
23:30	2		15		17	
23:45	4		5		9	
3/7/2023 00:00	2	11	6	12	8	23
00:15	5		3		8	
00:30	4		1		5	
00:45	0		2		2	
01:00	5	12	0	3	5	15
01:15	1		1		2	
01:30	2		2		4	
01:45	4		0		4	

Interval Start	NB		SB		Combined	
02:00	1	9	0	5	1	14
02:15	2		3		5	
02:30	2		0		2	
02:45	4		2		6	
03:00	2	12	3	7	5	19
03:15	2		0		2	
03:30	3		4		7	
03:45	5		0		5	
04:00	1	11	0	1	1	12
04:15	0		0		0	
04:30	2		1		3	
04:45	8		0		8	
05:00	16	27	8	22	24	49
05:15	3		4		7	
05:30	2		4		6	
05:45	6		6		12	
06:00	15	40	6	19	21	59
06:15	7		5		12	
06:30	6		2		8	
06:45	12		6		18	
07:00	15	40	10	25	25	65
07:15	7		3		10	
07:30	6		9		15	
07:45	12		3		15	
08:00	10	75	6	38	16	113
08:15	14		7		21	
08:30	20		10		30	
08:45	31		15		46	
09:00	36	165	16	57	52	222
09:15	30		17		47	
09:30	45		11		56	
09:45	54		13		67	
10:00	74	297	17	87	91	384
10:15	80		17		97	
10:30	66		29		95	
10:45	77		24		101	
11:00	100	383	35	153	135	536
11:15	76		42		118	
11:30	86		35		121	
11:45	121		41		162	
12:00	88	355	58	260	146	615
12:15	96		66		162	
12:30	95		62		157	
12:45	76		74		150	
13:00	94	350	73	309	167	659
13:15	94		74		168	
13:30	74		75		149	
13:45	88		87		175	

Volume Totals

	NB	SB	Combined
00:00 - 12:00	1082	429	1511
	(71.6%)	(28.4%)	
12:00 - 00:00	3054	3104	6158
	(49.6%)	(50.4%)	
24 Hours	4136	3533	7669
	(53.9%)	(46.1%)	

Peak Hours

00:00 - 12:00

	NB	SB	Combined
Started	11:00	11:00	11:00
Volume	383	153	536
Factor	0.79	0.91	0.83

12:00 - 00:00

	NB	SB	Combined
Started	16:00	19:45	16:00
Volume	395	432	697
Factor	0.81	0.81	0.89

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : E of Arizona Grand Parkway

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

Interval Start	EB		Interval Start	EB	
14:00	362	1487	02:00	31	131
14:15	400		02:15	39	
14:30	362		02:30	26	
14:45	363		02:45	35	
15:00	364	1356	03:00	33	211
15:15	324		03:15	44	
15:30	347		03:30	55	
15:45	321		03:45	79	
16:00	286	1241	04:00	85	543
16:15	327		04:15	117	
16:30	311		04:30	155	
16:45	317		04:45	186	
17:00	315	1325	05:00	172	999
17:15	304		05:15	207	
17:30	357		05:30	273	
17:45	349		05:45	347	
18:00	348	1301	06:00	273	1197
18:15	346		06:15	266	
18:30	297		06:30	322	
18:45	310		06:45	336	
19:00	300	1057	07:00	316	1415
19:15	255		07:15	348	
19:30	268		07:30	345	
19:45	234		07:45	406	
20:00	215	846	08:00	350	1513
20:15	195		08:15	353	
20:30	217		08:30	400	
20:45	219		08:45	410	
21:00	180	712	09:00	333	1407
21:15	203		09:15	328	
21:30	181		09:30	365	
21:45	148		09:45	381	
22:00	154	492	10:00	330	1393
22:15	135		10:15	360	
22:30	104		10:30	352	
22:45	99		10:45	351	
23:00	86	308	11:00	322	1304
23:15	92		11:15	312	
23:30	65		11:30	331	
23:45	65		11:45	339	
3/7/2023 00:00	57	200	12:00	317	1285
00:15	53		12:15	336	
00:30	59		12:30	346	
00:45	31		12:45	286	
01:00	34	123	13:00	318	1355
01:15	24		13:15	336	
01:30	40		13:30	373	
01:45	25		13:45	328	

24 Hour Total
23201

00:00 - 12:00

12 Hour Count	10436
Peak Hour	08:00
Peak Volume	1513
Factor	0.92

12:00 - 00:00

12 Hour Count	12765
Peak Hour	14:15
Peak Volume	1489
Factor	0.93

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : E of Arizona Grand Parkway

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

Interval Start	WB		Interval Start	WB	
14:00	297	1388	02:00	20	86
14:15	334		02:15	22	
14:30	364		02:30	22	
14:45	393		02:45	22	
15:00	375	1531	03:00	20	103
15:15	390		03:15	16	
15:30	364		03:30	27	
15:45	402		03:45	40	
16:00	372	1596	04:00	46	287
16:15	418		04:15	55	
16:30	414		04:30	73	
16:45	392		04:45	113	
17:00	401	1645	05:00	103	639
17:15	426		05:15	132	
17:30	438		05:30	168	
17:45	380		05:45	236	
18:00	390	1496	06:00	226	1027
18:15	373		06:15	221	
18:30	370		06:30	245	
18:45	363		06:45	335	
19:00	323	1312	07:00	309	1410
19:15	315		07:15	350	
19:30	324		07:30	390	
19:45	350		07:45	361	
20:00	311	1164	08:00	405	1482
20:15	304		08:15	351	
20:30	288		08:30	364	
20:45	261		08:45	362	
21:00	288	892	09:00	314	1224
21:15	220		09:15	309	
21:30	212		09:30	262	
21:45	172		09:45	339	
22:00	177	651	10:00	271	1133
22:15	180		10:15	277	
22:30	139		10:30	270	
22:45	155		10:45	315	
23:00	112	320	11:00	272	1218
23:15	91		11:15	328	
23:30	68		11:30	308	
23:45	49		11:45	310	
3/7/2023 00:00	45	164	12:00	337	1352
00:15	52		12:15	349	
00:30	34		12:30	340	
00:45	33		12:45	326	
01:00	31	102	13:00	319	1352
01:15	22		13:15	345	
01:30	24		13:30	327	
01:45	25		13:45	361	

24 Hour Total
23574

00:00 - 12:00

12 Hour Count	8875
Peak Hour	07:30
Peak Volume	1507
Factor	0.93

12:00 - 00:00

12 Hour Count	14699
Peak Hour	16:45
Peak Volume	1657

Factor 0.95

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : E of Hardy Drive

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

EB

Interval Start			Interval Start		
14:00	88	853	02:00	16	66
14:15	216		02:15	12	
14:30	271		02:30	13	
14:45	278		02:45	25	
15:00	227	1012	03:00	16	77
15:15	267		03:15	18	
15:30	252		03:30	17	
15:45	266		03:45	26	
16:00	268	1055	04:00	27	167
16:15	250		04:15	29	
16:30	254		04:30	45	
16:45	283		04:45	66	
17:00	277	1120	05:00	70	401
17:15	299		05:15	78	
17:30	268		05:30	104	
17:45	276		05:45	149	
18:00	221	843	06:00	148	559
18:15	238		06:15	106	
18:30	189		06:30	142	
18:45	195		06:45	163	
19:00	183	718	07:00	166	871
19:15	208		07:15	220	
19:30	172		07:30	213	
19:45	155		07:45	272	
20:00	154	573	08:00	212	741
20:15	154		08:15	176	
20:30	143		08:30	171	
20:45	122		08:45	182	
21:00	106	385	09:00	166	642
21:15	80		09:15	165	
21:30	89		09:30	146	
21:45	110		09:45	165	
22:00	99	354	10:00	144	629
22:15	96		10:15	172	
22:30	95		10:30	148	
22:45	64		10:45	165	
23:00	69	215	11:00	158	744
23:15	59		11:15	181	
23:30	46		11:30	205	
23:45	41		11:45	200	
3/8/2023 00:00	44	126	12:00	181	785
00:15	36		12:15	173	
00:30	21		12:30	220	
00:45	25		12:45	211	
01:00	19	72	13:00	197	802
01:15	18		13:15	205	
01:30	15		13:30	210	
01:45	20		13:45	190	

24 Hour Total
13810

00:00 - 12:00

12 Hour Count	5095
Peak Hour	07:15
Peak Volume	917
Factor	0.84

12:00 - 00:00

12 Hour Count	8715
Peak Hour	16:45
Peak Volume	1127

Factor 0.94

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : Eof Hardy Drive

Site: TC23029
3/21/2023
Tuesday

24 Hour Volume, per Channel

Interval Start		WB		Interval Start		
3/21/2023	00:00	51	150	12:00	232	899
	00:15	37		12:15	206	
	00:30	33		12:30	232	
	00:45	29		12:45	229	
	01:00	26	103	13:00	241	943
	01:15	31		13:15	232	
	01:30	19		13:30	230	
	01:45	27		13:45	240	
	02:00	9	61	14:00	235	959
	02:15	16		14:15	221	
	02:30	15		14:30	258	
	02:45	21		14:45	245	
	03:00	14	82	15:00	264	1060
	03:15	20		15:15	263	
	03:30	29		15:30	264	
	03:45	19		15:45	269	
	04:00	20	138	16:00	252	1021
	04:15	33		16:15	264	
	04:30	45		16:30	252	
	04:45	40		16:45	253	
	05:00	60	335	17:00	247	994
	05:15	74		17:15	237	
	05:30	89		17:30	246	
	05:45	112		17:45	264	
	06:00	102	607	18:00	236	890
	06:15	149		18:15	224	
	06:30	158		18:30	230	
	06:45	198		18:45	200	
	07:00	209	1075	19:00	175	768
	07:15	242		19:15	210	
	07:30	292		19:30	195	
	07:45	332		19:45	188	
	08:00	300	975	20:00	166	633
	08:15	250		20:15	169	
	08:30	212		20:30	152	
	08:45	213		20:45	146	
	09:00	200	771	21:00	159	535
	09:15	208		21:15	125	
	09:30	174		21:30	136	
	09:45	189		21:45	115	
	10:00	187	786	22:00	130	359
	10:15	216		22:15	76	
	10:30	182		22:30	82	
	10:45	201		22:45	71	
	11:00	189	825	23:00	89	229
	11:15	210		23:15	48	
	11:30	221		23:30	49	
	11:45	205		23:45	43	

24 Hour Total
15198

00:00 - 12:00

12 Hour Count	5908
Peak Hour	07:30
Peak Volume	1174
Factor	0.88

12:00 - 00:00

12 Hour Count	9290
Peak Hour	15:00
Peak Volume	1060

Factor 0.99

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : E of I-10 NB Ramps

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

Interval Start			WB Interval Start		
14:00	264	1089	02:00	35	116
14:15	255		02:15	26	
14:30	285		02:30	30	
14:45	285		02:45	25	
15:00	271	1145	03:00	24	141
15:15	314		03:15	25	
15:30	268		03:30	55	
15:45	292		03:45	37	
16:00	292	1173	04:00	47	266
16:15	266		04:15	60	
16:30	293		04:30	80	
16:45	322		04:45	79	
17:00	298	1124	05:00	93	511
17:15	281		05:15	107	
17:30	280		05:30	159	
17:45	265		05:45	152	
18:00	248	968	06:00	142	794
18:15	238		06:15	168	
18:30	261		06:30	225	
18:45	221		06:45	259	
19:00	242	955	07:00	246	1047
19:15	218		07:15	228	
19:30	261		07:30	283	
19:45	234		07:45	290	
20:00	237	884	08:00	275	1002
20:15	249		08:15	249	
20:30	205		08:30	241	
20:45	193		08:45	237	
21:00	171	542	09:00	203	827
21:15	128		09:15	219	
21:30	134		09:30	199	
21:45	109		09:45	206	
22:00	148	456	10:00	187	819
22:15	109		10:15	197	
22:30	113		10:30	217	
22:45	86		10:45	218	
23:00	102	306	11:00	225	905
23:15	87		11:15	225	
23:30	57		11:30	227	
23:45	60		11:45	228	
3/7/2023 00:00	41	162	12:00	224	937
00:15	42		12:15	227	
00:30	44		12:30	250	
00:45	35		12:45	236	
01:00	37	118	13:00	279	1100
01:15	25		13:15	267	
01:30	25		13:30	276	
01:45	31		13:45	278	

24 Hour Total
17387

00:00 - 12:00

12 Hour Count	6708
Peak Hour	07:30
Peak Volume	1097
Factor	0.95

12:00 - 00:00

12 Hour Count	10679
Peak Hour	16:30
Peak Volume	1194

Factor 0.93

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : W of 48th Street

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

EB

Interval Start			Interval Start		
10:00	239	1063	22:00	95	304
10:15	279		22:15	73	
10:30	278		22:30	69	
10:45	267		22:45	67	
11:00	301	1168	23:00	52	174
11:15	289		23:15	42	
11:30	264		23:30	41	
11:45	314		23:45	39	
12:00	298	1252	3/7/2023 00:00	31	108
12:15	321		00:15	29	
12:30	280		00:30	24	
12:45	353		00:45	24	
13:00	301	1265	01:00	16	71
13:15	342		01:15	16	
13:30	298		01:30	19	
13:45	324		01:45	20	
14:00	334	1363	02:00	13	59
14:15	307		02:15	13	
14:30	358		02:30	15	
14:45	364		02:45	18	
15:00	341	1472	03:00	20	106
15:15	355		03:15	17	
15:30	408		03:30	35	
15:45	368		03:45	34	
16:00	361	1395	04:00	41	306
16:15	351		04:15	68	
16:30	366		04:30	71	
16:45	317		04:45	126	
17:00	380	1407	05:00	132	679
17:15	341		05:15	125	
17:30	355		05:30	190	
17:45	331		05:45	232	
18:00	336	1204	06:00	236	1012
18:15	283		06:15	241	
18:30	306		06:30	240	
18:45	279		06:45	295	
19:00	263	882	07:00	303	1075
19:15	230		07:15	320	
19:30	200		07:30	321	
19:45	189		07:45	131	
20:00	159	596	08:00	114	835
20:15	153		08:15	173	
20:30	145		08:30	305	
20:45	139		08:45	243	
21:00	146	462	09:00	207	1007
21:15	117		09:15	229	
21:30	114		09:30	278	
21:45	85		09:45	293	

24 Hour Total
19265

00:00 - 12:00

12 Hour Count	7489
Peak Hour	06:45
Peak Volume	1239
Factor	0.96

12:00 - 00:00

12 Hour Count	11776
Peak Hour	15:15
Peak Volume	1492

Factor 0.91

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : W of 48th Street

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

WB

Interval Start			Interval Start		
10:00	151	827	22:00	208	715
10:15	238		22:15	180	
10:30	219		22:30	167	
10:45	219		22:45	160	
11:00	231	1007	23:00	137	524
11:15	254		23:15	159	
11:30	261		23:30	123	
11:45	261		23:45	105	
12:00	255	1177	3/7/2023 00:00	68	225
12:15	287		00:15	50	
12:30	306		00:30	50	
12:45	329		00:45	57	
13:00	272	1190	01:00	44	143
13:15	300		01:15	41	
13:30	310		01:30	31	
13:45	308		01:45	27	
14:00	312	1325	02:00	22	95
14:15	340		02:15	21	
14:30	329		02:30	26	
14:45	344		02:45	26	
15:00	376	1586	03:00	28	91
15:15	409		03:15	25	
15:30	376		03:30	25	
15:45	425		03:45	13	
16:00	426	1771	04:00	18	143
16:15	431		04:15	36	
16:30	449		04:30	41	
16:45	465		04:45	48	
17:00	415	1731	05:00	75	372
17:15	429		05:15	95	
17:30	450		05:30	92	
17:45	437		05:45	110	
18:00	455	1726	06:00	150	713
18:15	432		06:15	174	
18:30	433		06:30	181	
18:45	406		06:45	208	
19:00	386	1440	07:00	238	1164
19:15	373		07:15	299	
19:30	342		07:30	287	
19:45	339		07:45	340	
20:00	343	1303	08:00	339	1531
20:15	337		08:15	397	
20:30	302		08:30	415	
20:45	321		08:45	380	
21:00	282	1041	09:00	353	1301
21:15	265		09:15	363	
21:30	269		09:30	295	
21:45	225		09:45	290	

24 Hour Total
23141

00:00 - 12:00

12 Hour Count	7612
Peak Hour	08:15
Peak Volume	1545
Factor	0.93

12:00 - 00:00

12 Hour Count	15529
Peak Hour	17:30
Peak Volume	1774

Factor 0.97

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : W of Hardy Drive

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

EB

Interval Start			Interval Start		
15:00	219	915	03:00	18	84
15:15	262		03:15	18	
15:30	221		03:30	19	
15:45	213		03:45	29	
16:00	230	938	04:00	31	193
16:15	210		04:15	34	
16:30	254		04:30	49	
16:45	244		04:45	79	
17:00	240	983	05:00	82	413
17:15	234		05:15	85	
17:30	264		05:30	102	
17:45	245		05:45	144	
18:00	211	841	06:00	141	549
18:15	230		06:15	100	
18:30	201		06:30	137	
18:45	199		06:45	171	
19:00	184	744	07:00	151	799
19:15	220		07:15	191	
19:30	177		07:30	211	
19:45	163		07:45	246	
20:00	158	557	08:00	193	686
20:15	154		08:15	162	
20:30	133		08:30	170	
20:45	112		08:45	161	
21:00	102	420	09:00	157	597
21:15	90		09:15	145	
21:30	103		09:30	143	
21:45	125		09:45	152	
22:00	99	344	10:00	130	533
22:15	93		10:15	164	
22:30	83		10:30	113	
22:45	69		10:45	126	
23:00	66	219	11:00	129	612
23:15	55		11:15	161	
23:30	45		11:30	177	
23:45	53		11:45	145	
3/8/2023 00:00	30	127	12:00	164	683
00:15	36		12:15	159	
00:30	27		12:30	166	
00:45	34		12:45	194	
01:00	14	71	13:00	171	739
01:15	21		13:15	178	
01:30	17		13:30	189	
01:45	19		13:45	201	
02:00	16	67	14:00	220	883
02:15	9		14:15	189	
02:30	15		14:30	234	
02:45	27		14:45	240	

24 Hour Total
12997

00:00 - 12:00

12 Hour Count	4731
Peak Hour	07:15
Peak Volume	841
Factor	0.85

12:00 - 00:00

12 Hour Count	8266
Peak Hour	17:00
Peak Volume	983

Factor 0.93

United Civil Group

2803 N. 7th Avenue

Street : Baseline Road
Location : W of Hardy Drive

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

Interval Start			WB Interval Start		
15:00	123	848	03:00	14	80
15:15	212		03:15	20	
15:30	261		03:30	18	
15:45	252		03:45	28	
16:00	241	988	04:00	14	125
16:15	234		04:15	28	
16:30	257		04:30	39	
16:45	256		04:45	44	
17:00	244	981	05:00	44	229
17:15	243		05:15	55	
17:30	246		05:30	67	
17:45	248		05:45	63	
18:00	228	871	06:00	97	478
18:15	223		06:15	92	
18:30	191		06:30	141	
18:45	229		06:45	148	
19:00	193	794	07:00	202	868
19:15	215		07:15	170	
19:30	190		07:30	223	
19:45	196		07:45	273	
20:00	203	688	08:00	321	1151
20:15	188		08:15	314	
20:30	142		08:30	283	
20:45	155		08:45	233	
21:00	134	491	09:00	226	878
21:15	120		09:15	226	
21:30	135		09:30	232	
21:45	102		09:45	194	
22:00	115	428	10:00	178	724
22:15	103		10:15	169	
22:30	113		10:30	199	
22:45	97		10:45	178	
23:00	66	268	11:00	202	775
23:15	75		11:15	170	
23:30	87		11:30	196	
23:45	40		11:45	207	
3/8/2023 00:00	42	147	12:00	178	724
00:15	28		12:15	188	
00:30	36		12:30	183	
00:45	41		12:45	175	
01:00	33	106	13:00	208	857
01:15	30		13:15	200	
01:30	25		13:30	232	
01:45	18		13:45	217	
02:00	25	80	14:00	236	981
02:15	20		14:15	224	
02:30	13		14:30	266	
02:45	22		14:45	255	

24 Hour Total
14560

00:00 - 12:00

12 Hour Count	5641
Peak Hour	07:45
Peak Volume	1191
Factor	0.93

12:00 - 00:00

12 Hour Count	8919
Peak Hour	16:30
Peak Volume	1000

Factor 0.97

United Civil Group

2803 N. 7th Avenue

Street : Calle los Cerros
Location : N of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume

Interval Start	NB		SB		Combined	
12:00	26	72	17	34	43	106
12:15	15		2		17	
12:30	13		11		24	
12:45	18		4		22	
13:00	13	66	6	41	19	107
13:15	18		12		30	
13:30	14		12		26	
13:45	21		11		32	
14:00	14	68	5	44	19	112
14:15	16		3		19	
14:30	19		19		38	
14:45	19		17		36	
15:00	25	105	20	89	45	194
15:15	30		19		49	
15:30	16		27		43	
15:45	34		23		57	
16:00	29	119	30	99	59	218
16:15	32		21		53	
16:30	26		26		52	
16:45	32		22		54	
17:00	34	113	18	75	52	188
17:15	22		17		39	
17:30	33		14		47	
17:45	24		26		50	
18:00	24	94	18	77	42	171
18:15	24		18		42	
18:30	19		24		43	
18:45	27		17		44	
19:00	24	74	13	49	37	123
19:15	17		14		31	
19:30	19		17		36	
19:45	14		5		19	
20:00	27	71	8	40	35	111
20:15	14		8		22	
20:30	14		15		29	
20:45	16		9		25	
21:00	15	43	6	27	21	70
21:15	14		6		20	
21:30	10		8		18	
21:45	4		7		11	
22:00	9	32	2	16	11	48
22:15	10		7		17	
22:30	6		5		11	
22:45	7		2		9	
23:00	2	15	3	9	5	24
23:15	6		1		7	
23:30	0		1		1	
23:45	7		4		11	

Interval Start	NB		SB		Combined	
3/7/2023 00:00	7	14	4	15	11	29
00:15	2		2		4	
00:30	3		6		9	
00:45	2		3		5	
01:00	1	5	3	5	4	10
01:15	2		1		3	
01:30	1		1		2	
01:45	1		0		1	
02:00	3	7	2	2	5	9
02:15	1		0		1	
02:30	3		0		3	
02:45	0		0		0	
03:00	2	5	1	4	3	9
03:15	1		1		2	
03:30	0		1		1	
03:45	2		1		3	
04:00	0	2	1	15	1	17
04:15	1		4		5	
04:30	1		5		6	
04:45	0		5		5	
05:00	2	13	7	32	9	45
05:15	2		5		7	
05:30	5		10		15	
05:45	4		10		14	
06:00	4	17	12	58	16	75
06:15	1		13		14	
06:30	5		16		21	
06:45	7		17		24	
07:00	11	44	23	101	34	145
07:15	5		22		27	
07:30	18		18		36	
07:45	10		38		48	
08:00	8	53	24	68	32	121
08:15	16		13		29	
08:30	16		12		28	
08:45	13		19		32	
09:00	8	34	15	72	23	106
09:15	7		18		25	
09:30	10		17		27	
09:45	9		22		31	
10:00	10	43	18	60	28	103
10:15	13		13		26	
10:30	8		16		24	
10:45	12		13		25	
11:00	18	58	16	52	34	110
11:15	14		9		23	
11:30	10		17		27	
11:45	16		10		26	

Volume Totals

	NB	SB	Combined
00:00 - 12:00			
	295	484	779
	(37.9%)	(62.1%)	
12:00 - 00:00			
	872	600	1472
	(59.2%)	(40.8%)	
24 Hours			
	1167	1084	2251
	(51.8%)	(48.2%)	

Peak Hours

00:00 - 12:00

	NB	SB	Combined
Started			
	11:00	07:15	07:00
Volume			
	58	102	145
Factor			
	0.81	0.67	0.76

12:00 - 00:00

	NB	SB	Combined
Started			
	16:15	15:30	15:45
Volume			
	124	101	221
Factor			
	0.91	0.84	0.94

United Civil Group

2803 N. 7th Avenue

Street : Hardy Drive
Location : N of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume

Interval Start	NB		SB		Combined	
13:00	79	330	82	329	161	659
13:15	87		90		177	
13:30	85		69		154	
13:45	79		88		167	
14:00	61	303	67	383	128	686
14:15	70		89		159	
14:30	97		122		219	
14:45	75		105		180	
15:00	77	331	109	486	186	817
15:15	93		115		208	
15:30	82		127		209	
15:45	79		135		214	
16:00	85	333	115	487	200	820
16:15	93		116		209	
16:30	66		116		182	
16:45	89		140		229	
17:00	81	355	144	586	225	941
17:15	97		146		243	
17:30	88		142		230	
17:45	89		154		243	
18:00	71	295	102	350	173	645
18:15	80		92		172	
18:30	53		82		135	
18:45	91		74		165	
19:00	73	276	65	270	138	546
19:15	67		67		134	
19:30	81		69		150	
19:45	55		69		124	
20:00	52	197	52	204	104	401
20:15	57		58		115	
20:30	48		50		98	
20:45	40		44		84	
21:00	43	159	43	154	86	313
21:15	39		36		75	
21:30	36		28		64	
21:45	41		47		88	
22:00	32	101	31	150	63	251
22:15	37		45		82	
22:30	18		49		67	
22:45	14		25		39	
23:00	15	56	31	79	46	135
23:15	18		19		37	
23:30	9		11		20	
23:45	14		18		32	
3/8/2023 00:00	10	36	9	44	19	80
00:15	11		12		23	
00:30	9		15		24	
00:45	6		8		14	

Interval Start	NB		SB		Combined	
01:00	6	24	5	32	11	56
01:15	6		12		18	
01:30	8		6		14	
01:45	4		9		13	
02:00	6	15	5	20	11	35
02:15	4		7		11	
02:30	2		5		7	
02:45	3		3		6	
03:00	7	19	5	24	12	43
03:15	2		10		12	
03:30	5		5		10	
03:45	5		4		9	
04:00	6	56	7	31	13	87
04:15	4		7		11	
04:30	18		12		30	
04:45	28		5		33	
05:00	26	162	9	77	35	239
05:15	35		14		49	
05:30	39		23		62	
05:45	62		31		93	
06:00	54	212	35	159	89	371
06:15	38		35		73	
06:30	48		37		85	
06:45	72		52		124	
07:00	82	443	61	309	143	752
07:15	93		72		165	
07:30	112		87		199	
07:45	156		89		245	
08:00	149	435	64	276	213	711
08:15	110		69		179	
08:30	103		79		182	
08:45	73		64		137	
09:00	68	268	73	274	141	542
09:15	68		69		137	
09:30	66		72		138	
09:45	66		60		126	
10:00	52	215	58	266	110	481
10:15	52		61		113	
10:30	55		75		130	
10:45	56		72		128	
11:00	61	286	58	269	119	555
11:15	76		72		148	
11:30	70		78		148	
11:45	79		61		140	
12:00	80	311	86	326	166	637
12:15	73		75		148	
12:30	79		77		156	
12:45	79		88		167	

Volume Totals

	NB	SB	Combined
00:00 - 12:00	2171	1781	3952
	(54.9%)	(45.1%)	
12:00 - 00:00	3047	3804	6851
	(44.5%)	(55.5%)	
24 Hours	5218	5585	10803
	(48.3%)	(51.7%)	

Peak Hours

00:00 - 12:00

	NB	SB	Combined
Started	07:30	07:15	07:30
Volume	527	312	836
Factor	0.84	0.88	0.85

12:00 - 00:00

	NB	SB	Combined
Started	16:45	17:00	17:00
Volume	355	586	941
Factor	0.91	0.95	0.97

United Civil Group

2803 N. 7th Avenue

Street : Hardy Drive
Location : S of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume

Interval Start	SB		NB		Combined	
12:00	0	212	0	178	0	390
12:15	73		56		129	
12:30	65		61		126	
12:45	74		61		135	
13:00	67	340	49	234	116	574
13:15	86		61		147	
13:30	104		61		165	
13:45	83		63		146	
14:00	96	443	64	308	160	751
14:15	100		89		189	
14:30	129		65		194	
14:45	118		90		208	
15:00	120	513	79	275	199	788
15:15	131		61		192	
15:30	133		71		204	
15:45	129		64		193	
16:00	147	544	70	265	217	809
16:15	130		70		200	
16:30	138		63		201	
16:45	129		62		191	
17:00	83	354	68	248	151	602
17:15	104		61		165	
17:30	99		65		164	
17:45	68		54		122	
18:00	66	273	54	196	120	469
18:15	64		53		117	
18:30	79		43		122	
18:45	64		46		110	
19:00	65	233	41	127	106	360
19:15	48		34		82	
19:30	49		29		78	
19:45	71		23		94	
20:00	39	175	24	98	63	273
20:15	42		26		68	
20:30	50		18		68	
20:45	44		30		74	
21:00	34	100	17	43	51	143
21:15	27		8		35	
21:30	17		11		28	
21:45	22		7		29	
22:00	29	78	13	39	42	117
22:15	23		13		36	
22:30	12		5		17	
22:45	14		8		22	
23:00	12	40	12	25	24	65
23:15	13		7		20	
23:30	8		2		10	
23:45	7		4		11	

Interval Start	SB		NB		Combined	
3/8/2023 00:00	7	26	3	13	10	39
00:15	4		5		9	
00:30	9		3		12	
00:45	6		2		8	
01:00	6	19	5	16	11	35
01:15	6		2		8	
01:30	0		4		4	
01:45	7		5		12	
02:00	4	15	6	29	10	44
02:15	4		4		8	
02:30	3		12		15	
02:45	4		7		11	
03:00	3	30	7	56	10	86
03:15	6		7		13	
03:30	11		20		31	
03:45	10		22		32	
04:00	10	51	28	139	38	190
04:15	14		23		37	
04:30	11		42		53	
04:45	16		46		62	
05:00	25	123	42	232	67	355
05:15	25		50		75	
05:30	29		77		106	
05:45	44		63		107	
06:00	54	285	85	455	139	740
06:15	67		111		178	
06:30	93		140		233	
06:45	71		119		190	
07:00	50	221	84	291	134	512
07:15	62		63		125	
07:30	62		84		146	
07:45	47		60		107	
08:00	46	184	49	222	95	406
08:15	37		60		97	
08:30	58		52		110	
08:45	43		61		104	
09:00	45	168	55	205	100	373
09:15	55		43		98	
09:30	33		55		88	
09:45	35		52		87	
10:00	45	233	39	197	84	430
10:15	68		54		122	
10:30	59		65		124	
10:45	61		39		100	
11:00	74	359	49	255	123	614
11:15	68		61		129	
11:30	92		91		183	
11:45	125		54		179	

Volume Totals

	SB	NB	Combined
00:00 - 12:00	1714	2110	3824
	(44.8%)	(55.2%)	
12:00 - 00:00	3305	2036	5341
	(61.9%)	(38.1%)	
24 Hours	5019	4146	9165
	(54.8%)	(45.2%)	

Peak Hours

00:00 - 12:00

	SB	NB	Combined
Started	11:00	06:00	06:00
Volume	359	455	740
Factor	0.72	0.81	0.79

12:00 - 00:00

	SB	NB	Combined
Started	15:45	14:15	15:30
Volume	544	323	814
Factor	0.93	0.90	0.94

United Civil Group

2803 N. 7th Avenue

Street : I-10 NB Off-Ramp
Location : S of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

Interval Start			NB Interval Start		
12:00	257	1052	3/7/2023 00:00	0	0
12:15	250		00:15	0	
12:30	259		00:30	0	
12:45	286		00:45	0	
13:00	230	962	01:00	0	0
13:15	230		01:15	0	
13:30	218		01:30	0	
13:45	284		01:45	0	
14:00	262	1101	02:00	0	0
14:15	261		02:15	0	
14:30	278		02:30	0	
14:45	300		02:45	0	
15:00	302	942	03:00	0	9
15:15	250		03:15	0	
15:30	221		03:30	3	
15:45	169		03:45	6	
16:00	193	927	04:00	20	193
16:15	213		04:15	36	
16:30	267		04:30	50	
16:45	254		04:45	87	
17:00	223	920	05:00	67	493
17:15	258		05:15	97	
17:30	207		05:30	135	
17:45	232		05:45	194	
18:00	236	998	06:00	143	774
18:15	271		06:15	160	
18:30	240		06:30	199	
18:45	251		06:45	272	
19:00	227	881	07:00	229	1032
19:15	219		07:15	249	
19:30	207		07:30	273	
19:45	228		07:45	281	
20:00	197	727	08:00	283	1041
20:15	191		08:15	272	
20:30	184		08:30	243	
20:45	155		08:45	243	
21:00	173	521	09:00	219	831
21:15	121		09:15	212	
21:30	115		09:30	205	
21:45	112		09:45	195	
22:00	92	344	10:00	197	810
22:15	80		10:15	181	
22:30	91		10:30	206	
22:45	81		10:45	226	
23:00	59	110	11:00	207	856
23:15	47		11:15	208	
23:30	4		11:30	221	
23:45	0		11:45	220	

24 Hour Total
15524

00:00 - 12:00

12 Hour Count	6039
Peak Hour	07:30
Peak Volume	1109
Factor	0.98

12:00 - 00:00

12 Hour Count	9485
Peak Hour	14:15
Peak Volume	1141
Factor	0.94

United Civil Group

2803 N. 7th Avenue

Street : I-10 NB On-Ramp
Location : S of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume, per Channel

NB

Interval Start			Interval Start		
12:00	64	670	3/7/2023 00:00	32	123
12:15	219		00:15	32	
12:30	186		00:30	34	
12:45	201		00:45	25	
13:00	189	791	01:00	19	76
13:15	200		01:15	17	
13:30	184		01:30	22	
13:45	218		01:45	18	
14:00	216	852	02:00	23	90
14:15	228		02:15	22	
14:30	196		02:30	24	
14:45	212		02:45	21	
15:00	194	826	03:00	21	137
15:15	230		03:15	28	
15:30	205		03:30	40	
15:45	197		03:45	48	
16:00	190	824	04:00	44	268
16:15	210		04:15	59	
16:30	206		04:30	71	
16:45	218		04:45	94	
17:00	191	819	05:00	84	514
17:15	213		05:15	88	
17:30	215		05:30	166	
17:45	200		05:45	176	
18:00	165	709	06:00	148	740
18:15	168		06:15	176	
18:30	183		06:30	191	
18:45	193		06:45	225	
19:00	175	683	07:00	207	853
19:15	173		07:15	225	
19:30	178		07:30	212	
19:45	157		07:45	209	
20:00	190	632	08:00	180	759
20:15	158		08:15	195	
20:30	162		08:30	201	
20:45	122		08:45	183	
21:00	122	432	09:00	177	722
21:15	107		09:15	178	
21:30	112		09:30	181	
21:45	91		09:45	186	
22:00	100	302	10:00	183	741
22:15	72		10:15	197	
22:30	70		10:30	174	
22:45	60		10:45	187	
23:00	64	227	11:00	171	721
23:15	76		11:15	198	
23:30	45		11:30	178	
23:45	42		11:45	174	

24 Hour Total
13511

00:00 - 12:00

12 Hour Count	5744
Peak Hour	06:45
Peak Volume	869
Factor	0.97

12:00 - 00:00

12 Hour Count	7767
Peak Hour	13:45
Peak Volume	858

Factor 0.94

United Civil Group

2803 N. 7th Avenue

Street : I-10 SB Off-Ramp
Location : N of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

SB

Interval Start			Interval Start		
14:00	197	920	02:00	23	101
14:15	237		02:15	22	
14:30	253		02:30	32	
14:45	233		02:45	24	
15:00	226	969	03:00	15	102
15:15	247		03:15	23	
15:30	258		03:30	32	
15:45	238		03:45	32	
16:00	233	921	04:00	39	266
16:15	233		04:15	51	
16:30	228		04:30	84	
16:45	227		04:45	92	
17:00	226	929	05:00	54	455
17:15	240		05:15	104	
17:30	250		05:30	139	
17:45	213		05:45	158	
18:00	233	894	06:00	145	777
18:15	247		06:15	188	
18:30	224		06:30	188	
18:45	190		06:45	256	
19:00	207	724	07:00	182	821
19:15	191		07:15	204	
19:30	159		07:30	219	
19:45	167		07:45	216	
20:00	182	625	08:00	231	824
20:15	164		08:15	212	
20:30	136		08:30	170	
20:45	143		08:45	211	
21:00	144	512	09:00	218	773
21:15	127		09:15	185	
21:30	128		09:30	206	
21:45	113		09:45	164	
22:00	109	404	10:00	200	772
22:15	111		10:15	199	
22:30	93		10:30	175	
22:45	91		10:45	198	
23:00	86	254	11:00	195	812
23:15	64		11:15	204	
23:30	52		11:30	197	
23:45	52		11:45	216	
3/8/2023 00:00	54	142	12:00	203	827
00:15	33		12:15	218	
00:30	32		12:30	212	
00:45	23		12:45	194	
01:00	24	84	13:00	176	881
01:15	22		13:15	237	
01:30	18		13:30	250	
01:45	20		13:45	218	

24 Hour Total
14789

00:00 - 12:00

12 Hour Count	5929
Peak Hour	07:30
Peak Volume	878
Factor	0.95

12:00 - 00:00

12 Hour Count	8860
Peak Hour	15:15
Peak Volume	976

Factor 0.95

United Civil Group

2803 N. 7th Avenue

Street : I-10 SB On-Ramp
Location : S of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

SB

Interval Start			Interval Start		
13:00	130	890	01:00	12	67
13:15	247		01:15	15	
13:30	242		01:30	22	
13:45	271		01:45	18	
14:00	247	1149	02:00	13	51
14:15	281		02:15	7	
14:30	317		02:30	20	
14:45	304		02:45	11	
15:00	300	1294	03:00	28	153
15:15	307		03:15	33	
15:30	325		03:30	40	
15:45	362		03:45	52	
16:00	317	1329	04:00	79	432
16:15	337		04:15	101	
16:30	366		04:30	129	
16:45	309		04:45	123	
17:00	390	1369	05:00	127	732
17:15	367		05:15	169	
17:30	325		05:30	231	
17:45	287		05:45	205	
18:00	327	1047	06:00	181	887
18:15	222		06:15	218	
18:30	267		06:30	240	
18:45	231		06:45	248	
19:00	221	757	07:00	248	1117
19:15	187		07:15	270	
19:30	185		07:30	314	
19:45	164		07:45	285	
20:00	178	525	08:00	213	763
20:15	124		08:15	172	
20:30	118		08:30	199	
20:45	105		08:45	179	
21:00	93	375	09:00	161	604
21:15	107		09:15	157	
21:30	101		09:30	156	
21:45	74		09:45	130	
22:00	92	267	10:00	181	690
22:15	67		10:15	178	
22:30	61		10:30	175	
22:45	47		10:45	156	
23:00	65	188	11:00	145	672
23:15	53		11:15	167	
23:30	36		11:30	175	
23:45	34		11:45	185	
3/8/2023 00:00	32	120	12:00	178	720
00:15	40		12:15	199	
00:30	26		12:30	163	
00:45	22		12:45	180	

24 Hour Total
16198

00:00 - 12:00

12 Hour Count	6288
Peak Hour	07:00
Peak Volume	1117
Factor	0.89

12:00 - 00:00

12 Hour Count	9910
Peak Hour	16:30
Peak Volume	1432
Factor	0.92

United Civil Group

2803 N. 7th Avenue

Street : Priest Drive
Location : N of Baseline Road

Site: TC23029
3/21/2023
Tuesday

24 Hour Volume, per Channel

NB

Interval Start				Interval Start		
3/21/2023	00:00	17	52	12:00	85	377
	00:15	13		12:15	110	
	00:30	14		12:30	100	
	00:45	8		12:45	82	
	01:00	9	36	13:00	73	353
	01:15	11		13:15	88	
	01:30	8		13:30	91	
	01:45	8		13:45	101	
	02:00	1	32	14:00	96	408
	02:15	7		14:15	96	
	02:30	15		14:30	116	
	02:45	9		14:45	100	
	03:00	12	45	15:00	124	465
	03:15	11		15:15	119	
	03:30	14		15:30	126	
	03:45	8		15:45	96	
	04:00	11	80	16:00	124	485
	04:15	22		16:15	132	
	04:30	19		16:30	121	
	04:45	28		16:45	108	
	05:00	40	223	17:00	138	485
	05:15	46		17:15	136	
	05:30	58		17:30	99	
	05:45	79		17:45	112	
	06:00	91	333	18:00	109	349
	06:15	64		18:15	80	
	06:30	79		18:30	82	
	06:45	99		18:45	78	
	07:00	102	510	19:00	79	261
	07:15	120		19:15	65	
	07:30	136		19:30	52	
	07:45	152		19:45	65	
	08:00	124	442	20:00	52	236
	08:15	127		20:15	72	
	08:30	101		20:30	60	
	08:45	90		20:45	52	
	09:00	72	334	21:00	50	195
	09:15	91		21:15	54	
	09:30	89		21:30	46	
	09:45	82		21:45	45	
	10:00	81	317	22:00	29	140
	10:15	68		22:15	41	
	10:30	81		22:30	38	
	10:45	87		22:45	32	
	11:00	75	356	23:00	34	118
	11:15	81		23:15	20	
	11:30	95		23:30	28	
	11:45	105		23:45	36	

24 Hour Total
6632

00:00 - 12:00

12 Hour Count	2760
Peak Hour	07:30
Peak Volume	539
Factor	0.89

12:00 - 00:00

12 Hour Count	3872
Peak Hour	16:30
Peak Volume	503

Factor 0.91

United Civil Group

2803 N. 7th Avenue

Street : Priest Drive
Location : N of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

Interval Start	SB		Interval Start	SB	
16:00	180	704	04:00	13	99
16:15	156		04:15	20	
16:30	192		04:30	29	
16:45	176		04:45	37	
17:00	153	636	05:00	37	194
17:15	186		05:15	39	
17:30	142		05:30	50	
17:45	155		05:45	68	
18:00	118	478	06:00	54	260
18:15	130		06:15	54	
18:30	116		06:30	73	
18:45	114		06:45	79	
19:00	100	366	07:00	76	342
19:15	78		07:15	89	
19:30	103		07:30	89	
19:45	85		07:45	88	
20:00	71	285	08:00	75	362
20:15	73		08:15	103	
20:30	79		08:30	100	
20:45	62		08:45	84	
21:00	48	222	09:00	93	357
21:15	65		09:15	80	
21:30	49		09:30	90	
21:45	60		09:45	94	
22:00	60	233	10:00	98	403
22:15	61		10:15	104	
22:30	58		10:30	105	
22:45	54		10:45	96	
23:00	49	160	11:00	99	473
23:15	36		11:15	107	
23:30	34		11:30	130	
23:45	41		11:45	137	
3/8/2023 00:00	21	68	12:00	131	528
00:15	18		12:15	141	
00:30	11		12:30	138	
00:45	18		12:45	118	
01:00	9	39	13:00	125	515
01:15	11		13:15	133	
01:30	14		13:30	131	
01:45	5		13:45	126	
02:00	9	45	14:00	118	496
02:15	14		14:15	113	
02:30	10		14:30	116	
02:45	12		14:45	149	
03:00	10	58	15:00	126	626
03:15	17		15:15	153	
03:30	13		15:30	160	
03:45	18		15:45	187	

24 Hour Total
7949

00:00 - 12:00

12 Hour Count	2700
Peak Hour	11:00
Peak Volume	473
Factor	0.86

12:00 - 00:00

12 Hour Count	5249
Peak Hour	16:30
Peak Volume	707
Factor	0.92

United Civil Group

2803 N. 7th Avenue

Street : Priest Drive
Location : S of Baseline Road

Site: TC23029
3/7/2023
Tuesday

24 Hour Volume, per Channel

SB

Interval Start			Interval Start		
16:00	107	471	04:00	14	54
16:15	114		04:15	9	
16:30	124		04:30	16	
16:45	126		04:45	15	
17:00	101	467	05:00	18	94
17:15	122		05:15	24	
17:30	129		05:30	25	
17:45	115		05:45	27	
18:00	107	363	06:00	39	167
18:15	92		06:15	39	
18:30	83		06:30	30	
18:45	81		06:45	59	
19:00	76	269	07:00	62	317
19:15	71		07:15	85	
19:30	63		07:30	96	
19:45	59		07:45	74	
20:00	57	210	08:00	84	276
20:15	48		08:15	59	
20:30	52		08:30	68	
20:45	53		08:45	65	
21:00	36	164	09:00	66	271
21:15	45		09:15	73	
21:30	35		09:30	58	
21:45	48		09:45	74	
22:00	34	143	10:00	70	315
22:15	40		10:15	77	
22:30	39		10:30	82	
22:45	30		10:45	86	
23:00	25	82	11:00	75	337
23:15	19		11:15	79	
23:30	18		11:30	96	
23:45	20		11:45	87	
3/8/2023 00:00	7	39	12:00	79	384
00:15	14		12:15	109	
00:30	7		12:30	93	
00:45	11		12:45	103	
01:00	7	36	13:00	98	406
01:15	8		13:15	113	
01:30	13		13:30	102	
01:45	8		13:45	93	
02:00	6	22	14:00	98	419
02:15	4		14:15	102	
02:30	6		14:30	112	
02:45	6		14:45	107	
03:00	4	16	15:00	107	455
03:15	6		15:15	114	
03:30	1		15:30	115	
03:45	5		15:45	119	

24 Hour Total
5777

00:00 - 12:00

12 Hour Count	1944
Peak Hour	07:15
Peak Volume	339
Factor	0.88

12:00 - 00:00

12 Hour Count	3833
Peak Hour	16:45
Peak Volume	478

Factor 0.93

United Civil Group

2803 N. 7th Avenue

Street : Wendler Drive
Location : N of Baseline Road

Site: TC23029
3/6/2023
Monday

24 Hour Volume

Interval Start	SB		NB		Combined	
15:00	13	45	9	29	22	74
15:15	16		7		23	
15:30	10		5		15	
15:45	6		8		14	
16:00	74	143	12	42	86	185
16:15	22		18		40	
16:30	34		5		39	
16:45	13		7		20	
17:00	55	99	11	38	66	137
17:15	18		7		25	
17:30	16		9		25	
17:45	10		11		21	
18:00	32	55	0	27	32	82
18:15	11		13		24	
18:30	8		6		14	
18:45	4		8		12	
19:00	32	60	4	29	36	89
19:15	15		10		25	
19:30	8		6		14	
19:45	5		9		14	
20:00	21	34	6	22	27	56
20:15	5		8		13	
20:30	5		5		10	
20:45	3		3		6	
21:00	5	21	5	14	10	35
21:15	5		2		7	
21:30	8		5		13	
21:45	3		2		5	
22:00	2	7	3	11	5	18
22:15	4		3		7	
22:30	1		2		3	
22:45	0		3		3	
23:00	2	10	2	10	4	20
23:15	2		2		4	
23:30	3		2		5	
23:45	3		4		7	
3/7/2023 00:00	1	7	0	7	1	14
00:15	5		2		7	
00:30	0		3		3	
00:45	1		2		3	
01:00	3	5	1	9	4	14
01:15	0		3		3	
01:30	1		4		5	
01:45	1		1		2	
02:00	0	7	1	10	1	17
02:15	1		2		3	
02:30	1		5		6	
02:45	5		2		7	

Interval Start	SB		NB		Combined	
03:00	2	7	0	7	2	14
03:15	0		0		0	
03:30	3		3		6	
03:45	2		4		6	
04:00	9	27	2	11	11	38
04:15	10		2		12	
04:30	4		2		6	
04:45	4		5		9	
05:00	4	9	2	21	6	30
05:15	1		1		2	
05:30	2		9		11	
05:45	2		9		11	
06:00	6	22	11	110	17	132
06:15	6		18		24	
06:30	5		27		32	
06:45	5		54		59	
07:00	15	42	38	150	53	192
07:15	14		39		53	
07:30	6		28		34	
07:45	7		45		52	
08:00	21	46	30	107	51	153
08:15	5		17		22	
08:30	10		20		30	
08:45	10		40		50	
09:00	10	35	19	48	29	83
09:15	8		3		11	
09:30	8		11		19	
09:45	9		15		24	
10:00	15	38	11	40	26	78
10:15	5		8		13	
10:30	9		10		19	
10:45	9		11		20	
11:00	13	66	6	28	19	94
11:15	25		9		34	
11:30	14		4		18	
11:45	14		9		23	
12:00	43	88	13	78	56	166
12:15	17		19		36	
12:30	18		23		41	
12:45	10		23		33	
13:00	22	70	19	66	41	136
13:15	17		12		29	
13:30	18		23		41	
13:45	13		12		25	
14:00	18	50	14	45	32	95
14:15	8		9		17	
14:30	10		6		16	
14:45	14		16		30	

Volume Totals

	SB	NB	Combined
00:00 - 12:00			
	311	548	859
	(36.2%)	(63.8%)	
12:00 - 00:00			
	682	411	1093
	(62.4%)	(37.6%)	
24 Hours			
	993	959	1952
	(50.9%)	(49.1%)	

Peak Hours

00:00 - 12:00

	SB	NB	Combined
Started			
	11:00	06:45	06:45
Volume			
	66	159	199
Factor			
	0.66	0.74	0.84

12:00 - 00:00

	SB	NB	Combined
Started			
	16:00	12:15	16:00
Volume			
	143	84	185
Factor			
	0.48	0.91	0.54

Appendix D – Public Meeting Summary June 2023

Interstate 10 / Baseline Road Traffic Interchange Study
ADOT Project No. F0523 01L

Public Meeting Summary Report
June 27, 2023

Prepared by Gordley Group for
Arizona Department of Transportation
Communications and Public Involvement
1655 W Jackson St., Phoenix, AZ 85007

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, the Arizona Department of Transportation (ADOT) does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons that require a reasonable accommodation based on language or disability should contact Nancy Becerra at 623.695.7411 or NGBecerra@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras normas y leyes antidiscriminatorias, el Departamento de Transporte de Arizona (ADOT) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran asistencia (dentro de lo razonable) ya sea por el idioma o discapacidad deben ponerse en contacto con Nancy Becerra al 623.695.7411 o por correo electrónico al NGBecerra@azdot.gov. Las solicitudes deben hacerse lo más antes posible para asegurar que el Estado tenga la oportunidad de hacer los arreglos necesarios.

1. INTRODUCTION

2. PUBLIC MEETING

2.1. Public Meeting Notification

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2.1.2. GovDelivery Emails

2.1.3. Print Ads and E-blast

2.1.4. News Release

2.1.5. Social Media

2.1.6. Stakeholder Outreach

2.1.7. Direct Mail

2.1.8. Earned Media

2.2. Public Meeting Materials

2.2.1. Presentation

3. PUBLIC COMMENTS

3.1. Public Comments

4. TITLE VI REPORTING

4.1. Self ID Surveys

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5. Appendices

A Public Meeting Materials

B Public Meeting Notices / Advertising

C. Public Meeting Outreach

D News Articles

E. Public Questions and Comments

1. INTRODUCTION

Baseline Road at Interstate 10 is a major arterial road serving approximately 60,000 vehicles per day and experiences heavy congestion and delays. There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development, which contribute to congestion and crashes. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including curb and driveways that do not meet current standards, intersections without marked crosswalks on all legs and lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The development and evaluation of alternatives to address these concerns were found to be necessary. A feasibility study completed in May 2020 by the Maricopa Association of Governments (MAG) identified alternatives to enhance regional travel and safety in this corridor with various improvements to the Interstate 10/Baseline Road Traffic Interchange and serves as the basis for the current study. The purpose of this study and project is to further evaluate the two design options for the interchange and select a preferred alternative for further action.

Project Map

2. PUBLIC MEETING

The Arizona Department of Transportation (ADOT) and AZTEC Engineering (AZTEC) held a virtual public scoping meeting on Wednesday, May 9, 2023, from 6 – 7:30 p.m. The purpose of the meeting was to share information about the project and the potential improvements to be considered. It also was intended to allow for public input on the scope of the study as well as gather input on concerns and desires related to the project area before the team presents potential improvement alternatives. The meeting provided options for the public to ask questions and make comments.

The public meeting was hosted online through Zoom Webinar with simultaneous interpretation in Spanish. Participants could also call into the meeting if they did not have the ability or preference to participate online. The meeting featured a presentation by the project team, followed by a question-and-answer period. Participants, who were provided information on how to ask questions and provide comments, could submit written questions in either English or Spanish through the Zoom Webinar Q&A feature and use the Raise Hand feature to be called on to ask their questions verbally. English call-in participants could also ask questions by phone by pressing *9 to raise their hand. Spanish call-in participants could ask questions via a toll-free conference line.

Project team members from ADOT, partner organizations and AZTEC Engineering served as panelists to hear comments and respond to questions at the meeting. Panelists included:

- Olivier Mirza (ADOT)
- Nancy Becerra (ADOT)
- Daina Mann (ADOT)
- Nikki Green (ADOT)
- Dennis Haley (ADOT)
- Mark Gilliland (AZTEC)
- Daniel Voight (AZTEC)
- Diana Dunn (AZTEC)
- Ravi Ambadipudi (Jacobs)
- Catherine Hollow (City of Tempe)
- Jeff Kulaga (Town of Guadalupe)
- Myesha Harris (City of Phoenix)
- Quinn Castro (MAG)

Additional project team staff and a Spanish interpreter were present to assist in facilitating the online meeting and Q&A session. Participants were notified that comments and questions about the project could also be submitted during the public comment period ending May 23, 2023, through email, telephone, USPS mail or online survey/comment form. Participants were notified that project-related materials, including the presentation, were available online.

The public meeting presentation was recorded in English and Spanish and posted to the project website. During the meeting, the Spanish interpreter let the audience know where they could find the project website and that she would be available for the Q&A portion of the meeting. The interpreter also read

the explanation of the Title VI Nondiscrimination Notice to the Public, which was included in Spanish on a separate slide, as well as how to take the self-ID survey.

Seventy-seven (77) people were recorded as attending the virtual public meeting and 215 people completed the online survey/comment form during the survey period.

Copies of the public meeting materials posted to the website are included in Appendix A.

2.1. Public Meeting Notification

2.1.1. Project Website

ADOT hosts a project website https://azdot.gov/i10baseline, which was launched on April 10, 2023. The project website provides a project overview, including a list of the project elements, a timeline, the public meeting date, recordings in English and Spanish, project fact sheets in English and Spanish and information on how to ask questions or make comments. A link to an online survey/comment form was also included through May 23. All materials related to the public meeting are posted on the project website, including:

- Project area map and information
- Fact sheet (in English and Spanish)
- Public meeting information/recordings (in English and Spanish)
- Public meeting presentation and script

Copies of the public meeting materials posted to the website are included in Appendix A.

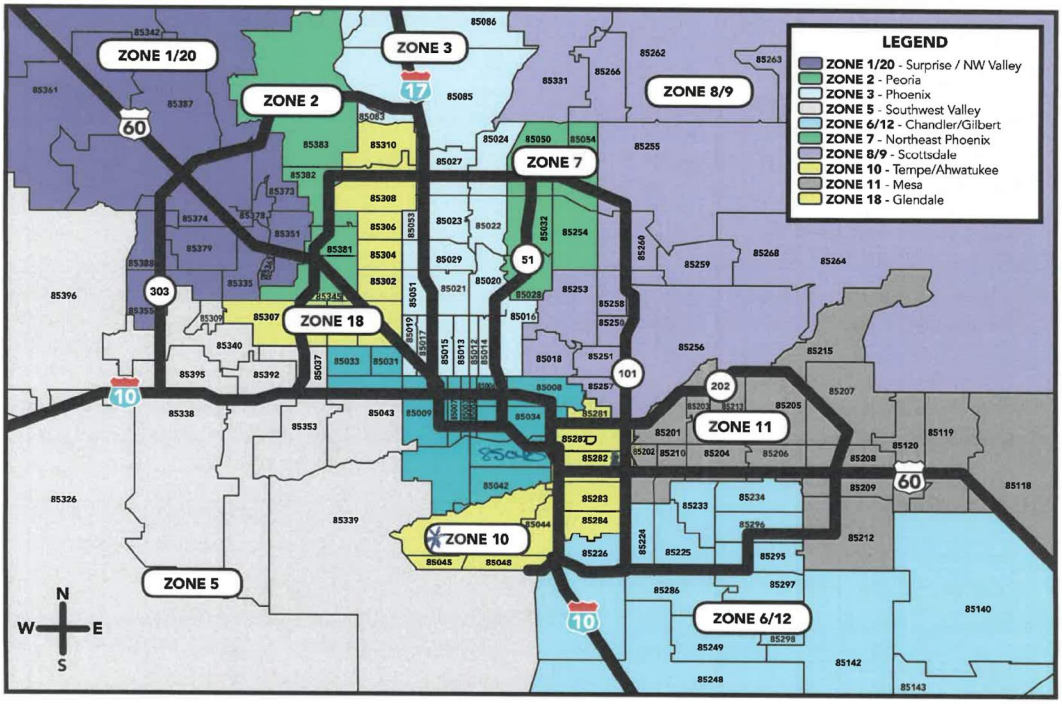
2.1.2. GovDelivery Emails

Information on how to participate in the virtual public meeting and reminder notices were distributed by ADOT on April 19, 25 and May 3, 8, 16 and 22 via GovDelivery. A total of 172,152 emails were sent out with an average of nearly 24,600 recipients per distribution.

Copies of the GovDelivery notices can be found in Appendix B.

2.1.3. Print Ads and E-blast

The virtual public meeting was advertised with English print ads in the *Tempe/Ahwatukee Republic Zone 10* (see zone map below) on April 26, 28 and 29, along with an *AZ Republic* E-blast on April 27. The E-blast went to an estimated 15,034 households within the project area but outside of Zone 10.



Additionally, the public meeting was advertised in a Spanish-language print ad in *Prensa Arizona*, published on April 27.

Copies of the publication tear sheets and e-blast can be found in Appendix B.

2.1.4. News Release/Media

ADOT Public Information staff distributed a news release to media outlets on May 3. The news release can be found in Appendix B.

News articles about the public meeting were posted online by ABC 15 and AZFamily (3TV/CBS 5) on May 9, 2023. Copies of news articles can be found in Appendix D.

2.1.5. Social Media

ADOT Digital Communications staff posted to ADOT's Facebook and Twitter accounts on April 19, 25 and May 2, 8, 12 and 22, and on Next Door on April 19, 25 and May 3, 8, 16 and 22, providing information about the public meeting and commenting opportunities.

Images of the social media posts can be found in Appendix C.

2.1.6. Stakeholder Outreach

The Study Team held meetings with project stakeholders, including representatives from the Town of Guadalupe, City of Phoenix, City of Tempe and the Maricopa Association of Governments. An in-person

site visit was held on February 24. Virtual meetings with project stakeholders to plan for the public meeting were held on February 10, March 10 and 30, and April 6, 13, 14, 20 and 27.

In addition, the ADOT Community Relations team created a contact list that included stakeholders in the project area, such as businesses, HOAs, schools and churches. The team communicated with these 114 contacts via email to provide information about the project and the public meeting. Information about the public meeting was emailed to these stakeholders on April 24, May 8 and May 16.

A copy of the emails can be found in Appendix C.

2.1.7. Direct Mail

Bilingual (English and Spanish) self-mailers were sent via Presorted Standard postage to all businesses and residential properties within one mile of the project area, as well as any property owners of record with addresses outside the area (12,938 total). The 8.5" x 4.67" tri-fold mailer included information about the project, how to participate in the virtual public meeting and how to provide comments. The mailer also included information, instructions and a QR code for requesting language accommodations and seeing the scoping public meeting mailer in Simplified Chinese (Mandarin) online.

The mailers were sent out on April 21 and began to arrive in-home on April 24.

A copy of the mailer can be found in Appendix C

2.2. Public Meeting Materials

A variety of public meeting materials were made available in English and Spanish to the public online via the project website. Materials also included accommodation language in Simplified Chinese, and the project webpages could be translated into over 100 languages (including Spanish and Simplified Chinese) using the browser's language tool. These public meeting materials included:

- Project Map and Information (English and Spanish)
- Fact sheet (English and Spanish)
- Presentation with script (English)
- Online survey/comment form (English and Spanish)
- Self-Identification survey (English and Spanish)

After the meeting, recordings of the presentation in English and Spanish were posted on the project website.

Copies of the materials listed above can be found in Appendix A.

2.2.1. Presentation

A presentation was made at the public scoping meeting to provide an overview of the study along with the alternatives that will be developed through the study process. The public was also given the opportunity to provide comments and ask questions to help guide the study team.

The presentation can be found in Appendix A and covered the following topics:

- Overview of Interstate 10/Baseline Road Traffic Interchange Study
- Study Area
- Study Purpose and Need
- Study Process
- Interchange Options:
    - Tight Diamond Interchange (TDI)
    - Diverging Diamond Interchange (DDI)
- Study Elements
- Study Timeline
- Project Website
- Comments and Questions

3. PUBLIC COMMENTS

This section summarizes the comments received during the public comment period from April 18 through May 23. Comments were accepted through the following methods: USPS mail, telephone, e-mail and online. A total of 284 comments were received through the following methods:

- Online survey/comment form responses: 215
- Project information telephone line comments: 6
- Email comments: 13
- Virtual public meeting comments: 13
- Virtual public meeting questions: 36
- Mail: 1

The most common questions received during the virtual public meeting were requests for more detailed information on the various interchange options. The project team informed the public that detailed alternatives are in development and more information will be shared at future meetings. Additionally, during the virtual public meeting and through the online survey, the public expressed the greatest concerns in the project area to be traffic congestion, signal timing and safety.

The public comments and questions are included in Appendix E.

3.1. Public Comment Topics

Comments and questions received during the public comment period and at the virtual public meeting addressed the following topics:

- Interchange options, details and alternatives = 55 questions/comments
- Traffic signals and timing = 33 questions/comments
- Traffic volume and speeds = 24 questions/comments
- Pedestrian and bike traffic and safety = 18 questions/comments
- Business access and economic impact = 17 questions/comments

- Timeline, schedule and closures = 12 questions/comments
- Broadway Curve impact = 9 questions/comments
- Freeway/ramp access = 9 questions/comments
- Turn lanes and options = 9 questions/comments
- Right of way and property impacts and questions = 8 questions/comments
- Wendler Drive options = 6 questions/comments
- Homeless and panhandling = 5 questions/comments
- Noise and sound barriers = 5 questions/comments
- Costs and funding = 4 questions/comments
- Neighborhood access and impacts = 4 questions/comments
- Road and pavement quality = 3 questions/comments
- Mass transit = 1 question/comment
-

3.1.1. Survey/Comment Form Questions

An online survey was developed to help the study team identify the public's interest in the study area, what mode(s) of transportation they use, and what concerns and/or suggestions they have around the traffic interchange. The survey/comment form was also available in print upon request. The following are the survey/comment form questions and responses:

Please tell us your interest in this project. (Check all that apply)

- Drive in the project area = 165
- Resident in the project area = 105
- Shop, dine or visit hotels and attractions in the project area = 88
- Walk or bike in the project area = 36
- Work in the project area = 26
- Business/commercial property owner in the project area = 5
- Other = 4
    - Professional civil engineer who has noticed the problems with the current configuration.
    - Resident nearby project area.
    - Interested in improving access to South Mountain Community College for pedestrians
    - 48th street and Baseline

Which of these transportation modes do you use in the project area? (Select all that apply)

- Vehicle = 211
- Bike = 33
- Walk = 27
- Bus = 2
- Wheelchair/scooter = 2
- Other = 3
    - Electric unicycle
    - Delivery truck
    - Interested in improving access to South Mtn CC for peds

Please tell us your level of concern related to the existing I-10/Baseline Road traffic interchange and the surrounding project area.
(With 1 being Not at All Concerned and 5 being Extremely Concerned)

- Traffic congestion
  - Responses = 214
  - Average = 4.5
- Number of signals/signal timing
  - Responses = 213
  - Average = 4.0
- Driver safety
  - Responses = 212
  - Average = 4.0
- Bicycle connectivity and safety
  - Responses = 208
  - Average = 3.2
- Pedestrian connectivity and safety
  - Responses = 209
  - Average = 3.4
- Ease of access to businesses/shopping centers
  - Responses = 209
  - Average = 3.5
- Neighborhood cut-through traffic
  - Responses = 210
  - Average = 3.1

How often do you access Baseline Road from Calle los Cerros Drive?
(With 1 being Never and 5 being Frequently)

- Responses = 215
- Average = 2.0

How often do you access Calle los Cerros Drive from Baseline Road?
(With 1 being Never and 5 being Frequently)

- Responses = 214
- Average = 2.0

4. TITLE VI REPORTING

4.1. Self ID Surveys

Meeting participants were asked to complete ADOT's self-identification survey for Title VI reporting purposes. A total of 17 people, out of 77 attendees, completed the self-ID survey during the meeting (excluding the panelists and ADOT/MAG/FHWA staff), which was a 22 percent response rate. Also, an additional 46 people completed the survey throughout the duration of the commenting period, for a

total of 63.

Of the 63 self-identification survey responses, seven participants (11.1%) identified as Hispanic/Latino, three (4.8%) identified as Asian, two (3.2%) identified as American Indian/Alaskan Native, one (1.6%) identified as African American/Black, one (1.6%) as Native Hawaiian/Other Pacific Islander, and 49 (77.8%) identified as White.

4.2. Title VI Meeting Summary

A Title VI public meeting summary documenting ADOT's compliance with Title VI and Title II nondiscrimination and accommodations was submitted to the ADOT Civil Rights Office on May 23.

Appendix A
Public Meeting Materials

Project Area Map

Fact Sheet (English)

Interstate 10/Baseline Road Traffic Interchange Study

Overview

The Arizona Department of Transportation (ADOT) is studying potential improvements to traffic flow, pedestrian and bicycle facilities and safety at the I-10/Baseline Road traffic interchange. Due to the high traffic volume and congestion in the area, the current interchange design may no longer be adequate to meet the needs of the traveling public.

The study will develop and evaluate design concepts for the alternatives and identify the preferred design alternative as part of the Design Concept Report (DCR) and environmental study, taking into account current and future traffic volumes and existing and new surrounding development.

Project Purpose and Need

Baseline Road at I-10 is a major arterial road serving approximately 60,000 vehicles per day and experiences heavy congestion and delays. There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development, which contribute to congestion and crashes. The corridor has a higher rate of crashes compared to the region. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges.

Due to these issues, the development and evaluation of alternatives to address the interchange and infrastructure was deemed necessary. A feasibility study completed in May 2020 by the Maricopa Association of Governments (MAG) identified potential solutions to relieve congestion and improve traffic flow in this corridor with various improvements to the I-10/Baseline Road traffic interchange and serves as the basis for the current study. The purpose of this study and project is to further evaluate the two design options for the interchange and select a preferred alternative for further action.

Study Elements

The engineering study will develop, evaluate and compare preliminary roadway design alternatives and their impacts to existing traffic and environmental factors to select the preferred design option. The study will include evaluating the following items:

- **Improving the existing diamond interchange or converting the existing interchange to a diverging diamond interchange.**
- **Consolidating driveway access on Baseline Road.**
- **Reducing the number of signalized intersections near the interchange.**
- **Improving traffic operations along Baseline Road.**

The project would occur primarily within ADOT and city of Tempe right-of-way (ROW). Some ROW and/or temporary construction easements from adjacent properties are anticipated to make these improvements. ROW needs will be evaluated as part of the study but would be determined as part of a future final project design.

Schedule

The study is expected to conclude in 2024. The project is not currently funded for final design and construction. The anticipated schedule of study activities and opportunities to participate is included below.

May 2023	Fall 2023	2024
Public Scoping Meeting	Public Meeting for Design Alternatives	DCR and Environmental Study completed

Stay Informed

Subscribe to receive project updates at azdot.gov/i10baseline. ADOT welcomes your questions and comments. Please contact us in any of these ways:

- **Online:** http://tinyurl.com/yv6vwbst
- **Phone:** 855.712.8530 (English/Spanish)
- **Email:** NGBecerra@azdot.gov
- **Mail:** ADOT Community Relations, 1655 W. Jackson St., MD126F, Phoenix, AZ 85007

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, the Arizona Department of Transportation (ADOT) does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons that require a reasonable accommodation based on language or disability should contact Nancy Becerra at 623.695.7411 or NGBecerra@azdot.gov.

要获取其他格式或语言的副本或服务，请致电855 712 8530或电邮至 NGBecerra@azdot.gov 联系Nancy Becerra，或访问网站 azdot.gov/i10baseline

ADOT Project No. F0523 01L

Fact Sheet (Spanish)

Interestatal 10/Baseline Road
estudio del intercambio de tráfico

Descripción general

El Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) está estudiando mejoras potenciales para el flujo de tráfico, instalaciones para peatones y ciclistas y la seguridad en el intercambio de tráfico de la I-10 y Baseline Road. Debido al alto volumen de tráfico y la congestión en el área, puede que ya no sea adecuado el diseño del intercambio actual para las necesidades del público viajero. El estudio evaluará dos alternativas de diseño para el intercambio: un Intercambio de Diamante Estrecho (TDI) y un Intercambio de Diamante Divergente (DDI).

El estudio desarrollará y evaluará estos conceptos alternativos de diseño e identificará la alternativa preferida como parte del Informe del Concepto de Diseño (DCR) y el estudio ambiental, teniendo en cuenta los volúmenes de tráfico actuales y futuros y el desarrollo circundante nuevo y existente.

Propósito y necesidad del proyecto

Baseline Road en la I-10 es una vía principal que da servicio a aproximadamente 60,000 vehículos por día, resultando en mucha congestión y retrasos. Hay varias intersecciones y entradas de vehículos a lo largo del corredor que sirven a los negocios y residencias en el área, las que resultan en embotellamientos y choques. El corredor tiene una cantidad más alta de choques en la región. Además, el corredor tiene mucho tráfico de peatones y bicicletas, con desafíos de conectividad y seguridad.

Debido a estas cuestiones, se consideró necesario el desarrollo y la evaluación de alternativas para mejorar el intercambio y la infraestructura. Un estudio de factibilidad completado en mayo de 2020 por la Asociación de Gobiernos de Maricopa (MAG por sus siglas en inglés) identificó soluciones potenciales para aliviar el embotellamiento y mejorar el flujo de tráfico en este corredor por varias mejoras en el intercambio de tráfico de la I-10 y Baseline Road y es la base del estudio actual. El propósito de este estudio y proyecto es evaluar más a fondo las dos opciones de diseño para el intercambio y escoger la alternativa preferida para acciones futuras.

Elementos del estudio

El estudio de ingeniería desarrollará, evaluará y comparará las alternativas preliminares de diseño de la carretera, sus impactos en el tráfico existente y las consideraciones ambientales para seleccionar la opción de diseño preferida. El estudio incluirá la evaluación de los siguientes elementos:

- **Mejorar el intercambio diamante existente o convertirlo en un intercambio de diamante divergente.**
- **Consolidar los accesos en Baseline Road.**
- **Reducir el número de intersecciones con semáforos cercas del intercambio.**
- **Mejorar las operaciones de tráfico a lo largo de Baseline Road.**

El proyecto estaría principalmente dentro de los derechos de vía de ADOT y la ciudad de Tempe. Se anticipa que algunos derechos de vía y/o servidumbres de construcción temporales en propiedades adyacentes serán necesarios para realizar estas mejoras. Las necesidades del derecho de vía se evaluarán como parte del estudio, pero se determinarán como parte de un futuro diseño de proyecto final.

Cronograma

Se espera que el estudio concluya en 2024. Actualmente, el proyecto no está financiado para el diseño final y la construcción. El horario anticipado de actividades del estudio y las oportunidades para participar se incluyen en el cronograma a continuación.

Mayo de 2023
Reunión público del alcance

Otoño de 2023
Reunión pública para alternativas de diseño

2024
DCR y estudio ambiental completados

Manténgase informado

Suscríbase para recibir actualizaciones del proyecto en azdot.gov/i10baseline. ADOT atenderá con mucho gusto a sus preguntas y comentarios. Póngase en contacto con nosotros por cualquiera de estas formas:

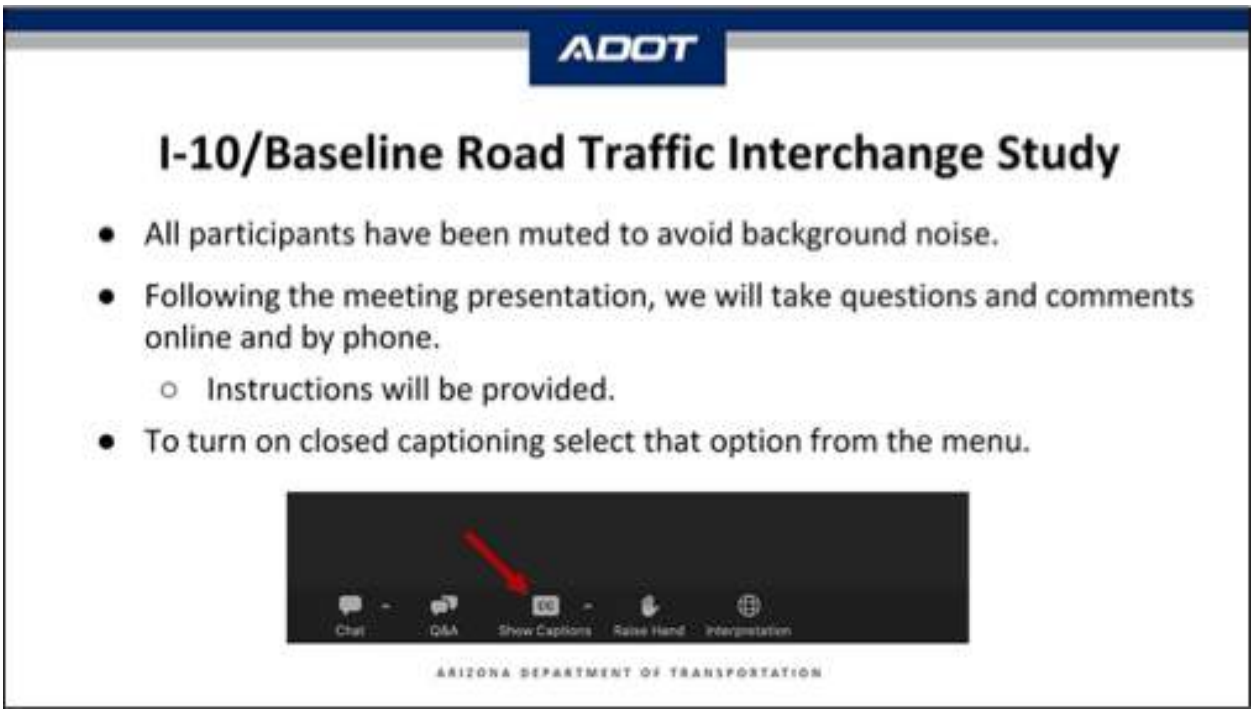
- **En línea:** http://tinyurl.com/yv6vwbst
- **Teléfono:** 855.712.8530 (inglés/español)
- **Correo electrónico:** NGBecerra@azdot.gov
- **Correo:** ADOT Community Relations, 1655 W. Jackson St., MD126F, Phoenix, AZ 85007

De acuerdo con el título VI de la Ley de Derechos Civiles de 1964 y la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés), el Departamento de Transporte de Arizona (ADOT por sus siglas en inglés) no discrimina por raza, color, nacionalidad, edad, género o discapacidad. Personas que requieren asistencia (dentro de lo razonable) ya sea por el idioma o por discapacidad deben ponerse en contacto con Nancy Becerra al 623.695.7411 o por correo electrónico a NGBecerra@azdot.gov. Las solicitudes deben hacerse lo más pronto posible para asegurar que el equipo encargado del proyecto tenga la oportunidad de hacer los arreglos necesarios.

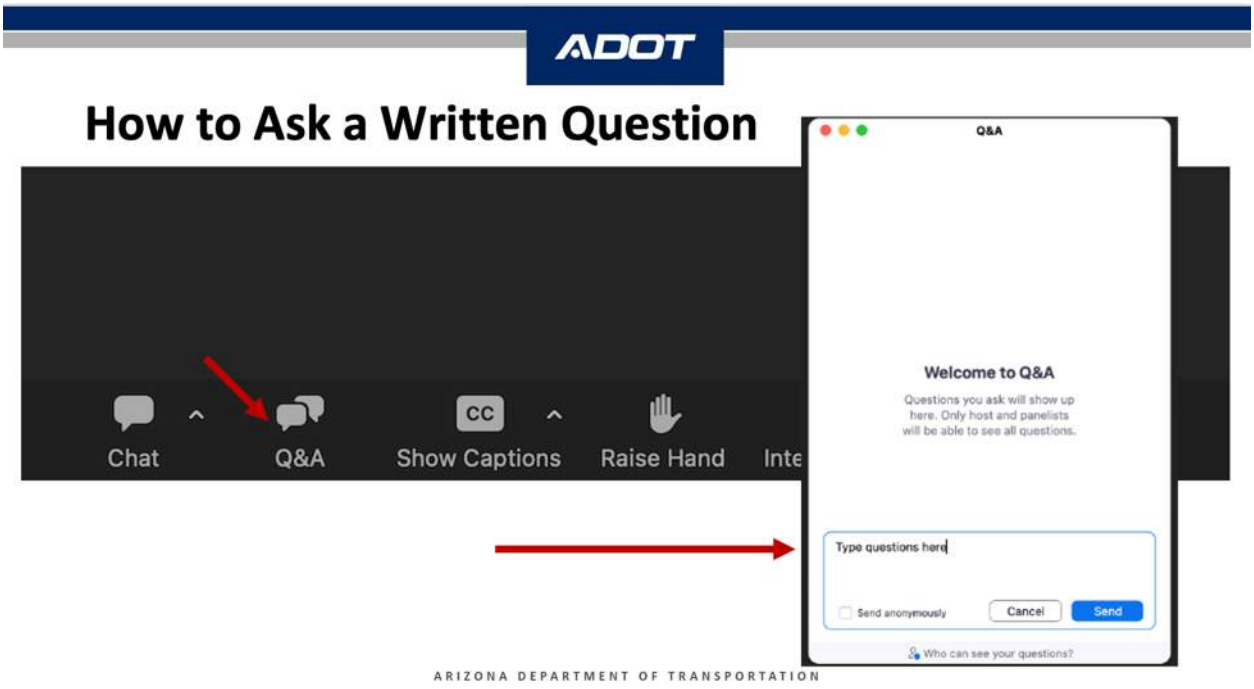
ADOT Project No. F0523 01L

Presentation and Script

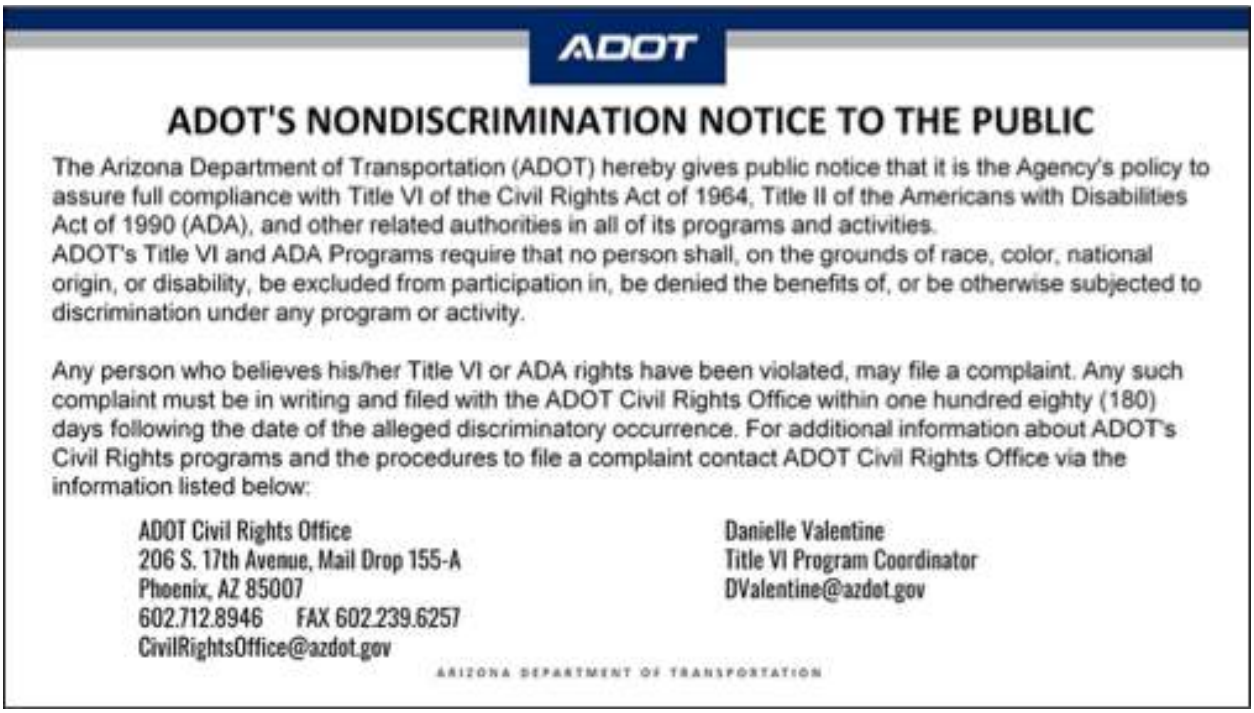
Good evening everyone and welcome to the public meeting for the Interstate 10/Baseline Road Traffic Interchange Study. My name is Nancy Becerra, Community Relations Project Manager with the Arizona Department of Transportation



Participants are joining us via their computers on Zoom or through their phones and are currently muted. I'll describe the meeting format and how to participate in just a moment, but first, if you are having any technical issues right now, you may need to hang up or log off, then redial or reconnect.
Please note this meeting is being recorded. The recording will be posted to the project website.
If you would like to turn on closed captioning, click Closed Caption on the bottom of your screen to start viewing closed captioning. Click Live Transcript, then select Show Subtitle.
The format for tonight is a short presentation, followed by an open question and answer session. After the presentation, we'll provide instructions on how to ask a question or comment by phone or online. Keep in mind that after this meeting, you can continue to ask questions or provide comments through May 23. We'll tell you how at the end of the meeting.



If you are participating in the online meeting, you can submit a written question or comment using the Q&A function. Written questions can be submitted at anytime during the presentation and they don't have to wait until the presentation is completed.
For our Spanish speakers when you provide comments in Spanish using the Q&A function a Spanish-speaking project team member will provide translation of both the question or comment and the response.



ADOT

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ADOT's Title VI and ADA Programs require that no person shall, on the grounds of race, color, national origin, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

Any person who believes his/her Title VI or ADA rights have been violated, may file a complaint. Any such complaint must be in writing and filed with the ADOT Civil Rights Office within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For additional information about ADOT's Civil Rights programs and the procedures to file a complaint contact ADOT Civil Rights Office via the information listed below:

ADOT Civil Rights Office
206 S. 17th Avenue, Mail Drop 155-A
Phoenix, AZ 85007
602.712.8946 FAX 602.239.6257
CivilRightsOffice@azdot.gov

Danielle Valentine
Title VI Program Coordinator
DValentine@azdot.gov

ARIZONA DEPARTMENT OF TRANSPORTATION

ADOT complies with Title VI of the Civil Rights Act of 1964, Title II of the Americans with Disabilities Act of 1990, and other related authorities in all of its programs and activities.

Any person, who believes his/her Title VI or ADA rights have been violated, may file a complaint by contacting the ADOT Civil Rights Office at 602- 712-8946 or by email at civilrightsoffice@azdot.gov within 180 days of the alleged violation.

ADOT

AVISO PÚBLICO DE LA LEY DE NO-DISCRIMINACIÓN DE ADOT

El Departamento de Transporte del Estado de Arizona (ADOT) informa al público que la agencia tiene como regla asegurar el cumplimiento de el Titulo VI de la Ley de los Derechos Civiles de 1964, del Titulo II de la Ley de ciudadanos Americanos con Discapacidades de 1990 (ADA) y otras normas relacionadas con todos sus programas y actividades.
Los programas del Título VI y ADA de ADOT exigen que a ninguna persona se le excluya de participar, se le nieguen beneficios o de ninguna otra manera sea sujeta a discriminación en ningún programa o actividad de ADOT por motivo de raza, color, país de origen, o discapacidad.
Cualquier persona que crea que se han violado sus derechos bajo el Título VI o el ADA, puede presentar una queja. Esta queja debe presentarse por escrito a la Oficina de Derechos Civiles de ADOT dentro de ciento ochenta (180) días a partir de la fecha en que se alega que ocurrió la discriminación. Para recibir más información sobre los programas de Derechos Civiles de ADOT y los procedimientos para presentar una queja, por favor póngase en contacto con la Oficina de Derechos Civiles de ADOT con la información que aparece abajo:

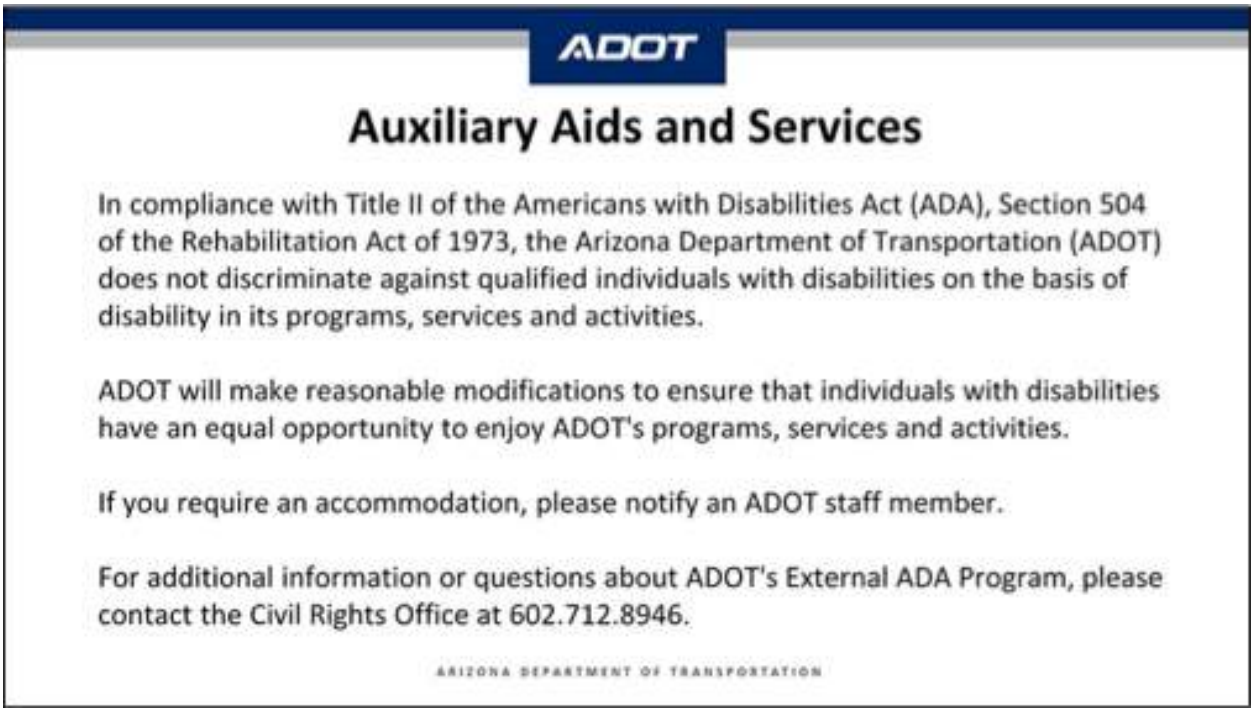
ADOT Civil Rights Office
206 S. 17th Avenue, Mail Drop 155-A
Phoenix, AZ 85007
602.712.8946 FAX 602.239.6257

Danielle Valentine
Title VI Program Coordinator
DValentine@azdot.gov

ARIZONA DEPARTMENT OF TRANSPORTATION

We will have a brief pause to allow individuals to read this information in Spanish while it is described in the Spanish channel.
Interpreter in the simultaneous Spanish channel: ADOT tiene como regla asegurar el cumplimiento total del Título VI de la Ley de los Derechos Civiles de 1964, del Título II de la Ley de ciudadanos Americanos con Discapacidades de 1990 (ADA) y otras normas relacionadas con todos sus programas y actividades.

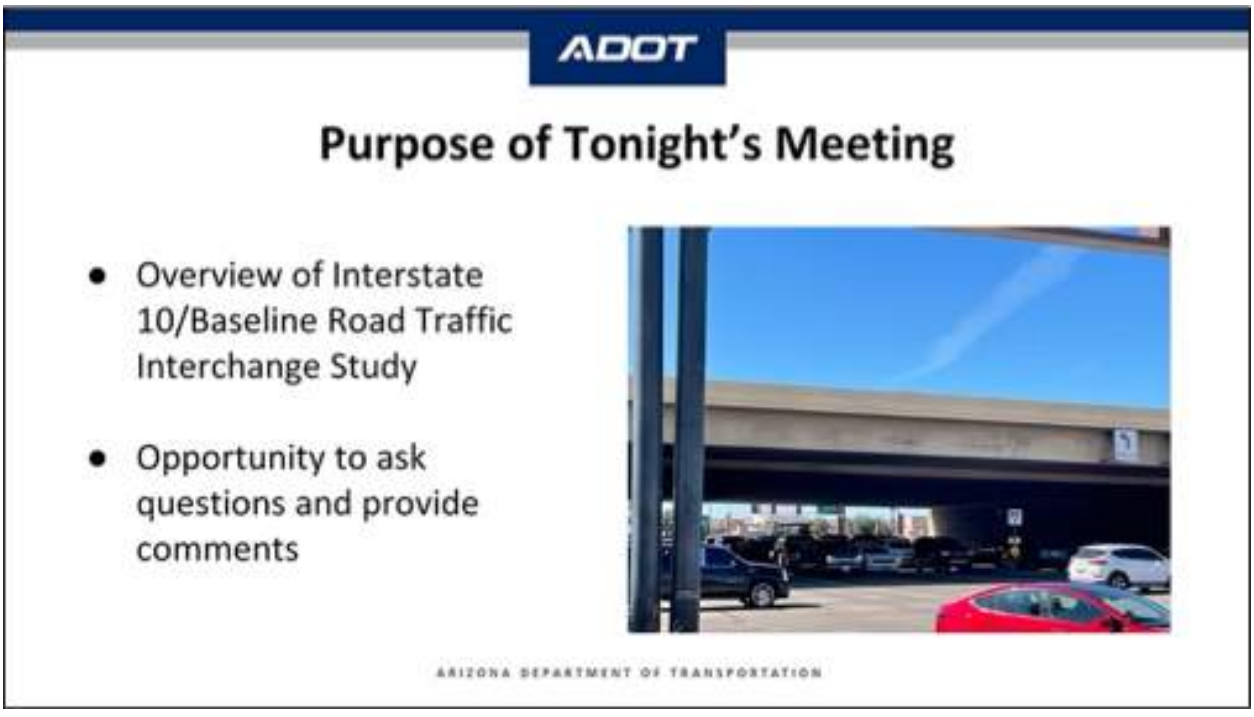
Cualquier persona que crea que se han violado sus derechos bajo el Título VI o el ADA, puede presentar una queja. Por favor póngase en contacto con la Oficina de Derechos Civiles de ADOT a 602.712.8946 o civilrightsoffice@azdot.gov.



ADOT will make reasonable accommodations to ensure that individuals with disabilities have an equal opportunity to enjoy ADOT's programs, services, and activities.
If you require an accommodation, please contact Nancy Becerra at 623-695-7411 or ngbecerra@azdot.gov

Before we begin the presentation, I'd like to introduce tonight's presenters. They are:
Olivier Mirza, registered Professional Engineer in the state of AZ and is ADOT's Project Manager on this Study and Mark Gilliland, registered Professional Engineer and the consultant Project Manager from AZTEC Engineering Additionally, other project team members are available for the Q&A session.

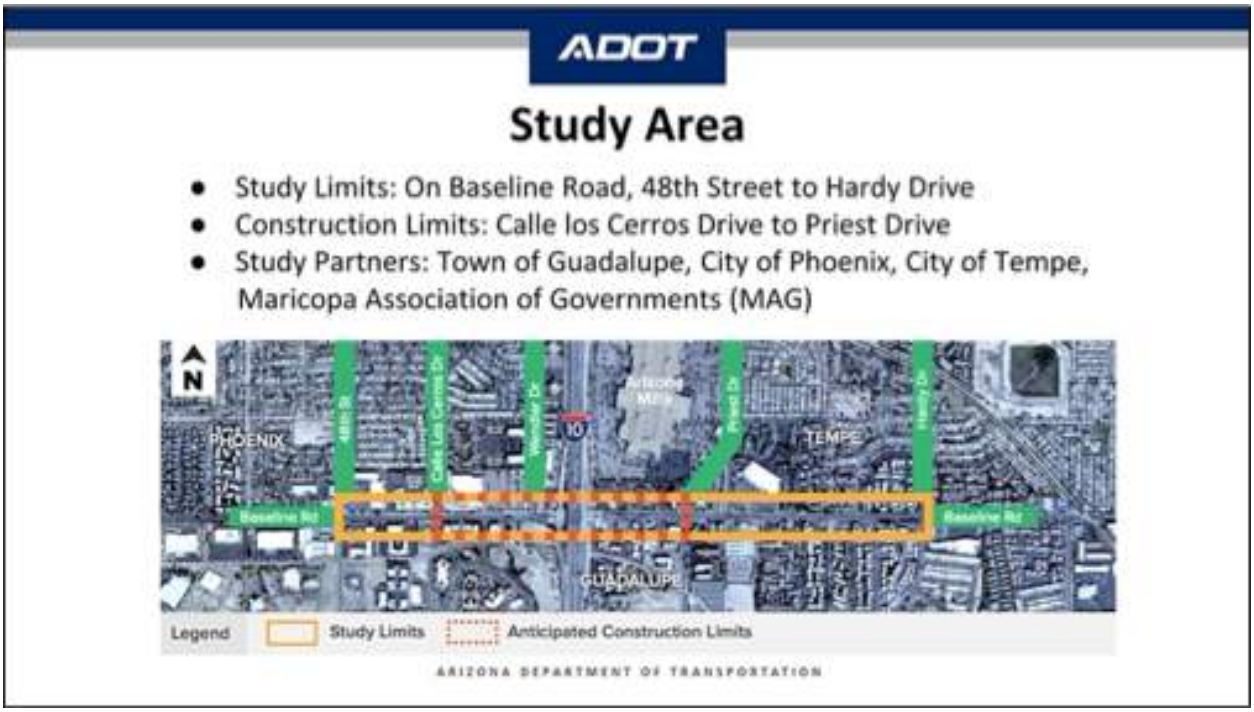
Now, I will hand the presentation off to Mark.



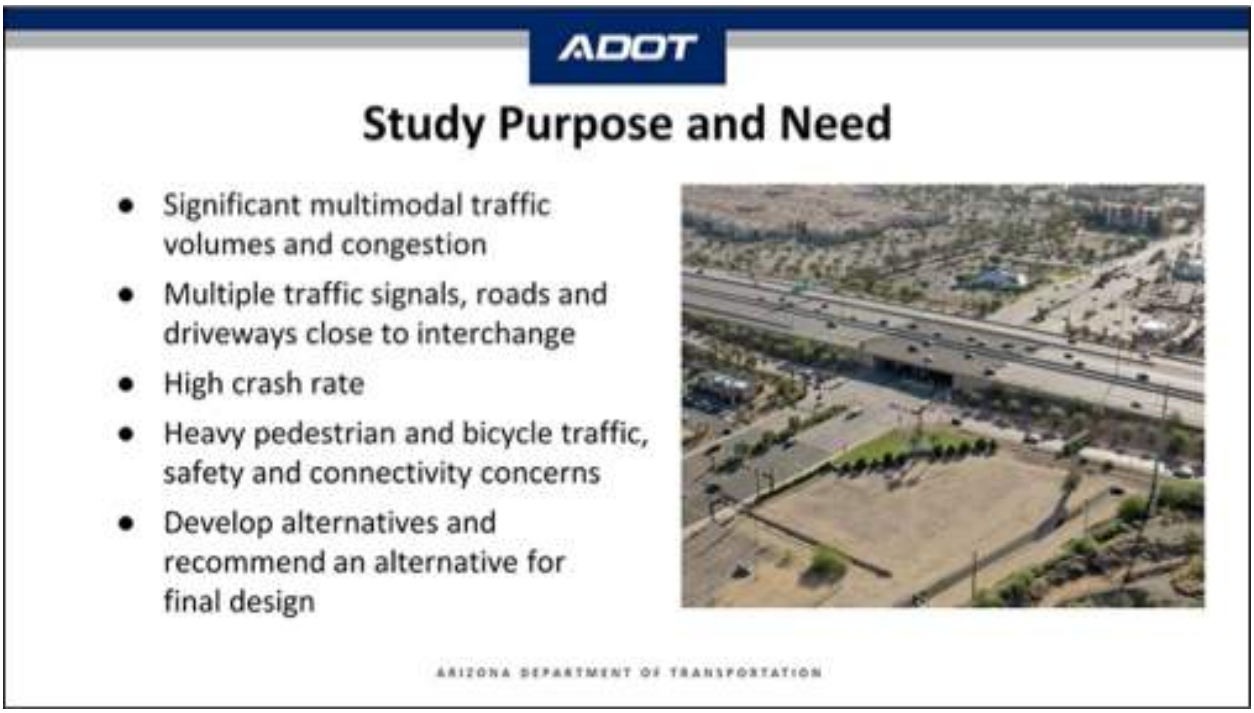
Thank you Nancy for the introduction,

The purpose of tonight's meeting is to give you an overview of I-10/Baseline Rd. Traffic Interchange design and concept report (DCR) that began in January. After that we will open up the presentation to the public for questions and to provide comments.

With this, I will hand over the presentation to Mark

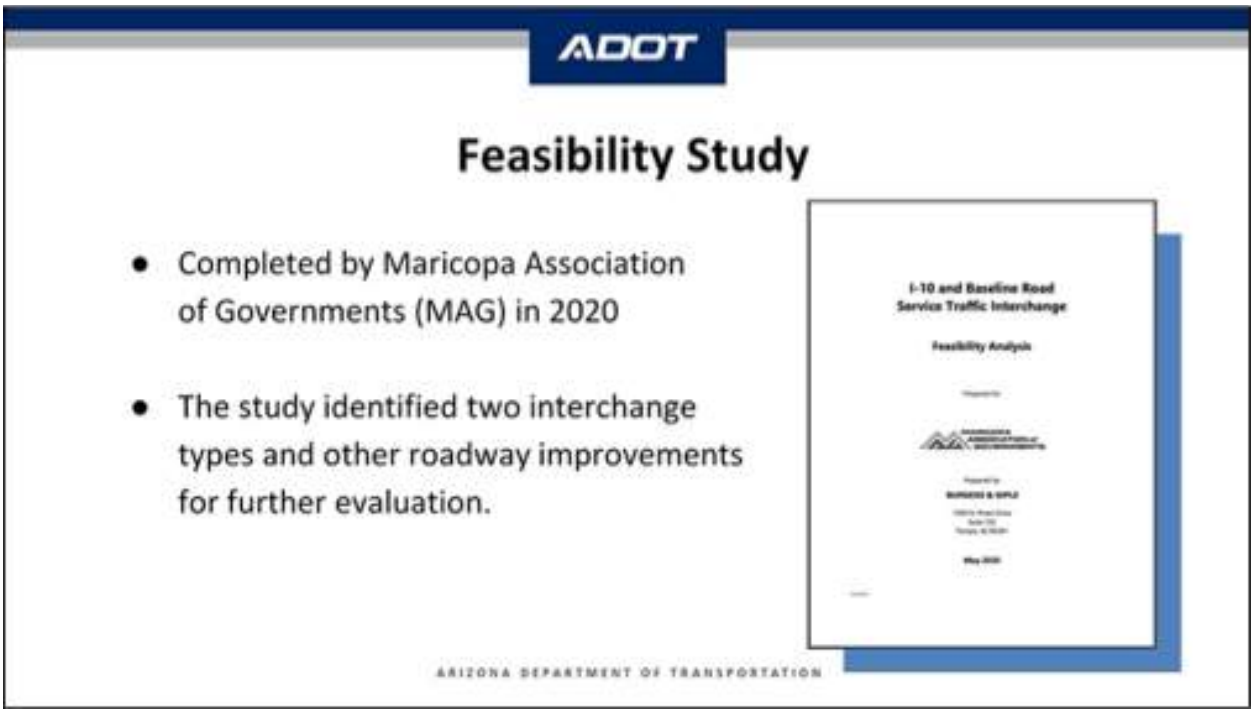


The study limits along Baseline Road are 48th Street at the west end and Hardy Drive at the east. The construction limits along baseline road are anticipated to be between Calle Los Cerros Drive and Priest Drive. Within these limits Baseline Road touches four jurisdictions: Phoenix, Tempe, Guadalupe, and ADOT. Phoenix maintains the intersection of 48th Street and Baseline Road. Tempe maintains Baseline Road from 48th Street to Hardy Drive, while ADOT maintains the entrance and exit ramps to I-10 as well as the bridge overpass. Guadalupe's northern-most limits are between the I-10 and Avenida del Yaqui on the south side of Baseline Road.



Study Purpose and Need: Baseline Road at Interstate 10 is a major arterial road serving approximately 60,000 vehicles per day and experiences heavy congestion and delays. There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development, which contribute to congestion and crashes. The corridor has a higher rate of crashes compared to the region. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes.

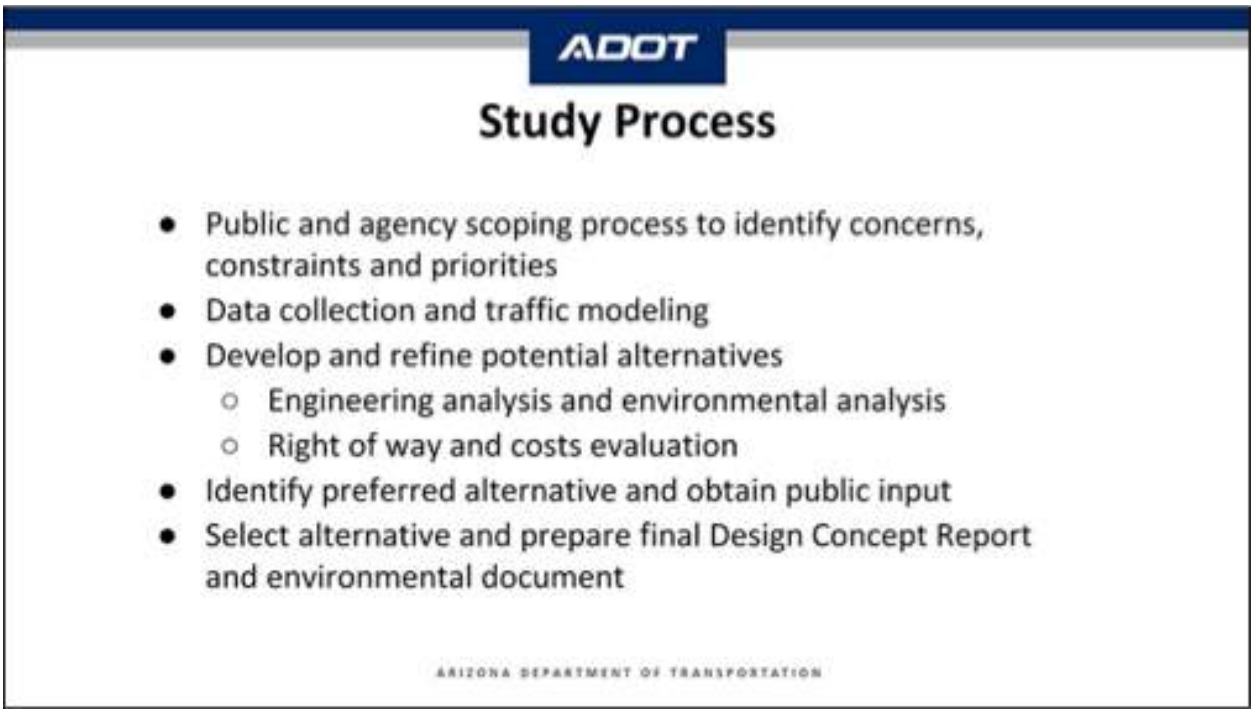
Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The development and evaluation of alternatives to address these concerns was found to be necessary. The purpose of this study and project is to further evaluate the two design options for the interchange and select a preferred alternative for further action.



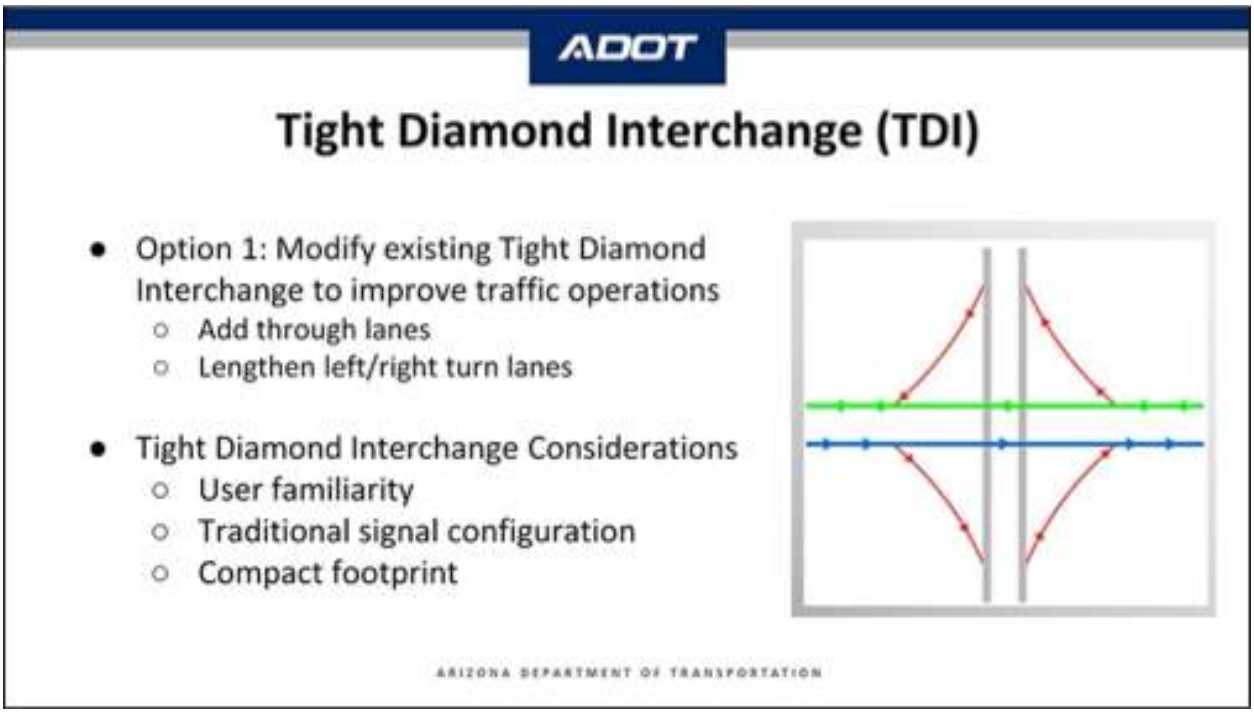
A feasibility study completed in May 2020 by the Maricopa Association of Governments (MAG) identified interchange types to enhance regional travel and safety in this corridor with various improvements to the Interstate 10/Baseline Road Traffic Interchange and serves as the basis for the current study.

The two types of interchanges identified for further consideration were a Tight Diamond Interchange and Diverging Diamond Interchange. I will go over those shortly.

A copy of the feasibility report can be found on the project website at azdot.gov/i10baseline



The study process for this effort will follow an established process. We are currently in the scoping phase of this process, looking to gather community concerns and input. We continue to collect data such as survey and traffic projections as needed to perform the traffic modelling. We are also beginning to develop potential alternatives for the interchange and Baseline Road improvements. In the future, we will be conducting engineering and environmental analyses, and evaluating right of way impacts and costs. We anticipate returning with a preferred alternative for public comments in the Fall of 2023, and completing the study in 2024.

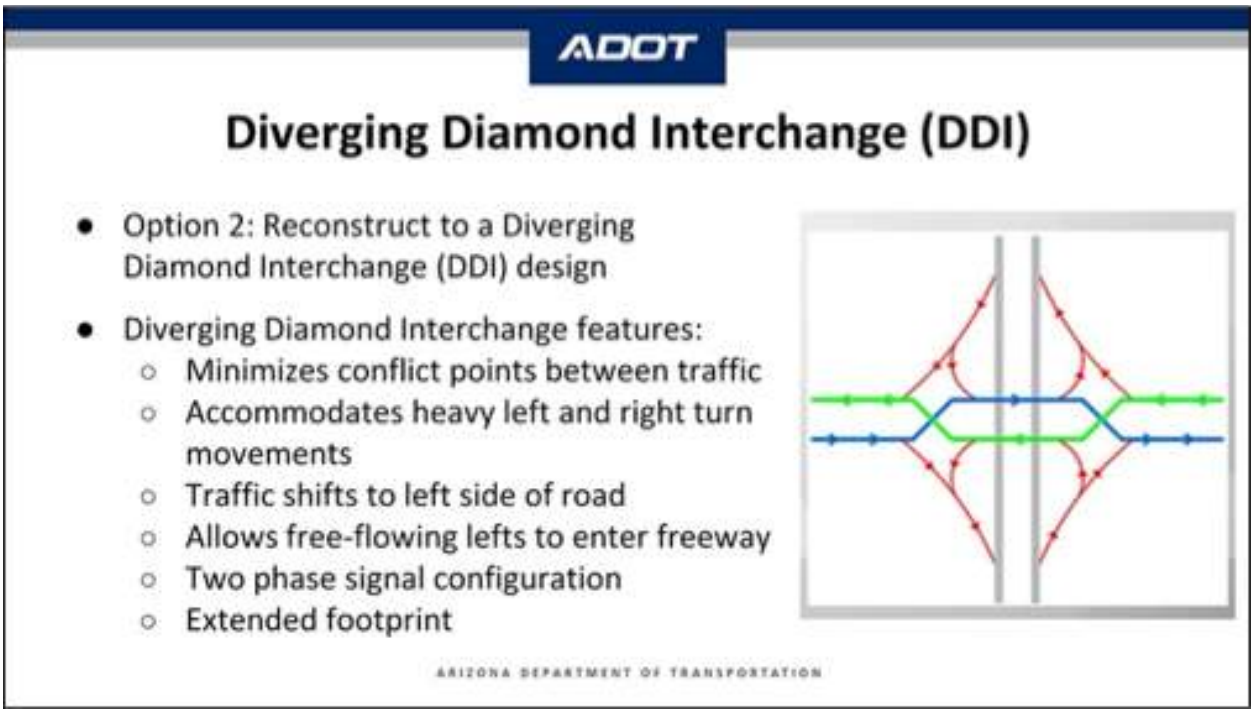


The first option for improving the traffic interchange that was recommended for advancement in the feasibility study was for the interchange to remain a tight diamond, with features intended to improve operation of the interchange and reduce vehicle queues.

A Tight Diamond Interchange is the most common traffic interchange on freeways in the Valley

For example as you typically see when driving, the eastbound traffic will remain in the right lane and continue through the interchange but it does require northbound traffic to cross through traffic to make a left turn.

This interchange allows for a compact footprint.

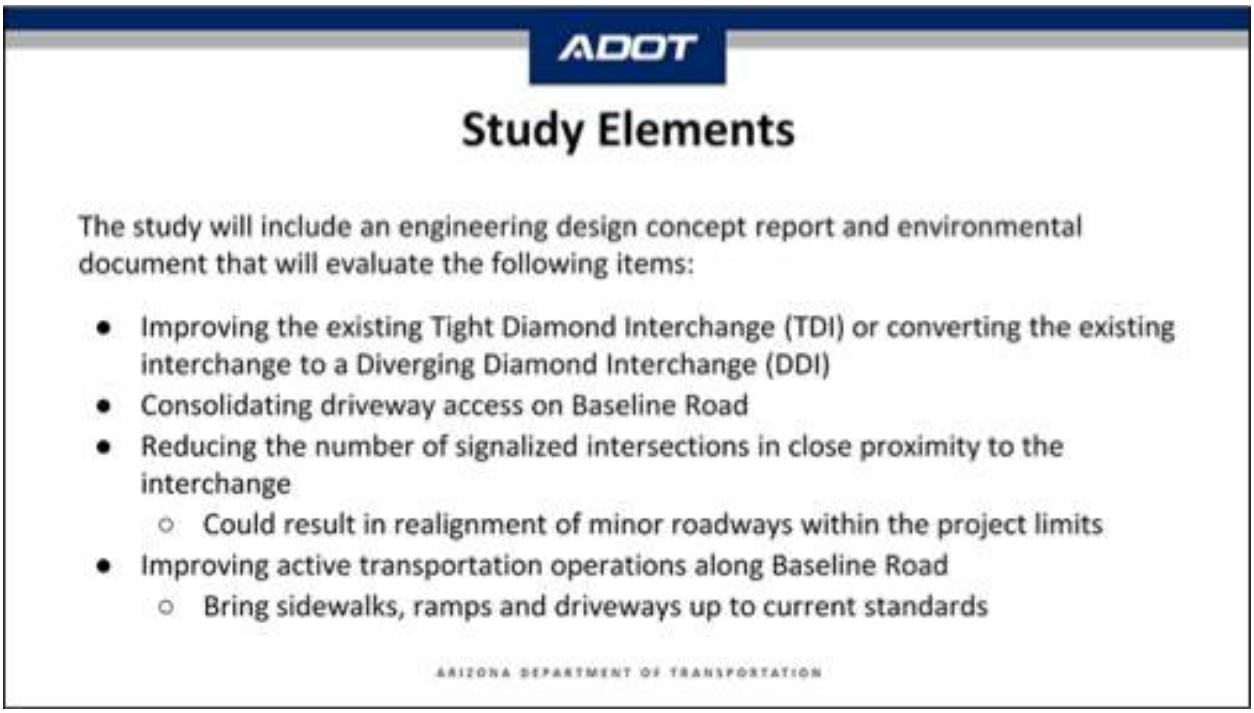


The second option is a Diverging Diamond Interchange (DDI) with signalized ramps to and from I-10.

DDI's are increasingly used nationwide due to improved safety features and traffic flow. Their features include traffic shifts as shown in the graphic that allows left turn movements to not intersect with through traffic and simplifies the signal phasing. ADOT has several other DDIs in the valley including at Happy Valley Road and I-17.

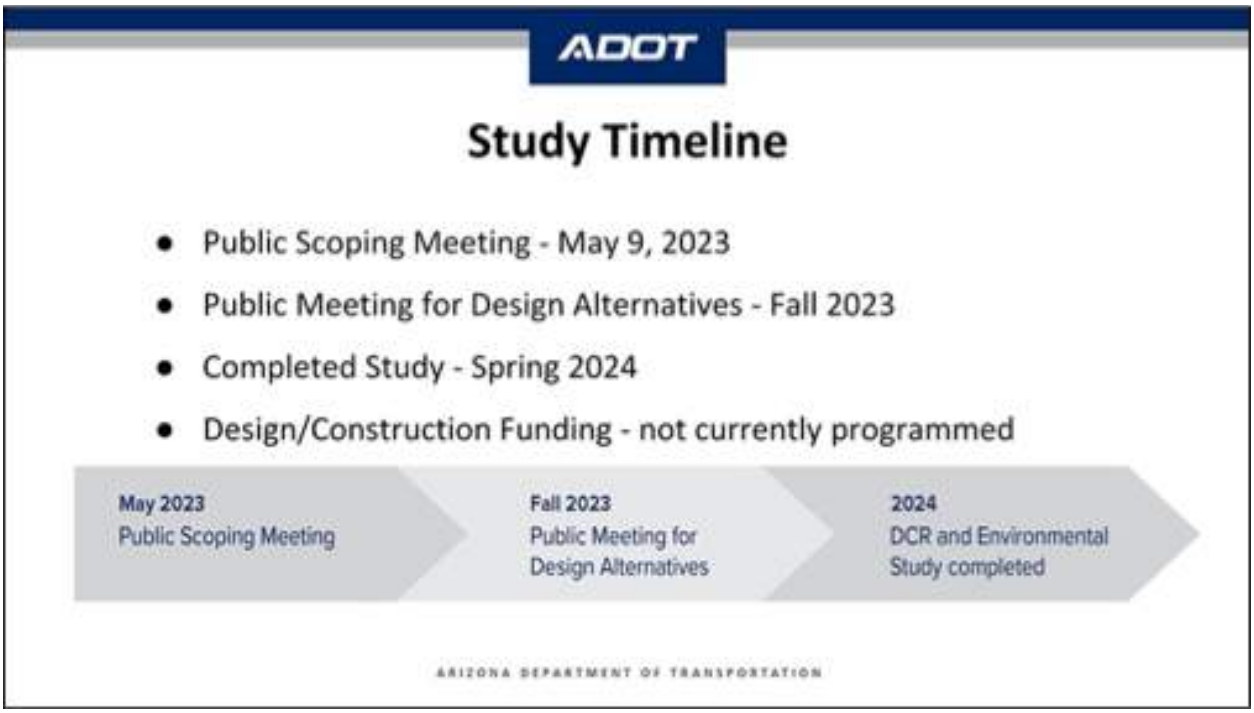
For instance, the blue line represents eastbound traffic that needs to shift to the left side as it goes through the interchange and allows for a free left turn for northbound traffic and further requires the eastbound traffic to shift back to the right to move on.

This interchange requires a more extended footprint.



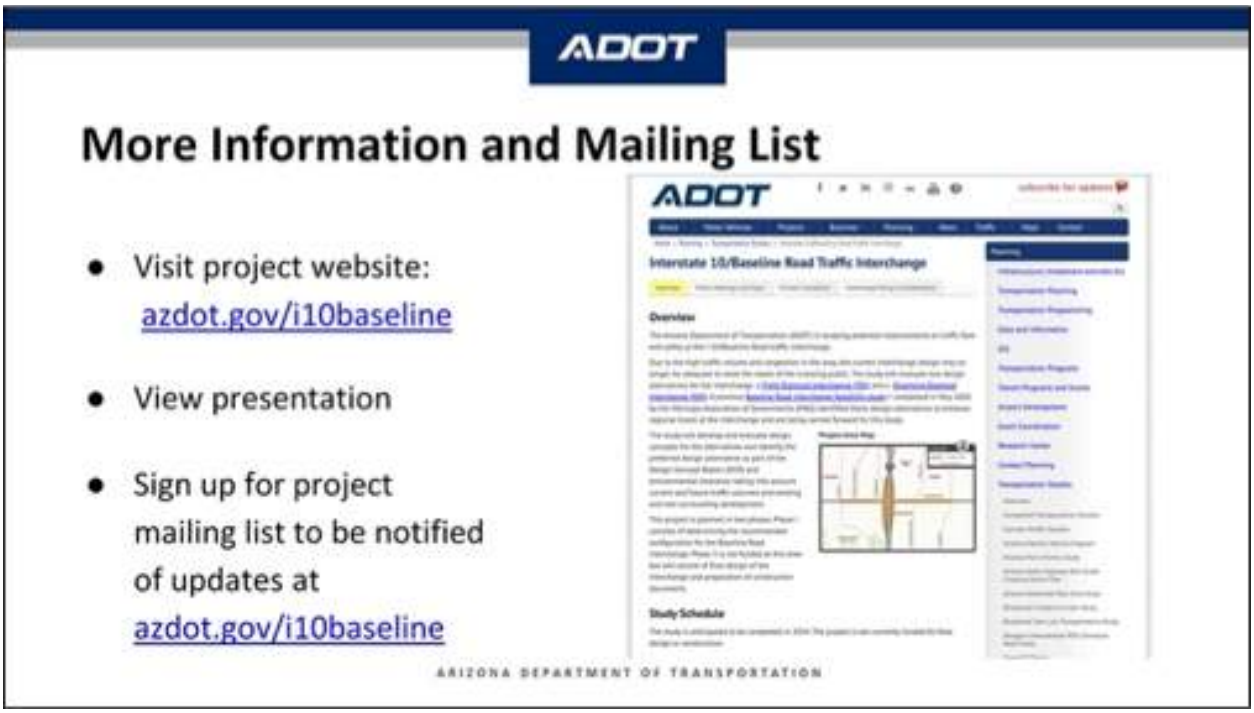
The study will include an engineering design concept report (DCR) and environmental document. The DCR will develop, evaluate and compare preliminary roadway design alternatives and their impacts to existing traffic and environmental factors to select the preferred alternative which includes evaluating the following items:

- Improving the existing Tight Diamond Interchange or converting the existing interchange to a Diverging Diamond Interchange,
- Minimizing right of way impact by consolidating driveway access on Baseline Road,
- Reducing the number of signalized intersections in close proximity to the interchange which could result in the realignment of some minor roadways within the project limits and
- Improving active transportation operations along Baseline Road by bringing sidewalks, ramps and driveways up to current standards



Study Timeline: We're here tonight at the Public Scoping Meeting. The alternatives will be developed and evaluated this Summer and Fall. We anticipate bringing this information back at a second public meeting later in the Fall of this year and completing the Study in 2024. This project has been funded for the design concept report and environmental document phase only, the design and construction funding is not currently programed.

Now I'll turn it back over to Nancy.



Thank you Mark!

For more information on the study, as mentioned earlier, we will be posting the recording of tonight's meeting on our project website at: azdot.gov/i10baseline

We encourage you to visit the website to sign up for the project mailing list.

We will be accepting comments through May 23. There are different ways you can comment or ask questions about the project. In just a moment, we will begin the question and comment portion of tonight's meeting. You can also submit questions and comments in the following ways:

Through the online survey to share your concerns and priorities at tinyurl.com/yv6vwbst, You can email me at ngbecerra@azdot.gov. You can call: 855-712-8530. Or, you can mail your comments to me at: Nancy Becerra, ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

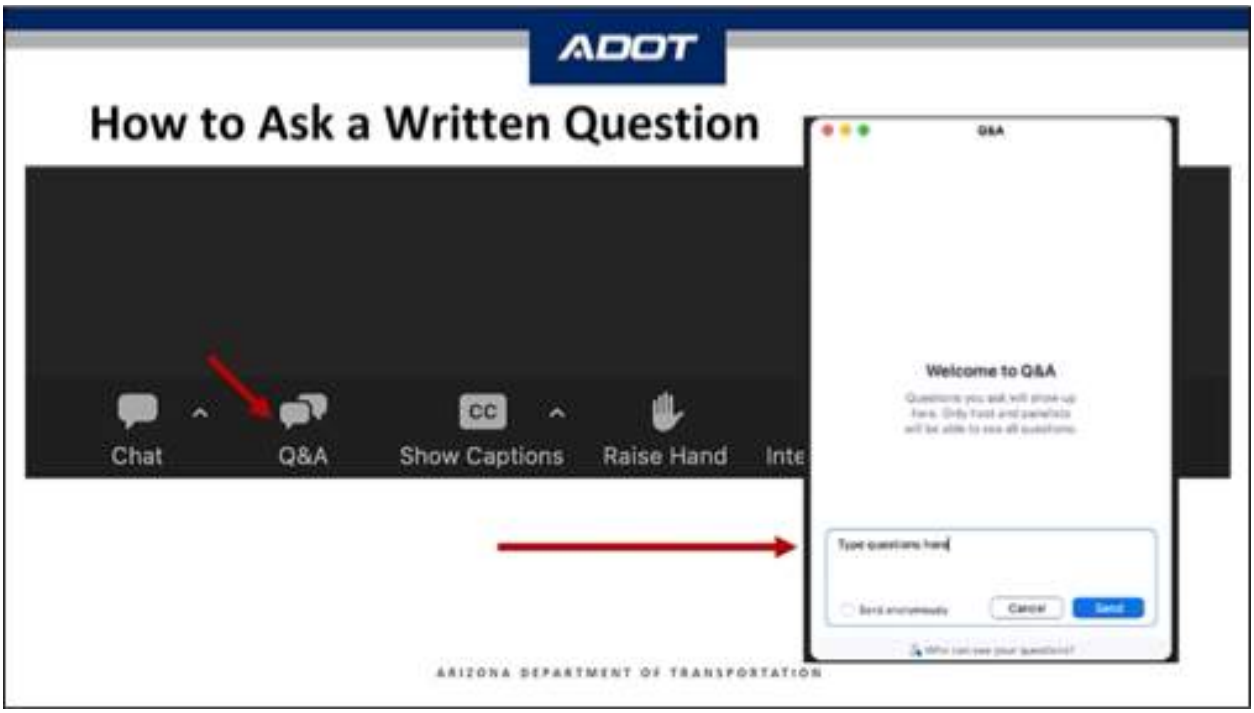
Now we'll begin the question and comments portion of the meeting.

We will do our best to respond to questions in the time available. Due to time constraints and to allow others time to comment, please be brief and limit your verbal question to no more than 30 seconds. If there are similar comments or questions received, we may consolidate them.

Additionally, please limit yourself to one question or comment until everyone has had an opportunity to comment.

If needed, we can extend our meeting time by up to 15 minutes to respond to questions. If we still have outstanding questions at that time, we will respond to written questions as part of the meeting summary and we will provide it to participants via email and post on our project web page.

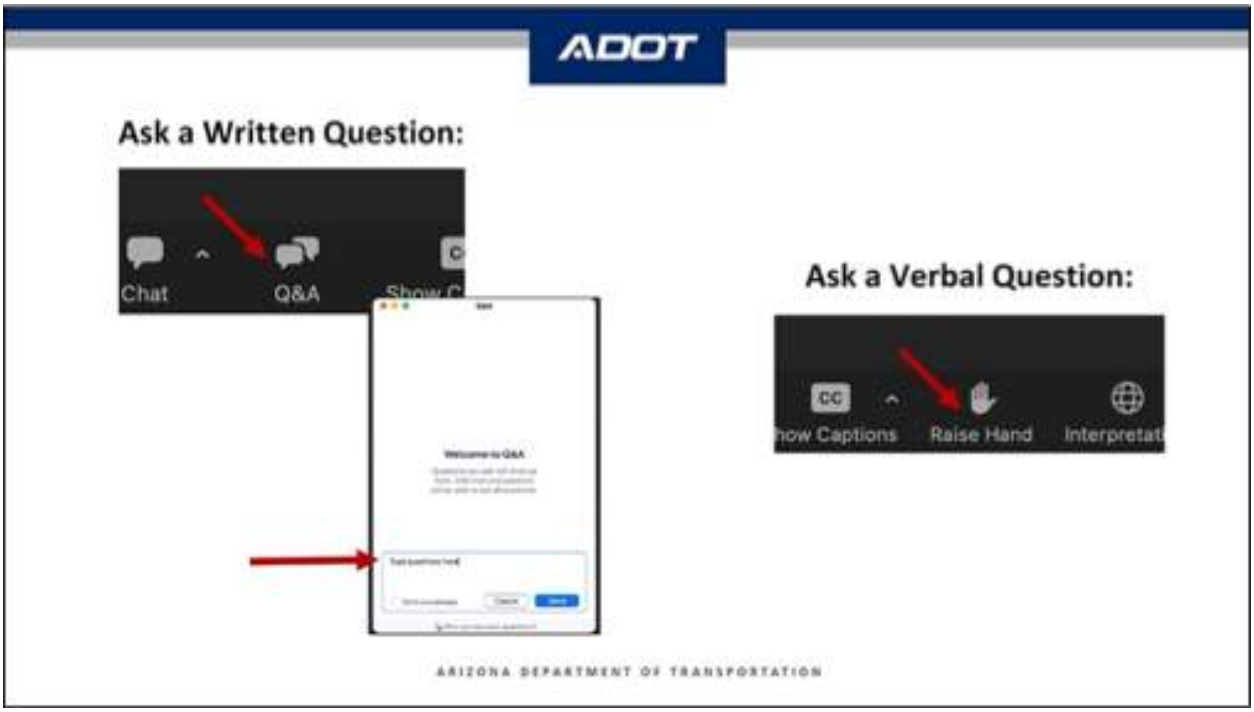
For those on the phone you may submit questions or comments by phone or the other methods described previously following the meeting.



If you are participating in the online meeting, you can submit a written question or comment using the Q&A function.
For our Spanish speakers when you provide comments in Spanish using the Q&A function a Spanish-speaking project team member will provide translation of both the question or comment and the response.

The second way to participate if you are joining the meeting online is to raise your hand by clicking on the Raise Hand icon at the bottom of your screen. When you raise your hand, the presenter will unmute you and call on you when it is your time to speak so you can be heard. Those who ask a question in Spanish will have it repeated in English by our interpreter and hear the response interpreted in Spanish.

For attendees joining us on the phone, please enter *9 to indicate you would like to speak and we will receive the hand raised signal. When we are ready for your question/comment our host will ask you to unmute yourself by pressing *6.



Thank you Nancy. Good evening, I'm Jan Gordley, a member of the outreach team for this project. I'll be helping take your questions this evening. Just as a reminder, in order to cover as many questions as possible, we may be paraphrasing and grouping some questions by similar topics in order to cover more information. And we may not have time to get to all of them but will be providing answers in the summary of this meeting that will be added to the project website. We already have a few entered in the Q&A so we'll start with those and then go to anyone with a hand raised online and then on the phone.

(Question and Answer session)

Before we close, I'd like to remind you that this presentation was recorded and will be posted to the project website.

We would like to encourage you to visit the website for more information and to sign up for the mailing list. We have posted the website link in the chat for your convenience. Also, if you have not already done so, please take the Anonymous Self-ID Survey. We have placed the link to the survey in the chat again for your convenience. Comments will be accepted until May 23. We will place the survey/comment form in the chat as well: tinyurl.com/yv6vwbst

If you have any follow-up questions or comments please use the contact form or contact me at Email: ngbecerra@azdot.gov

Thank you very much for your interest in the project and your participation.

Survey/Comment Form

ADOT: I-10/Baseline Road Traffic Interchange - Survey

The Arizona Department of Transportation (ADOT) invites you to provide your input as it prepares an environmental and engineering study to evaluate improvements to the I-10/Baseline Road traffic interchange near the cities of Tempe, Phoenix and the town of Guadalupe.

aaroncjohnson78@gmail.com Switch account

Not shared

* Indicates required question

Please tell us your interest in this project (check all that apply).

- [ ] Resident in the project area.
- [ ] Business/commercial property owner in the project area.
- [ ] Work in the project area.
- [ ] Shop, dine or visit hotels and attractions in the project area.
- [ ] Drive in the project area.
- [ ] Walk or bike in the project area.
- [ ] Other:

Which of these transportation modes do you use in the project area? (select all that apply)

- [ ] Vehicle
- [ ] Bike
- [ ] Walk
- [ ] Wheelchair/scooter
- [ ] Other:

Please tell us your level of concern related to the existing I-10/Baseline Road traffic interchange and the surrounding project area? (with 1 being Not At All Concerned and 5 being Extremely Concerned)

	1	2	3	4	5
Traffic Congestion	○	○	○	○	○
Number of Signals/Signal Timing	○	○	○	○	○
Driver Safety	○	○	○	○	○
Bicycle Connectivity and Safety	○	○	○	○	○
Pedestrian Connectivity and Safety	○	○	○	○	○
Ease of Access to Businesses/Shopping Centers	○	○	○	○	○
Neighborhood Cut Through Traffic	○	○	○	○	○

How often do you access Baseline Road from Calle los Cerros Drive?

	1	2	3	4	5	
Never	○	○	○	○	○	Frequently

How often do you access Calle los Cerros Drive from Baseline Road?

	1	2	3	4	5	
Never	○	○	○	○	○	Frequently

What other suggestions or input do you have for the study team regarding this traffic interchange/intersection?

Your answer

Name *

Your answer

Please fill out this field.

Address

Your answer

City

Your answer

Zip Code *

Your answer

Affiliation (Business Name, Community Name, Organization)

Your answer

Email Address *

Your answer

Submit Clear form

Self-Identification Survey (English)

ADOT Self Identification Survey - Interstate 10: Baseline Road Traffic Interchange Study

The Arizona Department of Transportation's goal is to ensure that every effort will be made to prevent discrimination through the impact of its programs, policies, and activities. ADOT will take reasonable steps to provide accommodations based on language or disability. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation. By completing this voluntary survey, ADOT will be able to determine who attends its public meetings and how the department can improve participation.
The survey will also help ADOT fulfill federal reporting requirements.

Title VI of the 1964 Civil Rights Act, as amended, 42 USC 2000d, and U.S. Department of Transportation regulations provide that "no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Other Title VI Nondiscrimination related authorities:
- Federal-Aid Highway Act of 1973
- Section 504 of the Rehabilitation Act of 1973
- Americans with Disabilities Act of 1990
- Executive Orders 12898 & 13166

Para Espanol: https://azdot.gov/i10BaselineSelf-idSpanish

aaroncjohnson78@gmail.com Switch account

Not shared

* Indicates required question

Completing this survey is voluntary. If you choose to respond, please mark all that apply.

Race/Ethnicity *

- [ ] White
- [ ] African American/Black
- [ ] American Indian/Alaskan Native
- [ ] Native Hawaiian/Other Pacific Islander
- [ ] Asian
- [ ] Hispanic/Latino

Submit Clear form

Self-Identification Survey (Spanish)

ADOT Encuesta para identificarse - Interstate 10: Baseline Road Traffic Interchange Study

El objetivo del Departamento de Transporte de Arizona es asegurar que cada esfuerzo se llevara a cabo para prevenir discriminación en el desarrollo de sus programas, políticas y actividades. ADOT también tomará todas las medidas razonables para ofrecer el acceso a servicios y actividades para personas con limitaciones ya sea por el idioma o por discapacidad. Las solicitudes deben hacerse lo más pronto posible para asegurar que el equipo encargado del proyecto tenga la oportunidad de hacer los arreglos necesarios. Con su participacion en esta encuesta voluntaria, ADOT podrá determinar quien participa en las reuniones públicas y como podrá mejorar la participación de miembros de minorías. La encuesta también le ayudará a ADOT a cumplir con requisitos federales.

El Titulo VI del Acto de Derechos Civiles, la ley 42 USC 2000d y otros reglamentos del Departamento
de Transporte de los Estados Unidos, aseguran que "ninguna persona en los Estados Unidos será negada
los beneficios de o será discriminado de cualquier programa o actividad que recibe asistencia de
fondos federales por su raza, color de su piel u origen nacional". Otras autoridades relacionadas con la NoD iscriminación de Título VI:
- La Ley Federal de Asistencia Vial de 1973 (FederalAid Highway Act of 1973)
- Sección 504 de la Ley de Rehabilitación de 1973 (Section 504 of the Rehabilitation Act of 1973)
- Ley de ciudadanos Americanos con Discapacidades de 1990 (Americans with Disabilities Act of 1990)
- Ordenes Ejecutivas 12898 y 13166 (Executive Orders 12898 and 13166)

For English: https://azdot.gov/i10BaselineSelf-id

aaroncjohnson78@gmail.com Switch account

Not shared

* Indicates required question

El completar esta encuesta es voluntaria. Si usted decide responder, por favor marque todas las respuestas que le corresponden.

Etnicidad/Raza *

- [ ] Nativo de Hawái/Otra isla del Pacífico
- [ ] Asiático
- [ ] Hispano/Latino
- [ ] Amerindio/Nativo de Alaska
- [ ] Caucásico/Blanco
- [ ] Afroamericano/Negro

Submit Clear form

Appendix B
Public Meeting Notices / Advertising

GovDelivery Email Notices

5/25/23, 4:40 PM Join ADOT for I-10/Baseline Road Traffic Interchange Study public meeting May 9

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Join ADOT for I-10/Baseline Road Traffic Interchange Study public meeting May 9

ADOT will hold a virtual public meeting on May 9 to seek the public's input for a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety.

The virtual public meeting will be held:

- **Tuesday, May 9, from 6 – 7:30 p.m.**
- Online (Zoom): https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
  English call-in number: 669.900.6833
  Spanish call in number: 866.730.7514, pin: 984619#

The meeting will include a presentation by the project team, followed by an opportunity for questions and comments from attendees. Following the meeting, a recording of the presentation will be available on the project website at azdot.gov/i10baseline.

ADOT is considering making improvements to the existing diamond interchange at Baseline Road and I-10. The public's input will be considered in the study of potential design options. Comments on the current study phase are being accepted through **May 23**, in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

5/25/23, 4:40 PM Join ADOT for I-10/Baseline Road Traffic Interchange Study public meeting May 9

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5/25/23, 4:39 PM ADOT seeking public's input on I-10/Baseline Road Traffic Interchange Study

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ADOT seeking public's input on I-10/Baseline Road Traffic Interchange Study

Public encouraged to attend May 9 virtual public meeting, provide comments through May 23

Join ADOT on May 9 for a virtual public meeting to seek the public's input for a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety.

The virtual public meeting will be held:

- Tuesday, May 9, from 6 – 7:30 p.m.
- Online (Zoom): https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
  English call in number: 669.900.6833
  Spanish call in number: 866.730.7514, pin: 984619#

The meeting will include a presentation by the project team, followed by an opportunity for questions and comments from attendees. Following the meeting, a recording of the presentation will be available on the project website at azdot.gov/i10baseline.

ADOT is considering making improvements to the existing diamond interchange at Baseline Road and I-10. The study will evaluate two design alternatives for the interchange: a Tight Diamond Interchange (TDI) and a Diverging Diamond Interchange (DDI).

Comments on the study are being accepted through **May 23**, in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations, 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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I-10/Baseline Road Traffic Interchange Study virtual public meeting May 9

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I-10/Baseline Road Traffic Interchange Study virtual public meeting Tuesday, May 9

ADOT is considering making improvements to the I-10/Baseline Road traffic interchange to address traffic flow and safety. Join the May 9 virtual public meeting to learn more and provide your input.

The virtual public meeting will be held:

- Tuesday, May 9, from 6 – 7:30 p.m.
- Online (Zoom): https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
  English call in number: 669.900.6833
  Spanish call in number: 866.730.7514, pin: 984619#

The meeting will include a presentation by the project team, followed by an opportunity for questions and comments from attendees. Following the meeting, the presentation will be available at azdot.gov/i10baseline.

Comments on the study are being accepted through **May 23** in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations, 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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Reminder: ADOT hosting virtual public meeting tomorrow, May 9 to seek public input on improvements to the I-10/Baseline Road Traffic Interchange

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Reminder: ADOT hosting virtual public meeting tomorrow, May 9 to seek public input on improvements to the I-10/Baseline Road Traffic Interchange

ADOT will hold a virtual public meeting tomorrow, May 9, to seek the public's input for a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety.

The virtual public meeting will be held:

- **Tuesday, May 9, from 6 – 7:30 p.m.**
- Online (Zoom): https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
  English call-in number: 669.900.6833
  Spanish call-in number: 866.730.7514, pin: 984619#

The meeting will include a presentation by the project team, followed by an opportunity for questions and comments from attendees. Following the meeting, a recording of the presentation will be available on the project website at azdot.gov/i10baseline.

ADOT is considering making improvements to the existing diamond interchange at Baseline Road and I-10. The public's input will be considered in the study of potential design options. Comments on the current study phase are being accepted through **May 23**, in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
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5/25/23, 4:38 PM Missed our public meeting for the I-10/Baseline Road Traffic Interchange Study? View the presentation and provide your comment…

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Missed our public meeting for the I-10/Baseline Road Traffic Interchange Study? View the presentation and provide your comments online

Learn more about ADOT's study to evaluate improvements to safety and traffic flow at the I-10/Baseline Road interchange.

Visit azdot.gov/i10baseline to watch the presentation and provide your comments.

Comments on the study are being accepted through **May 23**, in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
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5/25/23, 4:37 PM Last chance to provide comments on the I-10/Baseline Road Traffic Interchange Study

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Last chance to provide comments on the I-10/Baseline Road Traffic Interchange Study

Tuesday, May 23, is the last day to take our survey and provide your comments on ADOT's I-10/Baseline Road Traffic Interchange Study, which is evaluating improvements to safety and traffic flow at the interchange.

Learn more on the study website at azdot.gov/i10baseline.

Provide your comments through the end of tomorrow, **May 23**, in any of the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations, 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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Print Ad (English)

Tempe/Ahwatukee Republic Zone 10

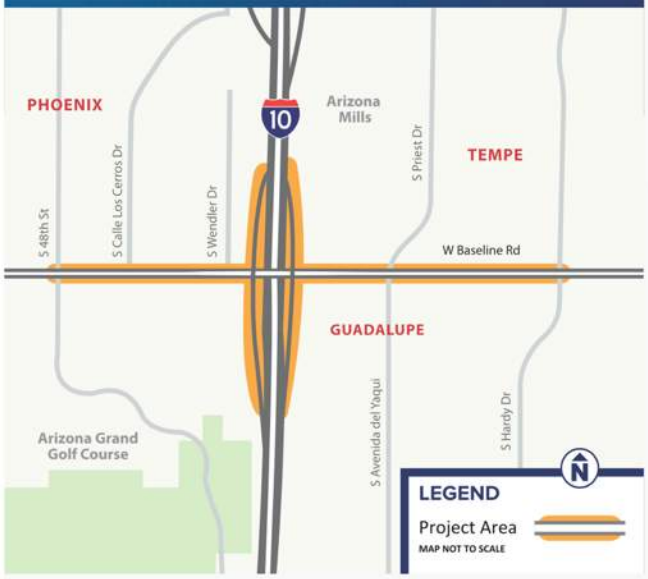
6 Z10 | MIDWEEK, 04.26.23 | AZCENTRAL.COM

Your Input is Requested!

Interstate 10/Baseline Road Traffic Interchange Study

Virtual Public Meeting

The Arizona Department of Transportation (ADOT) invites you to attend a virtual public meeting to provide input on a study to evaluate improvements to the I-10/Baseline Road traffic interchange near the cities of Tempe and Phoenix and the Town of Guadalupe. Project team members will make a virtual presentation, answer questions and seek input from attendees.



ADOT Project No. F0523 01L

Virtual Public Meeting

When: Tuesday, May 9, 2023
Time: 6 – 7:30 p.m.

HOW TO PARTICIPATE

- **Online (zoom):** https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
- **Phone:** 669.900.6833 (English)

CAN'T ATTEND BUT HAVE INPUT?

Comments may be made by May 23, 2023, in the following ways:

- **Online:** http://tinyurl.com/yv6vwbst
- **Phone:** 855.712.8530 (English/Spanish)
- **Email:** ngbecerra@azdot.gov
- **Mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

For more information, visit:
www.azdot.gov/i10baseline

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De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras normas y leyes antidiscriminatorias, el Departamento de Transporte de Arizona (ADOT) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran asistencia (dentro de lo razonable) ya sea por el idioma o discapacidad deben ponerse en contacto con Nancy Becerra al 623.695.7411 o por correo electrónico al NGBecerra@azdot.gov. Las solicitudes deben hacerse lo más antes posible para asegurar que el Estado tenga la oportunidad de hacer los arreglos necesarios.

要获取其他格式或语言的副本或服务，请致电855 712 8530
或电邮至 NGBecerra@azdot.gov 联系Nancy Becerra，
或访问网站 azdot.gov/i10baseline

Print Ad (Spanish)

Prensa Arizona

¡Se solicitan sus ideas!

Interestatal 10/Baseline Road, estudio del intercambio de tráfico

Reunión Pública Virtual

El Departamento de Transporte de Arizona (ADOT) los invita a una reunión pública virtual donde podrán proveer su aporte de un estudio evaluando mejoras potenciales al intercambio de tráfico de la I-10/Baseline Road cercas de Tempe, Phoenix y Guadalupe. Miembros del equipo del proyecto estarán haciendo una presentación virtual, contestando sus preguntas y buscando el aporte de los asistentes.

ADOT Project No. F0523 01L

Reunión Pública Virtual

Cuando: martes, 9 de mayo del 2023
Horario: 6 – 7:30 p.m.

COMO PARTICIPAR

- **En Línea (zoom):** https://tinyurl.com/ycy8ykvw
  Meeting ID (# de reunión): 849 4976 3354
- **Teléfono:** 866.730.7514 (español)
  pin de participante 984619#

¿NO PUEDE ASISTIR, PERO TIENE ALGO QUE APORTAR?

Comentarios pueden hacerse hasta el 23 de mayo del 2023 por las siguientes opciones:

- **En Línea:** http://tinyurl.com/yv6vwbst
- **Teléfono:** 855.712.8530 (inglés/español)
- **Email:** ngbecerra@azdot.gov
- **Dirección:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

Para más información, visite:
www.azdot.gov/i10baseline

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E-blast

Arizona Republic

ADOT

Your Input is Requested!
Interstate 10/Baseline Road Traffic Interchange Study

Virtual Public Meeting
When: Tuesday, May 9, 2023
Time: 6-7:30 p.m.

HOW TO PARTICIPATE

- **Online (zoom):** https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
- **Phone:** 669.900.6833 (English)

CAN'T ATTEND BUT HAVE INPUT?

Comments may be made by May 23, 2023,
in the following ways:

- **Online:** http://tinyurl.com/yv6vwbst
- **Phone:** 855.712.8530 (English/Spanish)
- **Email:** ngbecerra@azdot.gov
- **Mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 8500

For more information, visit:
www.azdot.gov/i10baseline

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ADOT Project No. F0523 01L

News Release

ADOT

Email Address e.g. name@example.com
Subscribe

Share Bulletin

ADOT News: ADOT to host May 9 virtual meeting for I-10/Baseline Road study

Arizona Department of Transportation sent this bulletin at 05/03/2023 07:24 AM MST. If you would like alerts on [illegible] sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3587861

ADOT

SHARE

ADOT to host May 9 virtual meeting for I-10/Baseline Road study

Potential improvements at busy interchange being evaluated

A virtual public meeting about potential improvements at the Interstate 10 interchange with Baseline Road in Tempe will be held on Tuesday, May 9.

The Arizona Department of Transportation is hosting the virtual meeting to provide information and seek public input about a study of the busy interchange. The study will evaluate whether improvements will be made to the existing diamond interchange or if the interchange should be reconstructed using the new diverging diamond design.

The meeting details are as follows:

- Tuesday, May 9, from 6 to 7:30 p.m.
- Access the meeting online at: tinyurl.com/ycy8ykvw. The meeting ID number is: 849 4976 3354.
- Access the meeting by phone: In English call 669-900-6833. In Spanish call 866-730-7514 (Pin Number is 984619#)

The meeting will include a presentation by the project team, followed by an opportunity for participants to ask questions and provide comments. A recording of the presentation will be posted to the study website for those unable to attend.

Comments on the current study phase are being accepted through May 23. An online survey is available at tinyurl.com/yv6vwbst.

For more information about the study and other methods to provide comments, visit the study website at azdot.gov/i10baseline.

To plan your trip, get travel times or see ADOT cameras, download the AZ 511 app.

Visit us on social media on Facebook, Twitter, YouTube, Flickr or the ADOT blog.

SUBSCRIBER SERVICES:
Manage Preferences | Delete Profile | Help

Civil Rights/ADA | Derechos Civiles/ADA

For more information, visit azdot.gov

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Appendix C
Public Meeting Outreach

Social Media Posts

Facebook

Arizona Department of Transportation

May 2 ·

ADOT is hosting a virtual meeting Tuesday, May 9, about potential improvements to the I-10/Baseline interchange in Tempe.

Click here for details and how to join: bit.ly/42kb4eQ

27 14 comments 8 shares

Like Comment Share

Twitter

← **Tweet**

Arizona DOT
@ArizonaDOT

Save the Date!

Join ADOT's virtual public meeting on May 9 to provide your input on potential improvements at the I-10, Baseline Road traffic interchange to address traffic flow and safety.

For more details visit azdot.gov/i10baseline.

7:37 PM · Apr 19, 2023 · **5,832** Views

1 Retweet **3** Likes

← **Tweet**

Arizona DOT
@ArizonaDOT

Your input is needed! ADOT is considering making improvements to the I-10/Baseline Road traffic interchange to address traffic flow/safety. Attend our May 9 virtual public meeting to learn more and provide feedback. For meeting and project details visit azdot.gov/i10baseline.

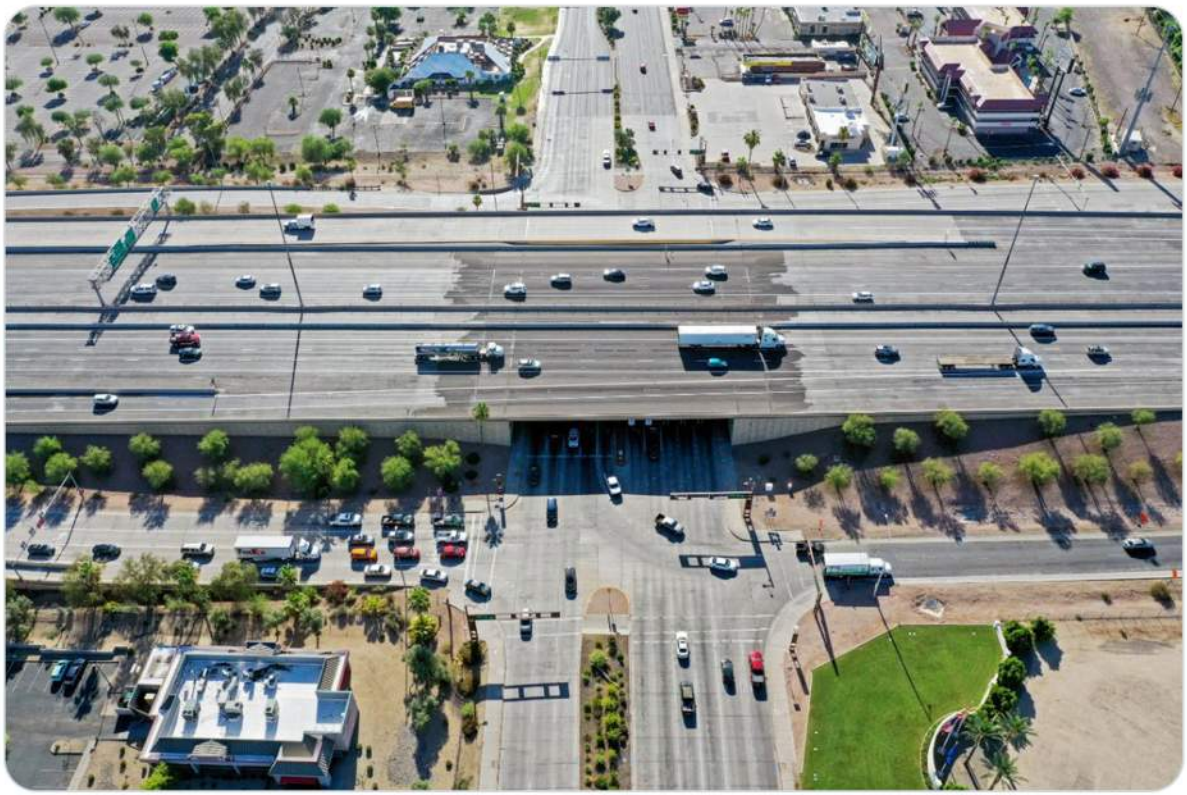
3:07 PM · Apr 25, 2023 · **6,352** Views

2 Retweets **5** Likes

← **Tweet**

Arizona DOT
@ArizonaDOT

Do you use the I-10/Baseline Interchange? ADOT is hosting a public meeting May 9 for the current study of potential improvements to traffic flow and safety at the interchange and wants to hear from you. Visit azdot.gov/i10baseline to learn more and provide your feedback.



6:37 PM · May 2, 2023 · **7,568** Views

2 Retweets **1** Quote **8** Likes

← **Tweet**

Arizona DOT
@ArizonaDOT

Reminder to join us tomorrow, May 9 at 6 p.m. for the I-10/Baseline Road virtual public meeting. For more details on how to participate and provide your input visit azdot.gov/i10baseline.
Can't attend, provide input through our online survey at: tinyurl.com/yv6vwbst

11:07 AM · May 8, 2023 · **5,430** Views

3 Likes **1** Bookmark

← **Tweet**

Arizona DOT
@ArizonaDOT

Missed our public meeting for the I-10/Baseline Road Interchange Study? You can view a recording of the meeting online at azdot.gov/i10baseline and provide your input through May 23.

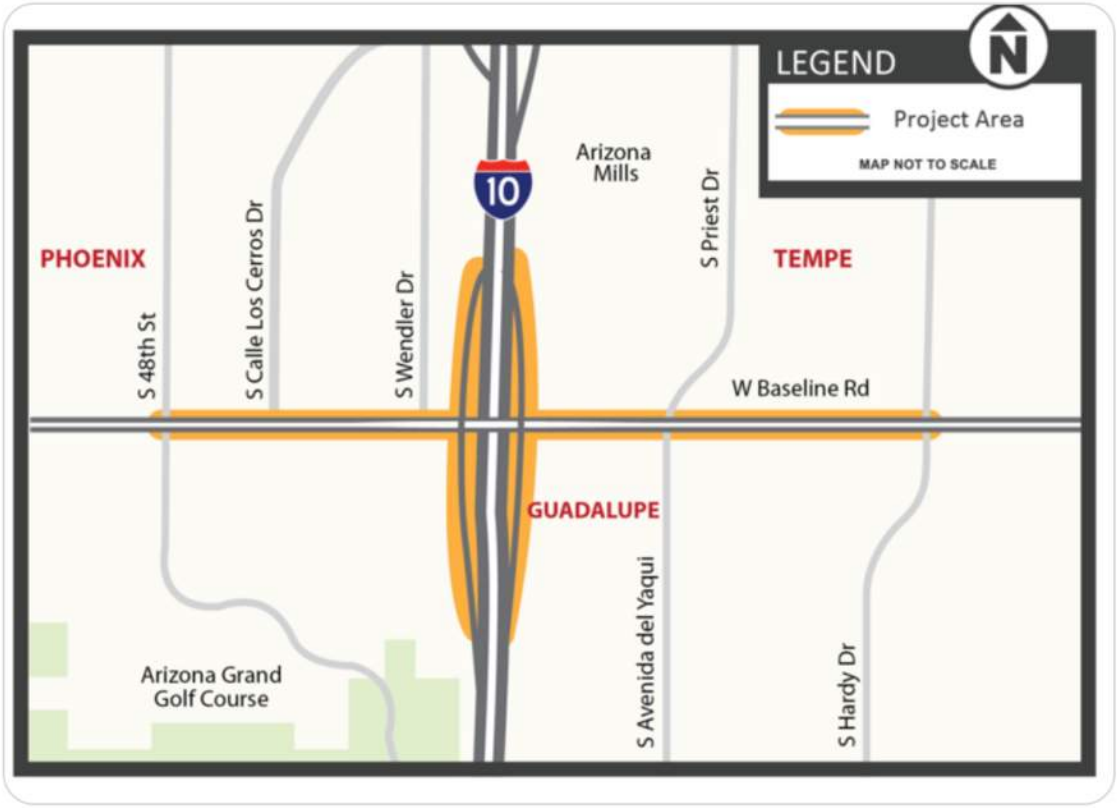
1:37 PM · May 12, 2023 · **5,888** Views

2 Retweets **3** Likes

← **Tweet**

Arizona DOT
@ArizonaDOT

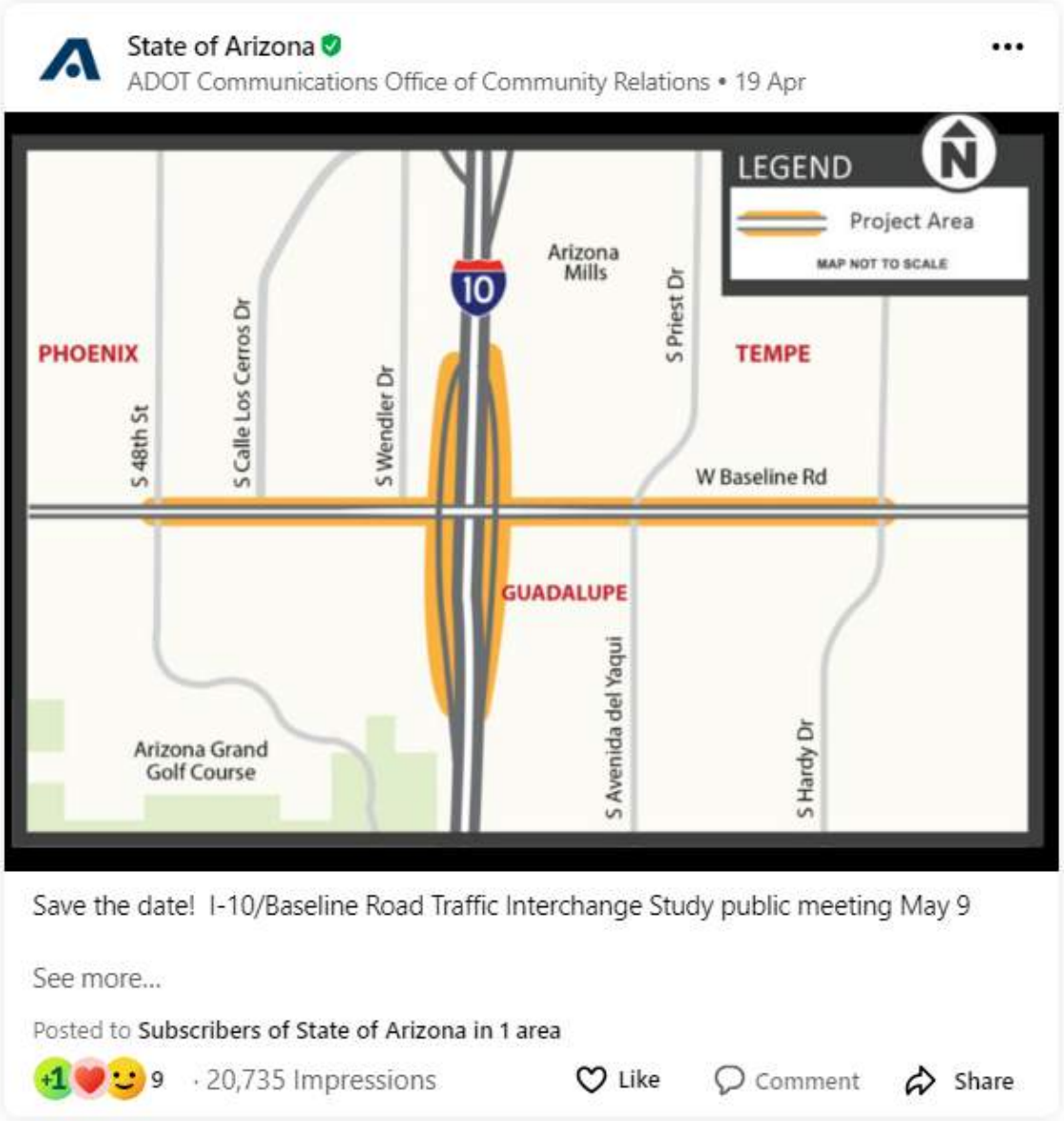
ADOT is seeking public input as it evaluates potential improvements to address the traffic flow and safety at the I-10/Baseline Road interchange near the cities of Tempe, Phoenix and Guadalupe. Learn more and provide comments through tomorrow, May 23 at azdot.gov/i10baseline.

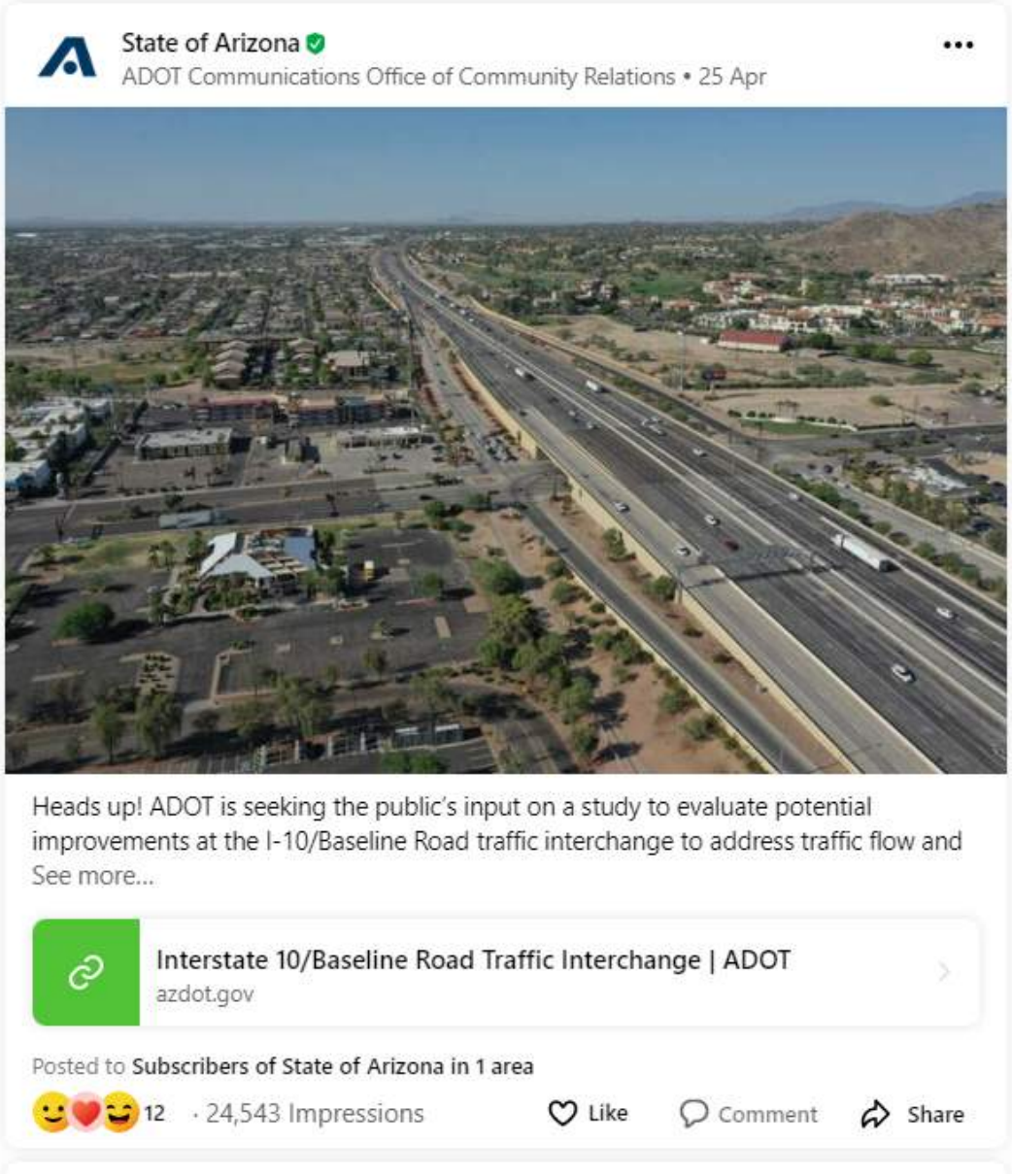


7:37 PM · May 22, 2023 · **8,132** Views

5 Retweets **7** Likes **2** Bookmarks

NextDoor


State of Arizona
ADOT Communications Office of Community Relations • 19 Apr
LEGEND
Project Area
MAP NOT TO SCALE
N
10
Arizona Mills
S Priest Dr
PHOENIX
TEMPE
S 48th St
S Calle Los Cerros Dr
S Wendler Dr
W Baseline Rd
GUADALUPE
S Avenida del Yaqui
S Hardy Dr
Arizona Grand Golf Course
Save the date! I-10/Baseline Road Traffic Interchange Study public meeting May 9
See more...
Posted to Subscribers of State of Arizona in 1 area
9 · 20,735 Impressions
Like
Comment
Share


State of Arizona
ADOT Communications Office of Community Relations • 25 Apr
Heads up! ADOT is seeking the public's input on a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and
See more...
Interstate 10/Baseline Road Traffic Interchange | ADOT
azdot.gov
Posted to Subscribers of State of Arizona in 1 area
12
· 24,543 Impressions
Like
Comment
Share

State of Arizona
ADOT Communications Office of Community Relations • 3 May

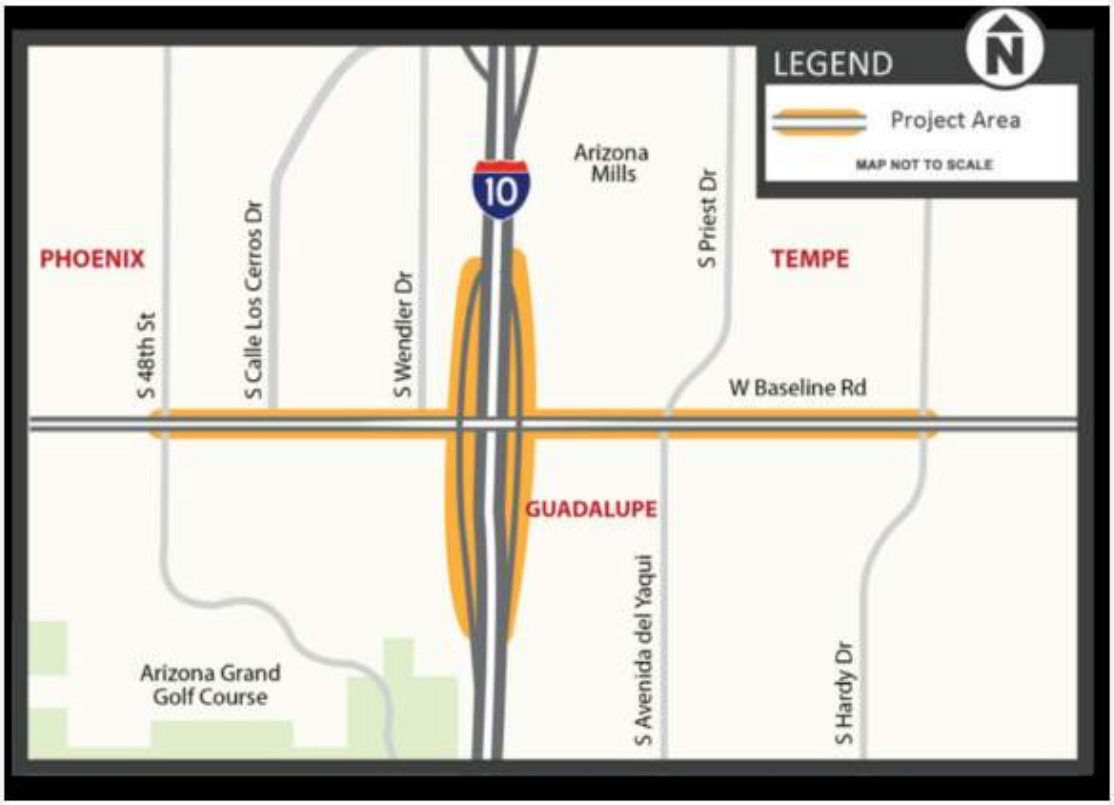
Do you use the I-10/Baseline Interchange? ADOT is hosting a virtual public meeting May 9 at 6 p.m. for the current study of potential improvements to traffic flow and See more...

Interstate 10 / Baseline Road Traffic Interchange | Department ...
azdot.gov

Posted to Subscribers of State of Arizona in 1 area

8 · 25,163 Impressions Like Comment Share

State of Arizona
ADOT Communications Office of Community Relations • 8 May



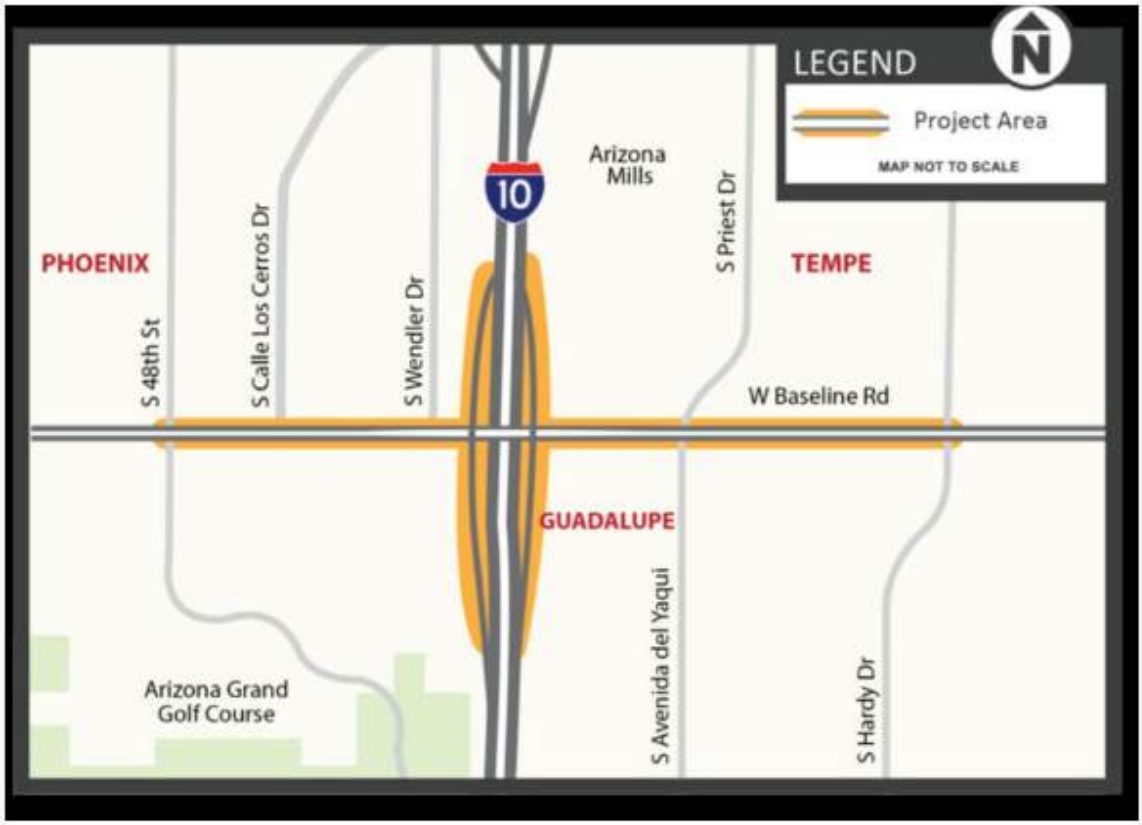
Reminder: ADOT hosting virtual public meeting tomorrow, May 9 to seek public input on improvements to the I-10/Baseline Road Traffic Interchange
See more...

Interstate 10 / Baseline Road Traffic Interchange | Department ...
azdot.gov

Posted to Subscribers of State of Arizona in 1 area

16 · 46,478 Impressions Like Comment Share

State of Arizona
ADOT Communications Office of Community Relations • 16 May

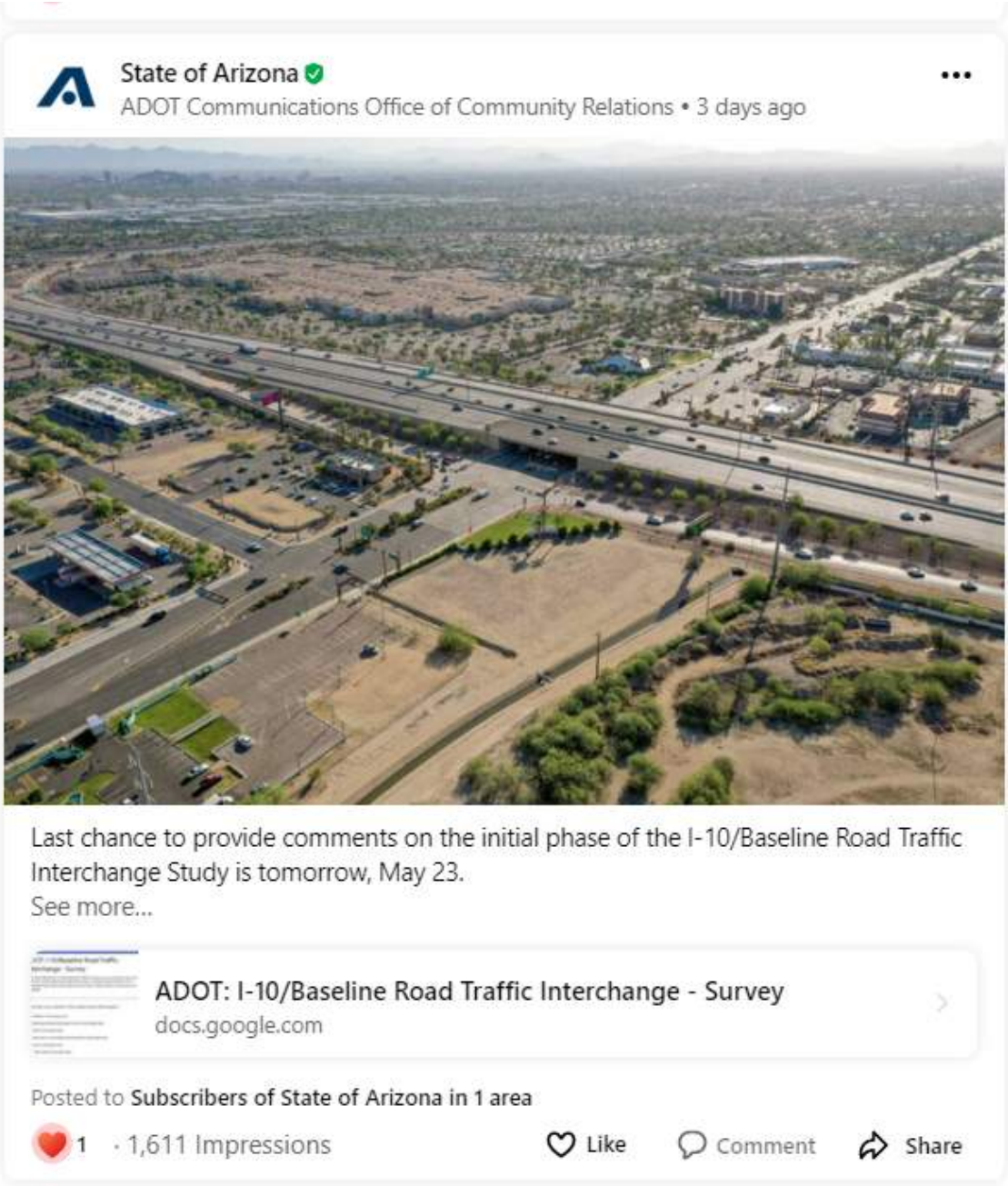


Missed our public meeting for the I-10/Baseline Road Traffic Interchange Study? View the presentation and provide your comments online to help us evaluate how we can
See more...

Interstate 10 / Baseline Road Traffic Interchange | Department ...
azdot.gov

Posted to Subscribers of State of Arizona in 1 area

4 · 16,989 Impressions Like Comment Share


State of Arizona
ADOT Communications Office of Community Relations • 3 days ago
Last chance to provide comments on the initial phase of the I-10/Baseline Road Traffic Interchange Study is tomorrow, May 23.
See more...
ADOT: I-10/Baseline Road Traffic Interchange - Survey
docs.google.com
Posted to Subscribers of State of Arizona in 1 area
1 · 1,611 Impressions
Like
Comment
Share

Stakeholder Outreach Emails

Hello,

The Arizona Department of Transportation would like to ensure that you have the information included below on an upcoming virtual public meeting for a study on the I-10/Baseline Road Interchange. Please let me know if you have any questions.

Nancy Becerra
Community Relations Project Manager
1655 W. Jackson St.
Phoenix, AZ 85007
623.695.7411
azdot.gov

ADOT | Arizona Department of Transportation

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3537d34

ADOT

SHARE

https://mail.google.com/mail/u/0/?ik=69df00cbab&view=pt&search=all&permmsgid=msg-a:r4777235175784460896&simpl=msg-a:r477723517578446… 1/3

5/25/23, 4:46 PM State of Arizona Mail - Fwd: Join ADOT for I-10/Baseline Road Traffic Interchange Study public meeting May 9

Join ADOT for I-10/Baseline Road Traffic Interchange Study public meeting May 9

ADOT will hold a virtual public meeting on May 9 to seek the public's input for a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety.

The virtual public meeting will be held:

- **Tuesday, May 9, from 6 – 7:30 p.m.**
- Online (Zoom): https://tinyurl.com/ycy8ykvw
  Meeting ID: 849 4976 3354
  English call-in number: 669.900.6833
  Spanish call in number: 866.730.7514, pin: 984619#

The meeting will include a presentation by the project team, followed by an opportunity for questions and comments from attendees. Following the meeting, a recording of the presentation will be available on the project website at azdot.gov/i10baseline.

ADOT is considering making improvements to the existing diamond interchange at Baseline Road and I-10. The public's input will be considered in the study of potential design options. Comments on the current study phase are being accepted through **May 23**, in the following ways:

- **By completing an online survey at:** http://tinyurl.com/yv6vwbst
- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

Hello,

Don't forget to join ADOT's virtual public meeting tomorrow, May 9 about potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety. More information included below and on the project website at azdot.gov/i10baseline.

Nancy Becerra
Community Relations Project Manager
1655 W. Jackson St.
Phoenix, AZ 85007
623.695.7411
azdot.gov
ADOT | Arizona Department of Transportation

---------- Forwarded message ---------
From: **Arizona Department of Transportation** <adot@info.azdot.gov>
Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/358f6bd

ADOT

SHARE

Reminder: ADOT hosting virtual public meeting tomorrow, May 9 to seek public input on improvements to the I-10/Baseline Road Traffic Interchange

ADOT will hold a virtual public meeting tomorrow, May 9, to seek the public's input for a study to evaluate potential improvements at the I-10/Baseline Road traffic interchange to address traffic flow and safety.

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- **By mail:** ADOT Community Relations 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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Nancy Becerra
Community Relations Project Manager
1655 W. Jackson St.
Phoenix, AZ 85007
623.695.7411
azdot.gov
ADOT | Arizona Department of Transportation

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From: **Arizona Department of Transportation** <adot@info.azdot.gov>
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ADOT

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  Spanish call-in number: 866.730.7514, pin: 984619#

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- **By phone:** 855.712.8530 (English/Spanish)
- **By email:** ngbecerra@azdot.gov
- **By mail:** ADOT Community Relations 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

Mailer (Bilingual)

Project Scoping Meeting Information (Mandarin/Simplified Chinese)

Chinese Translation

10 号州际公路/基线道路交通立交桥项目研讨

特此邀请!

虚拟公开会议

2023 年 5 月 9 日星期二下午 6 - 7:30

当前，亚利桑那州交通部 (ADOT) 正在拟订《设计概念报告》及筹划环境研究工作，以评估 Tempe 和 Phoenix 市与 Guadalupe 镇附近的 I-10/基线道路交通立交桥改造项目，在此恳请您提出宝贵意见。

如何参加

线上 (Zoom): https://tinyurl.com/ycy8ykvw

会议编号: 849 4976 3354

电话: 669.900.6833（英语）

会议结束后，我们会在 azdot.gov/i10baseline 发布演示文稿，您也可通过所列联系方式索取打印文本。会议结束后，我们会在 azdot.gov/i10baseline 发布演示文稿，您也可通过所列联系方式索取打印文本。

当前，亚利桑那州交通部正在拟订《设计概念报告》及筹划环境研究工作，研究这条立交桥多模式交通流和安全性的潜在改进措施，同时还将确定和评估这条立交桥的潜在重建设计方案，并推荐首选设计概念。

5 月 9 日拟召开的范围界定公开会议旨在介绍潜在改造项目的相关信息，并征询公众对拟议项目的意见。

届时，项目团队人员将进行虚拟演示，之后会解答相关问题，并听取与会人员的意见。

我们会在研究潜在替代方案时考虑公众意见。

恳请您提出宝贵意见!

公众可在 2023 年 5 月 23 日前通过如下方式对现阶段研究工作提出意见：

线上: http://tinyurl.com/yv6vwbst

电话: 855.712.8530（英语/西班牙语）

电邮: ngbecerra@azdot.gov

邮寄地址: ADOT Community Relations

1655 W. Jackson Street, MD126F Phoenix, AZ 85007

项目区域

地图未按比例绘制

I 10/Baseline Road Traffic Interchange Map

根据《1964 年民权法案》第六章、《美国残疾人法案》(ADA) 及其他禁止歧视法律法规的规定，亚利桑那州交通部 (ADOT) 不会因种族、肤色、民族血统、性别、年龄或残疾等因素而歧视任何人。

出于语言或残疾原因而需要合理便利条件的人员，可致电 623.695.7411 或电邮至 NGBecerra@azdot.gov 联系 Nancy Becerra。

请尽早提出申请，以便州政府有时间做出相关便利安排。

ADOT TRACS No. F0523 01L

Appendix D
News Articles

News Articles

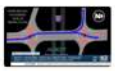
ABC 15

NEWS > OPERATION SAFE ROADS

ADOT looking for feedback on possible interchange changes near I-10 at Baseline Road

Meeting to be held Tuesday, May 9

On Tuesday night, the Arizona Department of Transportation is looking for drivers to share their opinion on creating a new interchange design at Interstate 10 and Baseline Road.



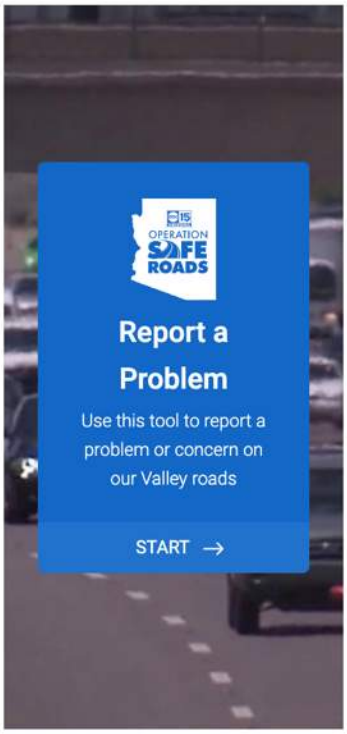
By: Megan Thompson

Posted at 5:27 AM, May 09, 2023 and last updated 5:54 AM, May 09, 2023

On Tuesday night, the Arizona Department of Transportation is looking for drivers to share their opinion on creating a new interchange design at Interstate 10 and Baseline Road.

They are looking to see if they should make improvements to the existing interchange or if it should be transformed.

Back in May 2020, the Maricopa Association of Governments conducted its own study and identified two design alternatives to improve traffic conditions: a Tight Diamond Interchange, known as a TDI, and a Diverging Diamond Interchange, known as a DDI.



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Drivers are likely used to seeing a TDI. ADOT describes it as when the ramps between the interstate and crossroad form a diamond. Drivers get off the freeway, then merge with other traffic on the frontage road, and then turn in either direction or continue straight.

As for a DDI, ADOT said it is relatively new and not as common. Drivers can find this type of interchange near I-17 and Happy Valley Road.

It seems strange because it will temporarily transition drivers to the opposite side of the road and will allow through traffic and left-turning traffic to proceed through the interchange at the same time.

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ADOT states the following areas where DDIs are most successful in improving safety and traffic flow:

- High volumes of left-turn traffic on and off of freeway ramps
- Left-turn-related safety challenges
- Moderate and unbalanced crossroad traffic through the interchange4
- Need for additional capacity without widening

ADOT will host a virtual meeting Tuesday from 6-7:30 p.m.

Commuters can log on online or call in with presentations in both English and Spanish.

Here is the information from the agency on participation:

- *Access the meeting online at: tinyurl.com/ycy8ykvw. The meeting ID number is: 849 4976 3354.*
- *Access the meeting by phone: In English call 669-900-6833. In Spanish call 866-730-7514 (Pin Number is 984619#)*

The meeting will include a presentation by the project team, followed by an opportunity for participants to ask questions and provide comments. A recording of the presentation will be posted to the study website for those unable to attend.

Comments on the current study phase are being accepted through May 23. An online survey is available at tinyurl.com/yv6vwbst.

For more information about the study and other methods to provide comments, visit the study website at azdot.gov/i10baseline.

Have a road issue or a question for the Operation Safe Roads team? Call 833-AZ-ROADS or email roads@abc15.com.

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AZFamily (3TV/CBS 5)

ADOT to host meeting on possible improvements to the I-10 near Arizona Mills mall

The meeting will start with a presentation by ADOT, followed by a question and answer period. (WILX)

By Dani Birzer

Published: May. 9, 2023 at 10:18 AM MST

TEMPE, AZ (3TV/CBS 5) - The Arizona Department of Transportation is hosting a public meeting about the heavily trafficked interchange in the East Valley on Tuesday night.

ADOT officials are expected to host a presentation on the traffic challenges and possible improvements on the stretch of I-10 near Baseline Road. Traffic engineers are specifically evaluating to see if the diamond interchange should be improved or whether it should be reconstructed into a diverging diamond pattern.

ADOT shared a photo of where traffic would be affected. (ADOT)

A meeting will be held virtually at this link from 6 p.m. until 7:30 p.m. on May 9th The meeting number for the Zoom meeting is 849 4976 3354, with the English call-in number at 669-900-6833 and the Spanish call-in number at 866-730-7514. The pin number is 984619#.

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Comments on the project will be accepted from Tuesday until May 23 in an online survey, by phone at 855.712.8530, by email at ngbecerra@azdot.gov, or by mail to the ADOT Community Relations at 1655 W. Jackson Street, MD126F, Phoenix, AZ 85007.

Can't make it to the meeting but still want to watch? Check back after the meeting for the recording here on the ADOT website.

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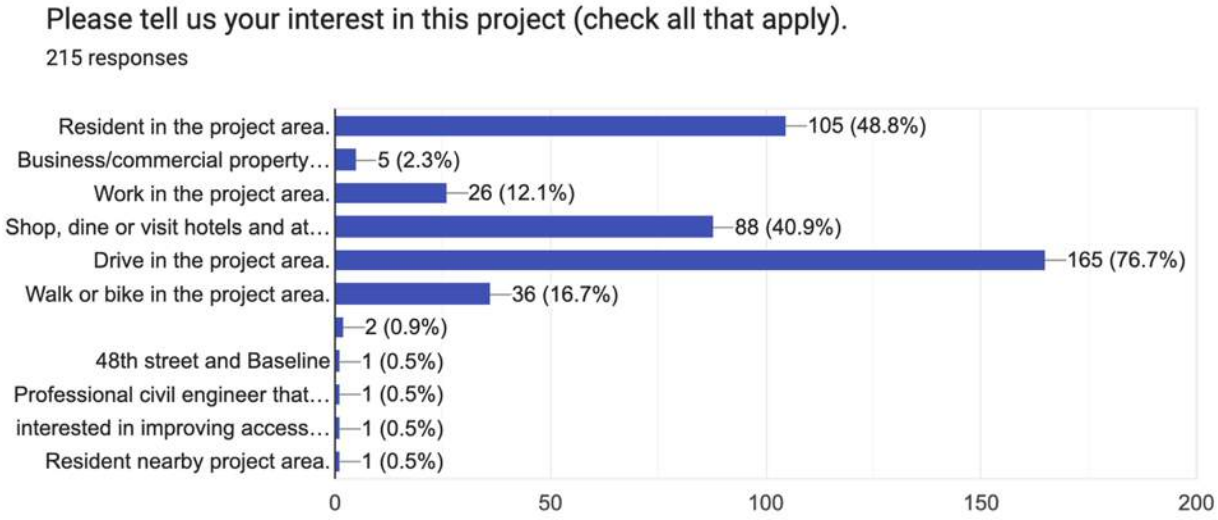
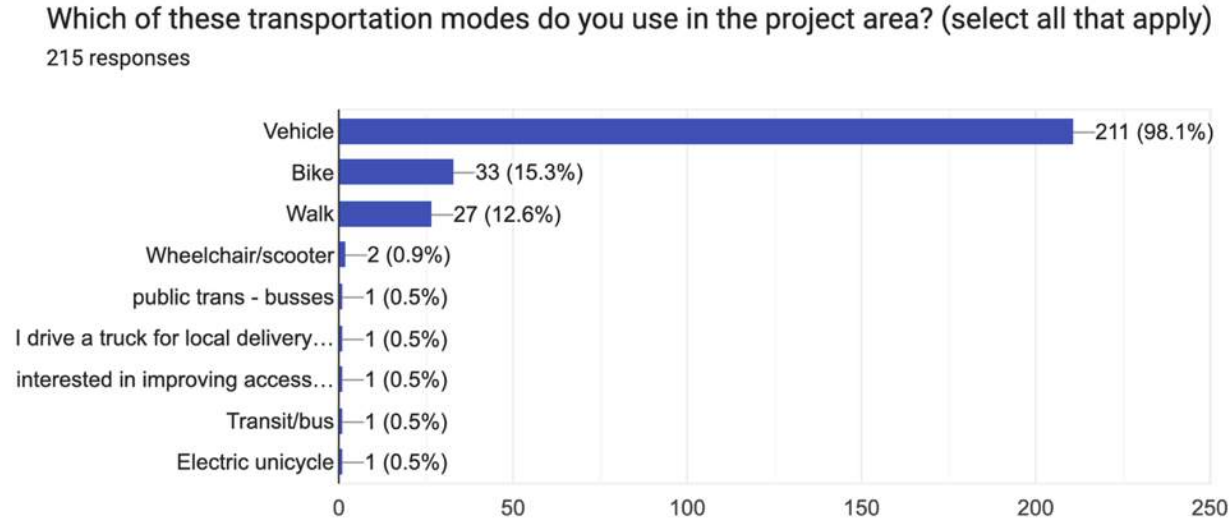
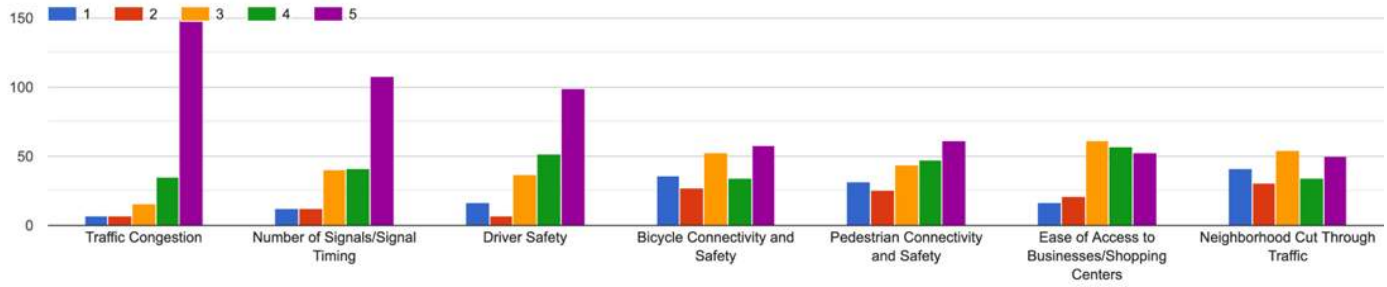
Appendix E
Public Questions and Comments

Online Survey Questions and Comments



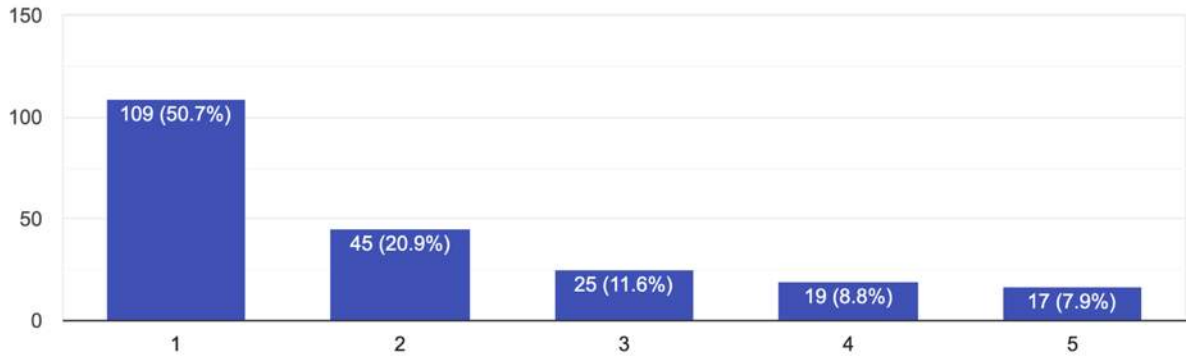


Please tell us your level of concern related to the existing I-10/Baseline Road traffic interchange and the surrounding project area? (with 1 being Not At All Concerned and 5 being Extremely Concerned)



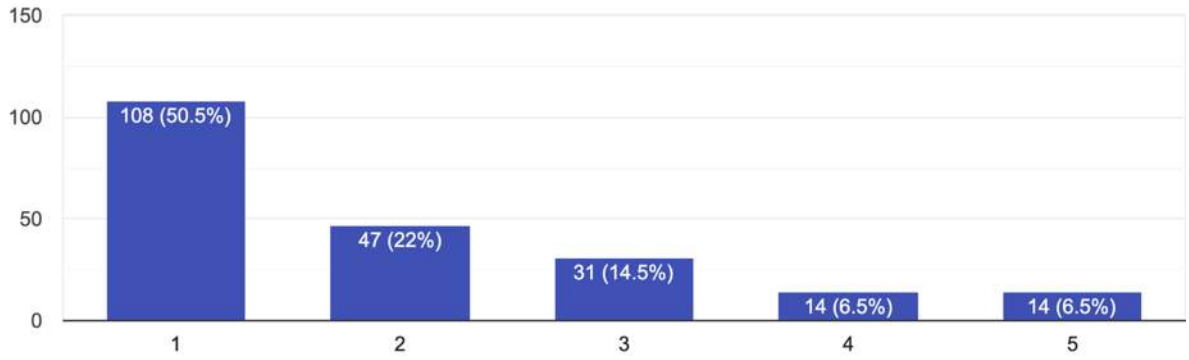
How often do you access Baseline Road from Calle los Cerros Drive?

215 responses



How often do you access Calle los Cerros Drive from Baseline Road?

214 responses



What other suggestions or input do you have for the study team regarding this traffic interchange/intersection?

1) Was this not modeled and scoped as part of the Broadway Curve project? 2) What about ingress/egress into AZ Mills? 3) Are large roundabout/rotaries/etc appropriate for any of these intersections?
48th street has been torn-up for 2 years, and is used as a detour which make the route very time consuming to the degree of a typical 20 minute commute over an hour when used as an alternate to a freeway closure. Also the striping at the intersection of 48th street and Baseline have been un legible for over two years and I have seen accidents as a result. I think Adot has done a very pour job of informing the public
Add additional turning lanes from EB Baseline to EB I-10
Add another lane and lengthen the light going eastbound
All of the major issues are outside of ADOT's ROW. The number of traffic signals on either side of the I-10 are insane. Tempe capitulating to commercial development compliance run amok - all done without any common sense towards the proper timing of the signals to work in conjunction with each other. The one thing ADOT could do to alleviate some of the traffic is to find a way to connect Southern Avenue to I-10, being able to add that connection would pull some traffic away from Baseline. Knowing that this study is focused on a TI redesign, the DDI would be the more desired interchange, because it would move the volume (current and future) more freely than the current TI or a TDI.
Also please fix the I-10 and Warner road interchange. This interchange is way worse it's a nightmare. Most days trying to make a left onto I-10 from west bound Warner is 4 or 5 lights long and people are cutting in. Road rage is real at this interchange. Please, Please spend some time at this interchange as well.
Any new traffic flow design has to be an improvement. The timing of the lights is horrible at times. As a side, the homeless people begging for money has to stop.

As homeowners within the adjacent Pointe South Mountain community, we are highly concerned about negative impacts due to an expanded roadway footprint for the proposed Diverging Diamond Interchange (DDI) design. Having listened to the introductory Zoom meeting on 5/9/23 and read related materials, at this point we would not support this Diverging Diamond design as it may negatively impact the 800+ homeowners in our community. Added traffic noise due to the added roadway footprint and the increased proximity of them to the AZ Grande resort and our adjacent Residential community near 48th street and Baseline would negatively impact out property values and our ability to peacefully enjoy outdoor activities without increased noise and traffic. Illustrations show proposed new roadways that would have an expanded footprint with an undetermined and unspecified impact on homeowners and the impacted resort/golf course. in addition to these impacts, we believe the proposed Diverging Diamond design will not be effective or well-accepted by motorists, instead creating more confusion and traffic snarls than more traditional designs. As noted, this traffic area directly impacts different municipalities (Tempe, Phoenix, Guadalupe) where this design is not utilized elsewhere and will lead to increased confusion. This area is also in the direct center of the Phoenix metro area with a very high proportion of transient and winter visitors who have no familiarity with this Diverging Diamond design. While full-time AZ residents 'joke' about the negative traffic impacts from confused snow bird visitors, the negative safety and traffic impact from this large group of part-year AZ drivers who are completely unfamiliar with the DDI concept can't be underestimated. I cannot imagine the confusion of them trying to enter the expanded north (west) bound I-10 freeway while traveling eastbound on Baseline Road, dodging free-flowing motorists who have just exited south (east) bound I-10 to travel east on Baseline. Likewise, morning commuters attempting this 'dance' of lanes during rush hour while squinting into the rising sun on the horizon does not sound safe or well-considered. At a time when we already struggle with fatalities caused by wrong-way drivers and see confused AZ motorists who just 'stop' in the middle of roadways, this design is asking for more problems than it solves. While we applaud improved roadways and maintenance, and appreciate seeking public input on this matter, we believe this study and project should wait until after the completion of the I-10 Broadway Curve project in 2024. At that time, new traffic patterns and counts can be best understood, and time, money and other resources can be best utilized to understand the best routes forward for the Baseline project.
As I said in traffic which is daily taking two and three light cycles to get through an intersection can't help but notice that the light cycles seem to be working against each other. While one light may be green the others are red defeating the purpose of a green light.
Based on available information, I would support the Diverging Diamond Interchange design for this interchange. Frankly, I am stunned this project was not included in the broader Broadway Curve project. Regardless, that is water under the bridge at this point and the capacity problems remain. It is my view that the Diverging Diamond Interchange design would do a better job at handling the congestion.
Baseline eastbound leading up to accessing I-10 onramp heading eastbound

Baseline Road is absolutely nuts. It takes me 10 or more minutes to go 1 mile. Why doesn't the city consider adding an access point to the freeway at Southern? When heading east, there should be more than one lane that can get over to the 60. It only becomes two lanes at the very end right before you get on the freeway. This causes such crazy backups. I often drive past the 10 and do a U turn at the Mills and then get on the freeway because it's much faster than waiting in the crazy long line to get on the 10 to the 60.
Better light timing east of the 10. I feel that I'm constantly stopping at lights between Hardy and the 10 - also exploring bringing the light rail to the area!
Bike lanes. Improvement to light timing.
Broadway and 52nd St intersection is a nightmare. Especially in the afternoon.
Can stop lights be programmed to move traffic more efficiently?
Certainly interested in hearing about how the I-10/Baseline intersections will be improved - it doesn't work well and is hazardous already, especially going west with the exit 154 traffic merging in to get to 60 East, and then having to merge into the very cramped freeway with a 2 lane ramp and short abrupt yield. Diverging diamond seems to be quite good and an intriguing solution - however, whatever is needed to make things work. There's definitely room that can be made on those four corners to make a wider, safer interchange work.
Check traffic signals and lights at night!!
Coming off of the I-10 East offramp it can be very hard to see incoming traffic from the corner and traffic moves extremely fast in this area making for a risk of vehicles pulling out in front of others. I have seen this occur many times.
Coming up baseline ramp to i10 or 60
Congestion homeless pan handling traffic lights timing
Coordination with Phoenix and Tempe to time traffic signals better to improve the congestion, especially during peak shopping weekends.
Currently there are too many stops at red traffic signals, and traffic blocking intersections because they don't want to leave a gap and be forced to weight for another light cycle. Also, traffic exiting the I-10 don't stop when making right turns onto Baseline Rd, putting pedestrians and cyclists in danger!
Dedicated turn lanes to mitigate bottlenecking. It’s usually not the traffic but merely the poor design of moving it that creates bottlenecks, which people call traffic.
Divergent diamond, please!
Diverging Diamond Interchange would help traffic flow in all directions.
Diverging Diamond or direct fly over ramps to access the Arizona Mills Outlet Mall or Arizona Grand Hotel without needing to use Baseline Rd.
Diverging diamond would likely be an improvement as freeway access is what leads to much of the congestion, as well as being a point of access to the South Mountain area south of Baseline Road. Business access is the other part of the equation that may be harder to solve due to limited space. In general it seems that the traffic flow is currently chaotic and makes the intersection a bit dicey.
Divert I-10 detours to Kyrene not through Avenida del Yaqui
efficient entry to I10 west (north) [to US 60) from the west on baseline. In particular inefficient traffic signaling.

Eliminate traffic signals on Baseline if possible. Traffic yield/merging for right turns is better, and stop signals only for left turns.
expedite asap. it has been put off way to long
From Baseline Rd to US 60 on ramp, there should be a dedicated lane for US 60 versus the current configuration.
Hello. I am a professional civil engineer that has noticed the problems with the current configuration at this particular interchange especially during the evening rush. May I suggest also studying using either "Michigan Left Turns" along Baseline Road OR using a "Single Point Urban Interchange (SPUI)". Michigan Lefts are currently being used in Tucson with great success and has improved traffic flow at key intersections by eliminating left turns. The traffic wanting to turn left onto I-10 would have to use the Michigan Left, but the traffic coming off the interstate could still make their left turn. SPUI's are a great alternative that increases capacity for large volume of vehicles with one traffic signal thereby reducing overall traffic delays and congestion. A diverging diamond interchange (DDI) is also a great possibility and will be very efficient. However there are too many traffic signals nearby (east and west of the interchange) that will cause the DDI to eventually fail as seen with other DDI's across the nation in heavily developed areas. Hope that provides some input and am looking forward to the final constructed product one day. Thank you. C
Highland canal is conspicuously divided by the freeway. Would be safer to underpass through canal than to merge on to Baseline road to travel East or West.
How do you get to the multipurpose bridge being built over I10 to Arizona Mills? There doesn't seem to be any easy access without having to deal with tons of traffic? Will there be bike lanes? Better crossing points?
I am a frequent mountain biker and it is tedious to say the least navigating the vehicular traffic to get into the South Mountain park trails
I am concerned for the safety of all road users. I don't feel safe riding my bike or walking down Baseline because of all the speeding cars. What are you doing for those people outside of cars?
I avoid Baseline Road at this intersection as the traffic is too congested
I do not recommend putting in a diverging diamond intersection. The simpler, the better. If you could make it like the 101/Guadalupe interchange/intersection, that would be better in my opinion.
I dread driving in that area because it is always SO congested and there are way too many traffic lights. Please don't add any more lights to that area of Baseline. Also, I think they need to be timed better so traffic flows better. It would be great if there was a way to somehow create a street behind In & Out Burger and Starbucks (to the south of them) so there can be access off of 48th street instead of those businesses creating even more congestion on Baseline. It's just a terrible area in general for traffic.
I hope the analysis considers the maintenance of traffic flow E-W along Baseline Rd, as well as the freeway access needs. Baseline is a major arterial for commuting across the Valley, which has experienced growth in traffic volumes since Phoenix has widened it and develops have been constructed. There are many traffic signals near the interchange that serve adjacent businesses, yet they interrupt through traffic flow. Signal timing has improved recently - Thank you Tempe! Hopefully Phoenix can coordinate too when construction at 48th is complete. Pedestrians often walk from the resort to the mall and restaurants, so please analyze the pedestrian options, as well as bikes and scooters. Lighting in the area would be important for safety. When traffic backs up (on the west side of the TI), vehicles tend to cut through the neighborhoods, seeking alternative routes, so alleviating the congestion around the interchange will be greatly appreciated. Looking forward to seeing the results of the analysis. Thank you!
I leave it to the professionals, and hope that the result turns out better than having the westside 202 adjoining I-10 east of the 303, which during snowbird season evening rush hour is a driving disaster.

I like the Diverging Diamond
I personally think I'd be more in favor of a DDI over moderate improvement to the existing TDI. I have no issues with any businesses/land that needs to be purchased and torn down to support the work. My only concern with a DDI is drunk or reckless drivers who might get messed up and go the wrong way. I have experienced a DDI intersection a few times and it is a little disorienting the first few times, but otherwise, I liked it.
I prefer Diverging Diamond Interchange (DDI). I've driven through several of this type of interchange and they seem to be a great balance of traffic flow and safety. I especially like that the left turns do not cross moving on coming traffic.
I prefer the Diverging interchange method over the current diamond method
I saw in MAG 2040 plan to put in a diverging diamond interchange, and I liked the design, so my suggest is to use the diverging diamond. thanks
I think a diverging diamond interchange would be the best for this area because of the amount of people taking left turns onto baseline from I-10 as well as taking a left turn to get from baseline onto the I-10.
I think the best solution given the available space is to flip the Baseline traffic. And, if it helps, that flip could happen at Priest on the east and at either Arizona Grand Pkwy or S Calle Los Cerros Dr on the west. In order for traffic to flow the lights at the intersections of S Wendler Dr and Baseline, and Arizona Mills S and Baseline, must be eliminated as if those intersections didn't exist along Baseline. If there was a way to tie the east bound I-10 exit to Baseline with S Wendler Dr so there is only one intersection with Baseline I think that would help also.
I think the new option for better flow and turning left - would be good.
I work on Baseline on the west side of the interchange and live on baseline on the east side of the interchange at Hardy. I'd like to see if there's some way to improve the throughput of through-traffic through the interchange, i.e. those not getting on the 10 east- or -westbound. 90% of my sometimes 30-minute commute home is sitting in traffic eastbound from 44th all the way up to the interchange, then a two minute drive after going under the interchange to get home. I counted a few years ago and there's something like 10 lights in the two miles between 48/baseline and hardy/baseline.
I'm curious on the impact for pedestrians specifically, and how any construction/changes would impact the surrounding area.
Improve signal timing through the area, add lanes to baseline, reduce number of signals if possible, stop vehicles from stopping in intersection and blocking cross traffic when the signal changes.
Improvements have been long overdue.
interested in improving South Mtn CC access for pedestrians. Maybe micro transit would work like WeRide in Avondale or Chandler Flex. Maybe a frequent circulating shuttle across the interchange/intersection to bridge the unfriendly pedestrian environment.
Is study premature to occur before the Broadway Curve CD road installation?
It would be nice if there were only a singular project going on at one time, ALL THESE projects happening at the SAMETIME lead to some serious back ups. Why is the project on 48th and Baseline taking so damn long?
It’s a harrowing experience getting on I-10 from Baseline. Anything that can be done to improve traffic flow and safety is much appreciated.

Just keep us in the loop as you have been doing. The intersection of I10 & Baseline rd. We do need no turn light on the north off ramp, people basically run the red lights. Traffic coming off the I10 going west onto Baseline on the east side of the underpass. Intersection from that area plugs up the road, sometimes to the point of no one can move & traffic in blocking the whole intersection..does not matter if its during heavy traffic on not. Having a meeting with the people that live in the area again, not just city wide. We are the ones that have to deal with this. Back in 2017 we brought this issue up at the meeting in Guadalupe, still waiting to have answers on this..:(Having said all this, I do appreciate that you are keeping us informed on what is going on. I am on your mailing list & forward all your emails to my email list. :)
Just wanted to comment on the diverging diamond. When I stayed in Springfield Missouri, I noticed that drivers who had lived there for years still had a hard time with it. People avoided it and congested other intersections instead. Semi trucks often jammed the intersection because it wasn't big enough and they just weren't familiar. It seems like a great way to reduce wrong way drivers in theory, but in practice, the cost of training drivers in a trial by fire might not be worth it.
Leave the interchange alone. Traffic is not going to get better with a redesign and it will only get worse while under construction. There are establishments that exist and they should not be destroyed impacted by unnecessary construction. A new interchange will only cost income and cause delays. There is no long term solution because the area was designed on a grid where the mountain comes down. It will always be a chokehold. Leave it alone.
Less traffic lights (consider removing intersections at old Frys and Arizona Grand Parkway, smarter traffic control (timing, sensors, etc.), protected left turns at all times of day, dedicated right turn lanes for business access and intersections, dedicated bus stop pullouts, expedite construction completion on 48th street south, no blocking intersection markings at 48th Street and to intersections east and west of I10, and dedicated turn lanes from Baseline onto I10 south.
Loss of area business access and sales.
Make provisions for continuous monitoring of signal timing/frequency to maximize traffic flow
Might be helpful to better understand the coordination of the Curve and the Baseline projects and how they with intersect.
minimize side streets and traffic signals. consider more modern connections (roundabout, double diamond, etc.)
More bike friendly better signals
My main concern is the level at which this scar grows -- it increases noise, congestion and pollution. And I believe it is well studied that such projects do not alleviate freeway congestion in the long term. I understand the interchange is critical, but there is also an increasing impact on businesses and homeowners as the already large and noisy highways continue to grow and encroach on property.
My question through the Q and A was whether a DDI will impact existing homes and/or businesses. I can't give a definitive "vote" on this until I know whether it will impact my home or my friends' homes. In any case, the fact that the team did not seem to have any clear picture of the extended footprint definitely spooks me.
Need more access to the freeway going southbound on I-10. Baseline traffic is horrible getting on the freeway right there due to the freeway traffic, surrounding businesses and AZ Mills mall.
Need more focus on lane division painting lines and uneven surface and bumps on new sections
No improvements needed in the project area at this time.
no other needs
None
None

Option needs to funnel traffic more efficiently at the intersection and eliminate homeless from hanging out in the median under the I-10 bridge.
Part of the traffic congestion is caused by the stop signs on 48th street just south of Baseline. If 48th did not have the stop signs but the small cross streets did then traffic would flow more smoothly.
Placing the grid X to not block intersection. Better timing of signals to flow traffic through intersection to minimize over-stack up at stop lights.
Planning for this project has been a fiasco since the first public hearing, typical for ADOT. The scope to do everywhere at the same time was a total brainfart. Sequence, so you can throw all your labor in a concentrated effort, minimizing traffic having to deal with miles of detours.
Please convert to a Diverging Diamond Interchange for I-10 & Baseline. It worked in Reno
Please do not create 1 of those wacky pretzel on/off ramps like you have on new S Mt 202. These are ripe for wrong way drivers and accidents
Please do not make it difficult to access the ramps. (The ramp to take the northbound 143 from westbound I-10 is difficult and dangerous.) Also, please try to alleviate the traffic backup of exiting vehicles which can lead to rear end collisions.
Please limit work to non-rush hour timeframes. There is no need for that kind of congestion and pollution and FRUSTRATION that comes from having Baseline reduced to one-lane during rush-hour. In addition, please make sure than the only other I-10 onramp alternative, Broadway Road, is CONSTRUCTION FREE. Please don't make it impossible to get on the I-10!
Please look into the amount of crashes at other DDIs in AZ and the USA. I would strongly consider an improved TDI at this intersection due to not having a lot of space and it doesn't need a learning curve. Many drivers travel at high rates of speed through this area, ignoring or not seeing traffic lights. While a DDI has less cross points for traffic and could force people to slow down, that's under the assumption that they use it correctly. Depending on the day and time, it seems like many drivers use Baseline as a race track while they're angry or under the influence. Comparing to traffic circles where that assumption was it was safer and that traffic would keep moving - I've nearly been rear ended multiple times for yielding to traffic, nearly side swiped, and seen people drive the wrong way. I can see someone who refuses to read materials related to how to drive through a DDI, is angry, or is under the influence causing crashes. I like the idea of improving the TDI to have less traffic lights. Right now, I see people stopping for green lights, blasting through reds, and not thinking/caring that there would be cyclists/pedestrians. Or not being able to see them past the cars. Also, when you're traveling on Baseline from either direction to turn right onto I-10 to go north or south, there is a dual turn lane. Everyone assumes only the right most lane turns and they turn wide. I've seen many near misses because of this.
Please prioritize pedestrian and cyclist safety.
Please provide for safe bicycle access east west. I'm very glad you're considering improvements. It's a very congested area many times, and for those of us that live west on Baseline there is little we can do to get east or south and vice versa. (At times we do use the cut through from 46th street or take 48th street south rather than I-10.) Happy to talk more if you want to call me.
Please review a diverging diamond like 74th Avenue in Sun City. Also study/survey the area for extending the crossover point further east and west to remove some of the driveway conflicting points; thus making the near side on ramps an against flow ramp that would need a mini physical buffer.
Protected bike lanes and features that promote alternative transportation

Provide protected bike lanes on street and/or separated multi-use paths both of which will (hopefully) enhance safety for bicyclists and in the case of multi-use path, enhance safety for pedestrians.
Providing additional access points to adjacent business areas off the off ramps. Use the off and on ramps as semi-frontage roads so it help relieve Baseline traffic either on the ingress trip or the egress trip or both. There is a potential for this on the southeast corner business area. Perhaps a cross access road could be built along the SRP canal right-of-way that then would provide right-in and right-out access to the business via the I-10 off ramp.
Re-aligning Wendler and Arizona Grand Parkway to eliminate one of signalized intersections
Recommend and support the construction of the diverging Diamond interchange.
Shorter signal cycles
Sound barriers do neighborhood
The carpool lane is being used by individual drivers during high occupancy times
The City of Tempe (and Phoenix) need to upgrade this and the existing signals around this interchange to adapt to changing traffic conditions, run on multiple schedules, traffic detection where the light isn't turning red for non existent cross traffic. Basically the traffic signal controls are stuck in the 1980s. It's 2023 if ADOT's going to redesign the interchange The City of Tempe must use 21st century traffic signal adaption.
The congestion at this interchange from the west side of I-10 is untenable.
The DDI option doesn't look very safe. It's like the traffic circles when no one knows how to use them.
The Highline Canal Bikeway needs a connection through this interchange. And I'd love to be able to pass through this intersection by foot or bike without feeling like I'm risking my life. I also think we can improve what's existing without some new interchange. Let's be fiscally responsible here, please.
The homeless and panhandling populations at the interchange are causing hazards
The interchange is fine at Baseline and I-10 except for panhandlers. Traffic is far worse at the Baseline and 48th St. intersection. There is no reason to disrupt traffic for years with unnecessary construction. To improve safety at the I-10 interchange get rid of the panhandlers running into traffic, crossing illegally, causing drivers to stop in traffic, and otherwise causing distraction. This is not an ADOT problem it's a failure of the Tempe police department.
The interchange signals need to be reconfigured to help with the overflow traffic that currently blocks the left turning autos and creates unnecessary traffic congestion. I believe if we can just figure out the best way to clear the traffic for all the left turns we can avoid another multi year "construction" project that contributes even more to our delays.
The loop 101 congestion between university a d southern/US60is a much more serious mess than I10 and baseline in my opinion.
The on ramp from Baseline to get to the 1-10 would help to have a stop & go light. When you get on the ramp on to the freeway, have to be very careful no vehicles are speeding coming to your lane behind you.
The problem is taking away the I-10 Lane from Elliott to Baseline. I used to take the I-10 to Baseline and go up Priest to Broadway so I didn't have to deal with the Curve. That made traffic flow. Now that that lane is gone traffic is at a stand-still and has added 7 mins to my commute from Ray Rd to Broadway Rd.
The problems in this area exist(ed) both with and without Fry's Electronics in business. It's important to consider whatever ends up replacing Fry's in any future plans e.g. if there's going to be new condominiums or a big shopping center.
The red light/left turn at Darrow Dr. southbound onto eastbound Baseline Rd. is ridiculously long. Same at southbound Priest/eastbound Baseline roads.

The TDI is a non starter in my opinion. It would be a huge waste of money and time to simply make the turn lanes longer. The main traffic that backs up at this interchange is left turn traffic. Keeping a TDI would not solve the problem of drivers not paying attention and blocking the intersection, thus slowing down or preventing other left turn actions. Thru lanes are not the problem or solution either. I have sat many days on the westbound I-10 exit ramp waiting to turn left to go westbound on Baseline where, after the initial flow of east and westbound Baseline traffic goes through, we sit for 20-30 seconds with virtually no cars going through the intersection. I believe the DDI is the only true option and solution to relieving traffic congestion at this interchange. I understand people's concerns about it being different and possibly confusing, but it only looks that way on paper. While I have only driven through a half DDI in Ahwatukee a handful of times, it is very easy to navigate, and people will get used to it very quickly. While this might be the more costly alternative and require buying nearby land and businesses, that will only help in removing some driveways that are very close to the intersection. The DDI would eliminate the left turn queuing problems that plague the intersection today. I am actually disappointed that a DDI at Baseline Rd was not included in the I-10 Broadway Curve improvement project. I fully support a DDI to be constructed as soon as possible.
The timing of the lights to avoid backups into the intersection is important. The backup of cars for feeding into left hand lane at Wendler before feeding into expanded 48th St lanes is a problem. Also exiting I-10 to West bound baseline traffic and the turning into The Pointe Parkway is congested.
The traffic from the northbound I-10 turning onto the US60 is horrible. Congestion from the Baseline onramp onto the freeway causes extreme delays and a lot of car accidents.
The traffic light sequence to turn left from eastbound Baseline to the 10/60 is a terrible time waster. Any improvement in the light sequencing and traffic flow would be welcome.
The weekends are a nightmare, a 20 minute drive is 70+ minutes with how both directions are shut down.
There are a lot of people walking all around; when there are large groups from the resort, I often see them walk to the Mills. Keep Pedestrians in mind for sustainable building and ensure that pedestrians and people who bike have space without nearly dying. A lot of people walk and bike.
There is already crazy traffic on my part of Wendler. We are not asking for more neighborhood interruptions. I am the corner house on Garden/Wendler and I don't want to be removed from my home.
There is no traffic flow. After getting off the I-10 to Baseline there are 9 traffic lights between I-10 and 40th Street. It is an awful stretch of road and try to avoid whenever possible. PLEASE make it better.
There is way too many accidents along Baseline. There two major apartment complexes along the route. There is also construction on 48th St going south and this complicates things by not making it easy to get to alternate routes when either EI10 or WI10 is close. Also, there way to many traffic lights to get to I10 and if the rumor that Costco may open a business center in the vacated lot were Fry's Electronics was, then this will further negatively impact residents and business. Let us not forget that in the summer the traffic gets particularly worse due to tourist heading to the Arizona Grand Resort. Something that tackles all of this challenges would be beneficial for residents and business alike.
There needs to be a "No Right on Red" for traffic exiting I-10 heading west on Baseline
There's very limited access to the large Diablo Business Park (West of I-10, South of Diablo stadium)--and the stadium itself. From the South, after existing at Baseline, the only options are to take Baseline West to 48th Street or to take Baseline East to Priest around Arizona Mills mall.
This is a heavily congested area. Immediate funding and construction is needed to provide the highest capacity possible.
This is not the best location to try out an experimental traffic interchange like the diverging diamond.

This whole stretch of road from 48th St. to access I-10 is a profound joke ... too many sensor tripped traffic lights all out of sync with each other, and that ridiculous light at Wendler Drive should have never been there in the first place. It's no wonder that gridlock is the word of the day at this horrible interchange. So frustrating to get caught at all of these nonsensical lights and then trying to get on I-10 to the west. Such a poor design to start with.
Timing of lights at the Baseline and I10 underpass that does not allow the traffic to flow smoothing and usually backs up because arrows from off ramp does not time well with left turning arrows to on ramps.
Timing of traffic lights needs to be carefully considered.
Traffic keeps exiting from northbound 10 to Baseline west even after light changes, which means traffic that is headed east on Baseline to enter 10/60 never gets to move
Traffic light timing is horrible especially during rush hour. People drive like idiots and it makes the congestion worse than it already is.
Traffic lights set to relieve congestion
Very enthusiastic about DDI interchanges as it appears like the traffic there really is increasing substantially
We definitely need to work on a solution to improve traffic flows between 40th and Priest. It is brutal through there most of the day on the weekends. Light timing at 48th street is probably the biggest pain point through the zone.
What other suggestions or input do you have for the study team regarding this traffic interchange/intersection?
Whoever decided to approve construction on Baseline Rd and 48th while at the same time making improvements on the Broadway curve needs to have their head examine.
Work fast!
Would prefer fewer weekend full closures of US 60 in Tempe to and from I-10-- partial closures could be tolerated. Same for the 143. I volunteer at the airport Sundays and some detours from Tempe have been a pain -- especially last Sunday via 202 to 44th St.
You need an

Public Meeting Zoom Webinar Q&A Questions and Comments

Question	Answer
can you show us drawings of the intersection and proposals?	Interchange improvement concepts are in development and will be presented at the next public meeting for the alternatives.
What does an extended footprint mean? How does it work.	An expanded footprint means that this alternative takes more physical space to construct and operate than a typical interchange.
What does an extended footprint mean? How does it work.	An expanded footprint means that this alternative takes more physical space to construct and operate than a typical interchange.
when will design and construction be funded?	This project is not currently funded for final design or construction.
Will the I-10 bridge over Baseline have to be rebuilt if the DDI option is chosen?	No, the bridge would not need to be rebuilt for the DDI. We have enough space based on the current bridge design.
Would the extended footprint of the divergent diamond impact any existing homes or businesses?	It is possible that the DDI footprint might be large enough to have impacts and we will be including that in our study evaluation.
It is not clear how a TDI would work at this intersection. I am especially interested in understanding how a left turn off the freeway or onto the freeway will look.	There already is a tight diamond interchange at this location. The study will evaluate improving the existing design to improve traffic flow.
Will there be an effort to coordinate signal timings to the west and east of the interchange at Baseline Road? These seem to contribute to traffic delays in the area - not sure if related to the changeover from Tempe to Phoenix, etc. Should be within scope of this project.	The city of Tempe controls the signals on both sides of the interchange. Tempe recently installed a new system at these signals to better handle traffic flows.
Will there be an effort to coordinate signal timings to the west and east of the interchange at Baseline Road? These seem to contribute to traffic delays in the area - not sure if related to the changeover from Tempe to Phoenix, etc. Should be within scope of this project.	Tempe has recently implemented an adaptive signal system across Baseline Road which adjusts the green lights start and end to accommodate traffic patterns to promote smooth flow and ease traffic congestion.
When the construction starts how will that effect businesses on Wendler?	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase.
How will this affect the businesses in the area? Will some have to move?	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase. Potential right-of-way impacts and access changes will be identified later in the study process once a preferred design concept alternative is identified and compared against the No-Build Alternative. If a Build alternative is selected, right of way impacts will be identified during final design and affected property owners will be contacted.
How will this affect the businesses in the area? Will some have to move?	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase. Potential right-of-way impacts and access changes will be identified later in the study process once a preferred design concept alternative is identified and compared against the No-Build Alternative. If a Build alternative is selected, right of way impacts will be identified during final design and affected property owners will be contacted.
What happens to pedestrian flow if the diverging diamond interchange is chosen, since traffic moves to the left?	There are a few possible alternatives for pedestrian movements through the Diverging Diamond Interchange. One is to have pedestrians on the outside of the roadway and another option is to move pedestrians to the median. Both will be evaluated for safety as part of the study.
Why not remove the median in the middle and have left turns go directly to the road? Similar to Loop 202 & Rural Road and several other intersections on the freeway?	A SPUI is too wide so it is not being considered at this location.
In the extended footprint are there different levels. Can you demonstrate how it actually works.	There aren't multiple levels to a DDI, it simply is a larger footprint to construct.
Can you share a photo of a diverging diamond interchange already in operation in Arizona?	Two DDIs were just constructed on I-10 at Watson and Miller roads in Buckeye. A DDI was also constructed on I-17/Happy Valley Road and in Tucson at I-10 and Houghton Road. The existing interchange is a TDI and TDIs are the most common type of traffic interchange on freeways in the Valley. For photos you can visit the respective project pages at https://azdot.gov/
Will the study include a cost comparison between the two different options?	Yes. The study will take cost into consideration.
HI.. So I see signs all over the freeway and valley and on the internet. They say that the project will be done by 2024. Will the Baseline DDI be an additional years to complete? Thank you, Robert	The signs out there pertain to the current I-10 Broadway Curve Project, which is under construction now. This is a separate effort. We are looking to complete this study in early 2024.
HI.. So I see signs all over the freeway and valley and on the internet. They say that the project will be done by 2024. Will the Baseline DDI be an additional years to complete? Thank you, Robert	The I-10/Baseline Traffic Interchange is separate project from the Broadway Curve Project. The Baseline Road interchange was not included in the I-10 Broadway Curve Improvement Project because it required additional study and coordination. The Maricopa Association of Governments (MAG) led a feasibility study to identify potential improvements at the Baseline Road interchange, which was completed in May 2020. The recommendations of that study are being further evaluated as part of ADOT's current study and Design Concept Report for the interchange.
What will be the impact to businesses along baseline. Will there be a business loss or reduction.	ADOT is required to maintain access/entry to existing businesses during construction. Coordination with the owner would be required and compensation could be negotiated if temporary closure was to occur.
Will the study include how drivers here will adapt to a DDI? Instead of just if there's space for it. There are also traffic circles throughout the metro area due to assuming they cause less crashes. Navigating through a traffic circle here is very dicey. While a DDI is supposed to be intuitive, it doesn't seem to be for many drivers based on the interchange in north Phoenix.	ADOT has a number of DDIs in operation in Arizona and they are working well in terms of driver acceptance and safety. ADOT would conduct driver education prior to implementing a DDI.
Has ADOT looked at the economic impact the extended footprint will have on surrounding communities?	The economic impact will be evaluated as part of the environmental study.
You mentioned 60,000 vehicles per day today use this interchange. What are the projected traffic volumes in the future?	The projected 2050 average daily traffic (ADT) on this portion of Baseline Road is 85,000 vpd.
Do you expect any new right of way in any of the alignments?	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase.
Would the extended footprint impact Aunt Chilada's Mexican Restaurant?	Potential impacts to the Aunt Chilada's property will be evaluated as part of the study.

Question	Answer
Would the extended footprint impact Aunt Chilada's Mexican Restaurant?	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase. Each alternative will be evaluated for Right-of-Way and access impacts as part of the study.
Many of the feeder streets have been under construction for years like 48th and Baseline, There are several lights/intersections before one gets to I10, Those issues should be addressed first.	Thank you for sharing your comments and concerns. The project team will take them into consideration as part of the study.
Will new soundwall being constructed with Broadway Curve project be impacted with either proposed TIs?	A noise evaluation will be performed as part of this study and any abatement measures would be identified according to ADOT and federal guidelines.
How much land is expected to be taken from businesses on the south side of Baseline from I-10 to Hardy	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase. Each alternative will be evaluated for Right-of-Way and access impacts as part of the study.
earlier studies showed Wendler being moved. is there a solution for the former Frys Building?	Our goal is to minimize to properties, while improving the operation of this interchange. The previous feasibility study showed a concept that showed that option. This study will look at other options to potentially reduce impacts to that property.
How do you evaluate the impact on properties if there is a realignment of the roadway like Wendler in MAG DDi?	ADOT tries to minimize impacts. Each alternative will be evaluated for Right-of-Way and access impacts as part of the study.
in either design how much right of way will be needed to be taken between i10 and priest. what will the new setbacks be	Property impacts will be evaluated during this study. If a Build alternative is identified and receives final environmental clearance to move forward, final property impacts will be identified in a future final design phase. Each alternative will be evaluated for Right-of-Way and access impacts as part of the study.
The diverging diamond option will likely involve impact to removing existing homes and/or business. However you cannot show us which homes and businesses will be impacted until AFTER your two-week feedback period is complete. As homeowners within a 1000+ person community next to this proposed project, how can we voice opposition or support to this option without a better visual of how our community may be impacted?	No homes will be impacted by the alternatives. Please note we will be coming back to the public with potential design concept alternatives for input.
Why was this work not incorporated into the Broadway Curve project? Seems odd to finish a multi million dollar project and then go back and tear part of it up.	The Baseline Road interchange was not included in the I-10 Broadway Curve Improvement Project because it required additional study and coordination. The Maricopa Association of Governments (MAG) led a feasibility study to identify potential improvements at the Baseline Road interchange, which was completed in May 2020. The recommendations of that study are being further evaluated as part of ADOT's current study and Design Concept Report for the interchange.
Thank you!	
What is going to be done to the current interchange to keep traffic moving on baseline since it appears that the I10 Broadway curve project will be finished before the baseline interchange is finished and traffic is challenging at the moment right now?	The City of Tempe has been implementing new signals and other measures. We are looking at the input that we are receiving as part of the study and are receiving some good ideas that might be able to be implemented as interim measures.
I agree with the gentleman who is speaking now.	
The Spine study showed conceptual drawing of the diverging diamond intersection	The current effort will expand upon the previous studies. We will be developing much more detail on potential concepts for the second public meeting later this year.
We need more information on the diverging diamond to be able to make comments.	We will be presenting potential design concepts for the Diverging Diamond design for input at the next public meeting.
If the diverging diamond is selected, what will be done to reduce freeway traffic noise at the intersection.	A noise evaluation will be performed as part of this study and any abatement measures would be identified according to ADOT and federal guidelines. More information will be provided at the next public meeting.
I am also very concerned about traffic speeds along Baseline Rd corridor, and the lack of safe pedestrian crossings. The double right-hand turn lanes along Baseline make the I-10 / Baseline interchange very scary if you're walking on riding a bike.	Specific multimodal improvements will be evaluated as part of the alternatives in the study. The I-10 Broadway Curve will be providing an additional pedestrian crossing over I-10 as well.
I would like nothing more than to be able to ride a bike (or walk) through this area without feeling like I'm risking my life. If this were possible I'd frequently walk/pedal instead of driving my car the short distance to businesses just west of the interchange. I hope pedestrian and bicyclists are give more consideration.	Thank you for your comments. Specific multimodal improvements will be evaluated as part of the alternatives in the study
1. Will this project affect the (newly constructed) collector distributor roads and I-10 bridges of the Broadway Curve project? 2. Will there be (ample) study time to include the new actual throughput of the Broadway Curve collector-distributor and include that info/data in the modeling of this Baseline project?	Regarding impacts to the Broadway Curve improvements that will be part of the study analysis. It is likely that those impacts would be minimal. Regarding the change to Broadway Road as part of the Broadway Curve project we will reflect those changes as part of our traffic projections for the project.
Do you send notices of these type meetings to all property owners/tenants in the area?	ADOT shares meeting notifications through a variety of methods. A mailer was sent through USPS to all addresses within a one mile radius of the project boundaries. Additionally, meeting notices were shared through ADOT social media, newspaper ads and stakeholder partners.
Between the two options, which is expected to provide the best improvement to traffic given the expected growth in traffic?	This will be part of the study to evaluate.
If the signal lights have been recently modified, not noticeable yet, due to Phx recently having a WB (north) lane closed on Baseline from Wendler to Frys Food area. Please don't say Longer yellows, but that to us means More drivers piling in intersections. Those that speed up thru yellow light , and end on red, block us from getting in or out of our neighborhood. When your study starts, will there be undercover cruisers hanging around Baseline from interchanges to Calle to see the pile on	The city of Tempe is constantly evaluating traffic operations throughout the city. The new system Tempe installed senses traffic so it should help with the traffic operations.
ty	
I live in the community that is accessed from Calle Los Cerros, around and north of the Fry's building. It is currently very difficult for first responders to get into our community. We also often have a difficult time entering or leaving the community. When leaving our community, we always have to wait to see if there will be red light runners before we try to exit on to Baseline.	One of the main purposes of this study is to evaluate traffic flow at the interchange, so we appreciate that comment.

Question	Answer
Is Baseline Road going to be widened.	Both of the preliminary alternatives being evaluated involve some widening of Baseline road to accommodate the features of the alternatives being evaluated. The amount of widening that will be required and impacts will be evaluated as part of the study.
Is there more than the two alternatives being evaluated?	Currently we are considering two design options for the interchange: a Diverging Diamond Interchange (DDI) and improvements to the existing Tight Diamond Interchange (TDI). A no build - or do nothing - option will also be evaluated.
I think it's fair to say that the width of Baseline under the I-10 bridge is limited to the as-built width of Baseline under the I-10 underpass ???	One of the constraints is that the bridge at Baseline Road would not be impacted or widened. This means that Baseline Road could not be widened beneath the bridge. However we will be evaluating potential widening beyond the bridge as part of the study.
I think it's fair to say that the width of Baseline under the I-10 bridge is limited to the as-built width of Baseline under the I-10 underpass ???	Correct, one of the constraints we are operating under is that the width of the road beneath the bridge is restricted.
What does multimodal mean?	Multimodal means transpiration modes other than cars. For example pedestrians, scooters, bicycles and light rail.
thank you	
The impact of freeway noise and it's impact on residents in the area needs to carefully evaluated.	Thank you for your comment. A noise evaluation will be performed as part of this study and any abatement measures would be identified according to ADOT and federal guidelines.
Thank you!	

Appendix E – Public Meeting Summary October 2024

Interstate 10 / Baseline Road Traffic Interchange Study

August 8, 2024 • Public Meeting Summary

ADOT Project No. F0523 01L

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, the Arizona Department of Transportation (ADOT) does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons who require a reasonable accommodation based on language or disability should contact Gael Luna at 480.604.4785 or gluna2@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras leyes y autoridades contra la discriminación, el Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran una adaptación razonable basada en el idioma o la discapacidad deben comunicarse con Gael Luna al 480.604.4785 o gluna2@azdot.gov. Las solicitudes deben hacerse lo antes posible para garantizar que el Estado tenga la oportunidad de abordar la adaptación.

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1. INTRODUCTION

Baseline Road at Interstate 10 is a major arterial road serving approximately 55,000 vehicles per day and experiences heavy congestion and delays. There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential properties, which contribute to congestion and crashes.

The project corridor has a higher rate of crashes compared to the regional average. Additionally, the corridor has heavy pedestrian and bicycle traffic with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The study is evaluating design alternatives to improve the interchange and address these issues. The study team has identified two potential build alternatives to improve the interchange and crossroad - reconstructing to a Modified Diamond Interchange (MDI) design and a Diverging Diamond Interchange (DDI) option. At the conclusion of the study, the Arizona Department of Transportation (ADOT) will select a preferred alternative for further action.

The I-10/Baseline Road traffic interchange study looked at Baseline Road from 48th Street at the west end and Hardy Drive at the east. The maximum construction limits along Baseline Road are anticipated to be between Calle Los Cerros Drive and Priest Drive. Within these limits, Baseline Road touches four jurisdictions: the cities of Phoenix and Tempe, the Town of Guadalupe and ADOT.

Project Map

2. VIRTUAL PUBLIC MEETING

ADOT held a virtual public meeting from 6 – 7 p.m. on Aug. 8, 2024. The purpose of the meeting was to provide an overview of the two interchange design alternatives under consideration to improve traffic flow

and safety. The meeting also provided an update on the study schedule and opportunities for the public to ask questions and make comments.

The improvements are being planned in coordination with the cities of Tempe and Phoenix, and the town of Guadalupe.

The public meeting was hosted online through Zoom Webinar with simultaneous interpretation in Spanish. Participants could also call-in to the meeting if they preferred or did not have the ability to participate online. The meeting featured a presentation by the project team, followed by a question-and-answer period. Participants, who were provided information on how to ask questions and provide comments, could submit written questions in either English or Spanish through the Zoom Webinar Q&A feature and use the Raise Hand feature to be called on to ask their questions verbally. English call-in participants could also ask questions by phone by pressing *9 to raise their hand. Spanish call-in participants could ask questions via a toll-free conference line.

Project team members from ADOT, partner organizations and AZTEC Engineering (the design consultant) served as panelists to hear comments and respond to questions at the meeting.

The following team members were presenters:

- Mark Gilliland (AZTEC), Consultant Design Project Manager
- Olivier Mirza (ADOT), Design Project Manager
- Gael Luna (ADOT), Community Relations

Additional panelists included:

- Nikki Green (ADOT)
- Madison McCormick (ADOT)
- Dennis Haley (ADOT ROW)
- Tracy Eberlein (AZTEC)
- Alyssa Morrison (AZTEC)
- Diana Dunn (AZTEC)
- Ravi Ambadipudi (Jacobs)
- Amanda Nelson (Town of Guadalupe)
- Myesha Harris (City of Phoenix)
- Shauna Warner (City of Tempe)
- Shelly Seyler (City of Tempe)
- Quinn Castro (MAG)

Additional project team staff and a Spanish interpreter were present to assist in facilitating the online meeting and Q&A session. Participants were notified that comments and questions about the project could also be submitted during the public comment period ending Aug. 22, 2024, through email, telephone, USPS mail or online survey/comment form. Participants were notified that project-related materials, including the presentation, were available online.

The public meeting presentation was recorded in English and Spanish and posted to the project website. During the meeting, a Spanish-speaking ADOT panelist let the audience know where they could find the

project website and that a Spanish interpreter would be available for the presentation and Q&A portions of the meeting. The ADOT staff member also read the explanation of the Title VI Nondiscrimination Notice to the public, which was included in Spanish on a separate slide, as well as how to take the self-ID survey.

Seventy-eight (78) people were recorded as attending the virtual public meeting and 194 people completed the online survey/comment form during the survey period.

Copies of the public meeting materials posted to the website are included in Appendix A.

2.1 Virtual Public Meeting Notification

2.1.1 Project Website

ADOT hosts a project website https://azdot.gov/i10baseline, which was launched on April 10, 2023. The project website provides a project overview, including a list of the project elements, project area map, study timeline, interchange designs being considered, the public meeting date, recordings in English and Spanish, and information on how to ask questions or make comments. A link to an online survey/comment form was also included through Aug. 22. All materials related to the public meeting were posted on the project website, including:

- Project area map and information
- Fact sheet (in English and Spanish)
- Public meeting information
- Public meeting recordings (in English and Spanish)
- PDF public meeting presentation and script

Copies of the public meeting materials posted to the website are included in Appendix A.

2.1.2 GovDelivery Emails

Notices that provided information on how to participate in the virtual public meeting and comment were distributed by ADOT on July 18 and 25, and Aug. 14, 15 and 21, via GovDelivery. A total of five emails were sent out with an average of greater than 25,000 recipients per distribution.

Copies of the GovDelivery notices can be found in Appendix B.

2.1.3 Print Ads and E-blast

The virtual public meeting was advertised with English print ads in the *Arizona Republic – SE Valley Republic* on July 24, 26 and 27, along with a bilingual (English/Spanish) *Arizona Republic Buyer's Edge* insert on July 24, and an *Arizona Republic* E-blast on July 25. The e-blast went to an estimated 14,917 email recipients within the project area.

Additionally, the public meeting was advertised in a Spanish-language print ad in *Prensa Arizona*, on July 25.

Copies of the publication tear sheets and e-blast can be found in Appendix B.

2.1.4 Direct Mail

Bilingual (English and Spanish) oversized postcards were sent via EDDM (Every Door Direct Mail) to all businesses and residential properties within one-mile of the project area. Additionally, mailers were sent to non-resident property owners whose mailing address is outside of the project and one-mile EDDM areas. A total of 12,829 postcards were mailed. The 12” x 15” oversized postcard included information about the project, how to participate in the virtual public meeting and how to provide comments. The mailer also included information, instructions and a QR code for requesting accommodations in Simplified (Mandarin) and Traditional (Cantonese) Chinese.

The mailers were sent to the post office on July 17 and began to arrive in mailboxes on July 24.

A copy of the mailer can be found in Appendix B.

2.1.5 Social Media

ADOT Digital Communications staff posted to ADOT’s Facebook and X accounts on July 25 and Aug. 1, 7, 12 and 21, and on Nextdoor on July 18, 25, and Aug. 1, 7, 12, 15 and 21, providing information about the public meeting and commenting opportunities.

Images of the social media posts can be found in Appendix B.

2.1.6 News Release/Media

ADOT Public Information staff distributed a news release to media outlets on Aug. 2. The news release can be found in Appendix B.

News stories about the public meeting were posted online by Chandler News on Aug. 5, Queen Creek Sun Times on Aug. 7, Daily Independent on Aug. 4 and 20, and Ahwatukee Foothills News on Aug. 1 and 21.

Copies of news articles can be found in Appendix C.

2.1.7 Direct Outreach

The study team held meetings with project stakeholders, including representatives from the town of Guadalupe, cities of Phoenix and Tempe and the Maricopa Association of Governments. Virtual meetings with project stakeholders to plan for the public meeting were held on June 20 and 27, and July 2, 11, 18 and 25.

In addition, the ADOT Community Relations team created a contact list that included stakeholders in the project area, such as businesses, HOAs, schools and churches. The team communicated with 173 contacts via email and forwarded GovDelivery emails to provide information about the project and the public meeting. Information about the public meeting was emailed to these stakeholders on July 18 and 25, and Aug.14, 15 and 21.

Copies of the GovDelivery notices can be found in Appendix B.

ADOT Community Relations conducted in-person and phone outreach to 35 businesses and four property management companies, and distributed project fact sheets to 12 community organizations and gathering locations. Three businesses were permanently closed or had relocated, three property management companies were no longer managing properties in the area and 32 businesses were successfully contacted in-person and/or by phone.

Summaries of the business and small group meetings can be found in Appendix B.

Contact Attempted in Person	Contact Attempted by Phone	Community Organizations and Gathering Locations
OneMain Financial	**Kidder Mathews, Point Office Suites	Frank Elementary School

Contact Attempted in Person	Contact Attempted by Phone	Community Organizations and Gathering Locations
*Conn's Home Plus	**Cushman Wakefield, 4415-4265 S Wendler Dr	Guadalupe Library
Studio 6	**CBRE, 4920-4940 S Wendler Dr	Boys and Girls Club, Thunderbird Branch
Celerion Screening & Return Center	OneMain Financial	Getz School
Denny's	*Conn's Home Plus	Wood Elementary School
Joe's Crab Shack	Studio 6	Tempe Union High School District Professional Development Center
Waffle House	Celerion Screening & Return Center	Marcos de Niza High School
TitleMax	Denny's	Geneva Epps Mosley Middle School
Ramada Inn by Wyndham	Joe's Crab Shack	Fees College Preparatory Middle School
The Molino Apartments	Waffle House	Tempe High School
Simon Group, Arizona Mills Mall	TitleMax	Chicanos por la Causa, Family Resource Center
Christie's Cabaret	Ramada Inn by Wyndham	Arredondo Elementary School
Batch Service	The Molino Apartments	
Arrive Logistics	Simon Group, Arizona Mills Mall	
Fry's Fuel	Christie's Cabaret	
KRAF Inc., Burger King	2300 W Baseline Rd	
Aunt Chilada's, Arizona Grand Resort	Ireland-Miller Inc., 5005-5075 S Wendler Dr	
Truelieve Dispensary	Orsette Property Management, 4920-4940 S Wendler Dr	
Shell	*CSA Benefits Claim	
Popeye's Louisiana Kitchen	*BuySellAZHouse.com	
Carl's Jr.		
Parts Authority		
Magic Smoke and Vapor		

Contact Attempted in Person	Contact Attempted by Phone	Community Organizations and Gathering Locations
J&J Barbershop		
Mint Cannabis		
TownPlace Suites		
SpringHill Suites		
Sonesta Simply Suites		
Sonesta ES Suites		
Holiday Inn Express		

** Moved or permanently closed ** No longer affiliated with commercial property*

2.2 Public Meeting Materials

2.2.1 Presentation

A presentation was made at the public meeting to provide an overview of the interchange design alternatives being considered. The public was also given the opportunity to provide comments and ask questions to help guide the study team.

The presentation can be found in Appendix A and covered the following topics:

- Overview of Interstate 10/Baseline Road Traffic Interchange Study
- Study Area and Partners
- Study Purpose & Need
- Study Process
- Study Elements
- Environmental Considerations
- Interchange Options:
    - No Build Scenario
    - Modified Diamond Interchange (MDI) Alternative
    - Diverging Diamond Interchange (DDI) Alternative
- Anticipated Study Timeline
- Project Website
- Comments and Questions

3. PUBLIC COMMENTS

This section summarizes the comments received during the public comment period from July 8 through Aug. 22. Comments were accepted through the following methods: USPS mail, telephone, e-mail and online. A total of 250 comments were received through the following methods:

- Online survey/comment form responses: 194
- Project information telephone line comments: 6
- Email comments: 7
- Virtual public meeting comments: 5
- Virtual public meeting questions: 38
- Mail: 0

Additionally, during the virtual public meeting ADOT staff worked with the project team to provide responses to each of the questions and comments, which were also included in the public comment log.

The public comments and questions are included in Appendix D.

3.1 Public Comment Topics

Comments and questions received during the public comment period and at the virtual public meeting addressed the following topics:

- Concerns about traffic volume, flow and congestion = 259 questions/comments
- Diverging Diamond Interchange (DDI) alternative feedback (like) = 164 questions/comments
- Diverging Diamond Interchange (DDI) alternative feedback (dislike) = 159 questions/comments
- Diverging Diamond Interchange (DDI) alternative feedback (misc.) = 8 questions/comments
- Modified Diamond Interchange (MDI) alternative feedback (like) = 161 questions/comments
- Modified Diamond Interchange (MDI) alternative feedback (dislike) = 146 questions/comments
- Modified Diamond Interchange (MDI) alternative feedback (misc.) = 5 questions/comments
- No Build alternative feedback (like) = 150 questions/comments
- No Build alternative feedback (dislike) = 158 questions/comments
- No Build alternative feedback (misc.) = 1 question/comment
- Construction timeline, schedule and impacts = 139 questions/comments
- Costs and funding = 109 questions/comments
- Driver education for MDI and DDI = 84 questions/comments
- Addressing future needs = 54 questions/comments
- Traffic signals and timing = 44 questions/comments
- Safety = 42 questions/comments
- Business/property access, parking and economic impacts = 34 questions/comments
- Wendler Drive options and impacts = 32 questions/comments
- Turn lanes and options = 26 questions/comments
- Freeway/ramp access = 24 questions/comments
- Pedestrians and cyclists = 11 questions/comments

- Neighborhood access and concerns = 7 questions/comments
- Broadway curve impact = 4 questions/comments

Based on the number of like and dislike questions and comments for each alternative, it appears that there is no strong preference for either alternative as there were nearly as many dislikes as likes for each. However, taking a closer look at the likes shows that many of the likes on the DDI alternative are actually in opposition to it. On the contrary, many of the dislikes on the MDI were actually comments in favor of that option. Some of the key aspects that the public liked and disliked for each alternative are as follows:

- Diverging Diamond Interchange (DDI) alternative likes:
    - Improves traffic congestion, operations and safety
    - Addresses long-term traffic needs and growth
    - Nearly 20% of likes were actually dislikes on the DDI alternative
    - Some commenters acknowledged the high cost and impacts to existing properties even if their overall comment was positive
- Diverging Diamond Interchange (DDI) alternative dislikes:
    - Most expensive of the build alternatives
    - More area construction and longer construction timeline
    - Larger footprint / more impact on the surrounding areas
- Modified Diamond Interchange (MDI) alternative likes:
    - Least expensive of the build alternatives
    - Smaller footprint / less impact on the surrounding areas
- Modified Diamond Interchange (MDI) alternative dislikes:
    - Concerns that the improvements to address traffic congestion, operations and safety may not go far enough
    - Impact on business access
    - Nearly 10% of comments were actually likes or that there was “nothing” they didn’t like

Additionally, there were concerns related to making Wendler Drive right-in-right out only, including freeway access for offices located along Wendler and having to drive past Wendler and make a u-turn to access certain businesses.

Overall, most participants agreed that addressing and reducing congestion at the traffic interchange is needed, particularly in light of the projected growth in the area.

3.2 Survey/Comment Form Questions

An online survey was developed to help the study team evaluate the public’s feedback on the three design alternatives for the interchange. The survey/comment form was also available in print upon request. The following are the survey/comment form questions:

- What do you like about the No Build alternative? = 150 responses
- What do you dislike about the No Build alternative? = 158 responses
- What do you like about the Modified Diamond Interchange (MDI) alternative? = 161 responses
- What do you dislike about the Modified Diamond Interchange (MDI) alternative? = 146 responses
- What do you like about the Diverging Diamond Interchange (DDI) alternative? = 164 responses
- What do you dislike about the Diverging Diamond Interchange (DDI) alternative? = 159 responses
- Provide any additional comments below = 101 responses

As indicated above, there were nearly as many dislike responses and likes for each alternative. In evaluating the actual comments received in the likes category, however, it clearly shows that many of these comments actually expressed a dislike for continuing with the status quo. The overall sentiment about the No Build option is that doing nothing is not a positive outcome of this study.

4. TITLE VI REPORTING

4.1 Self ID Surveys

Meeting participants were asked to complete ADOT's self-identification survey for Title VI reporting purposes. A total of 11 people, out of 78 attendees, completed the self-ID survey during the meeting, which was a 14% response rate. Also, an additional eight people completed the survey throughout the duration of the commenting period, for a total of 19 responses.

Of the 19 self-identification survey responses, three participants (16%) identified as Hispanic/Latino, one (5%) identified as Asian, zero (0%) identified as American Indian/Alaskan Native, one (5%) identified as African American/Black, zero (0%) as Native Hawaiian/Other Pacific Islander, and 16 (84%) identified as White.

4.2 Title VI Meeting Summary

A Title VI public meeting summary documenting ADOT's compliance with Title VI and Title II nondiscrimination and accommodations was submitted to the ADOT Civil Rights Office on Aug. 22.

Appendix A
Public Meeting Materials

Project Area Map

Fact Sheet (English)

Interstate 10/Baseline Road
Traffic Interchange Study

Overview

The Arizona Department of Transportation (ADOT) is studying improvements to multimodal traffic flow and safety at the I-10/Baseline Road interchange. The study has identified three design alternatives for the interchange: a Modified Diamond Interchange and a Diverging Diamond Interchange, which will be compared to a "no-build" alternative in which no improvements will be made. At the conclusion of the study, ADOT will determine a preferred alternative to move forward with improvements and final design if a new interchange alternative is selected. The I-10/Baseline Road Traffic Interchange Study is being conducted in coordination with the cities of Phoenix and Tempe and the town of Guadalupe.

The **Modified Diamond** alternative would keep the interchange and ramp configuration as they are while adding some modifications to improve traffic operations, including adding new right turn lanes on Baseline Road at I-10 and additional lanes on the exit and entrance ramps. This alternative includes the removal of the traffic signal at Wendler Drive and revising access to be right-in, right-out.

Traffic flow increases with a **Diverging Diamond (DDI)** by temporarily transitioning traffic to the left side of the road, eliminating the need for a signalized left turn. The DDI would have the largest footprint, impacting more existing properties. This alternative also includes the removal of the traffic signal at Wendler Drive and revising access to be right-in, right-out.

Stay Informed

Visit the study website at azdot.gov/i10baseline for more information and to subscribe for project updates.

How to Comment

The public can provide comments by Aug. 22, in the following ways:

- **Online:** https://tinyurl.com/i10baselinecomment
- **Phone:** 855.712.8530
- **Email:** gluna2@azdot.gov
- **Mail:** ADOT Community Relations, 1655 W. Jackson St., MD126F, Phoenix, AZ 85007

Attend Virtual Public Meeting on Aug. 8 (online or phone)

Visit the study website at azdot.gov/i10baseline for more information and to subscribe for project updates.

- **Online (Zoom):** https://tinyurl.com/i10baseline
  Meeting ID: 859 6049 1133
- **Phone:** 669.900.6833 (English)

Anticipated Schedule

The study is expected to conclude in 2024. The project is not currently funded for construction. The anticipated schedule of study activities and opportunities to participate is included below.

May 2023	August 2024	December 2024
Public Scoping Meeting	Public Meeting for Design Alternatives	Design Concept Report (DCR)

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, the Arizona Department of Transportation (ADOT) does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons who require reasonable accommodation based on language or disability should contact Gael Luna at 480.604.4785 or gluna2@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

如需获取其他格式或语言的副本或服务，请联系 Gael Luna，电话：855.712.8530，邮箱：gluna2@azdot.gov，或访问网站：azdot.gov/i10baseline

如需獲取其他格式或語言的副本或服務，請聯繫 Gael Luna，電話：855.712.8530，郵箱：gluna2@azdot.gov，或訪問網站：azdot.gov/i10baseline

ADOT Project No. F0523 01L

Fact Sheet (Spanish)

Estudio de Intercambio de Tráfico Vial I-10/Baseline Road

Visión General

El Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) está estudiando mejoras en el flujo de tráfico multimodal y la seguridad en el intercambio de la I-10 y Baseline Road. El estudio ha identificado tres alternativas de diseño para el intercambiador: un intercambiador de Diamantes Modificado y un intercambio de Diamantes Divergente, que se comparará con una alternativa de "no construcción" en la que no se realizarán mejoras. Al concluir el estudio, ADOT determinará una alternativa preferida para avanzar con las mejoras y el diseño final si se selecciona una nueva alternativa de intercambio. El Estudio de Intercambio de Tráfico Vial I-10/Baseline se está llevando a cabo en coordinación con las ciudades de Phoenix y Tempe y la ciudad de Guadalupe.

La alternativa de **Diamante Modificada** mantendría la configuración de intercambio y rampa como está, al tiempo que agregaría algunas modificaciones para mejorar las operaciones de tráfico, incluida la adición de nuevos carriles para girar a la derecha en Baseline Road en la I-10 y carriles adicionales en las rampas de salida y entrada. Esta alternativa incluye la eliminación del semáforo en Wendler Drive y la revisión del acceso para que sea de entrada y salida.

El flujo de tráfico aumenta con un **Diamante Divergente (DDI)** al hacer la transición temporal del tráfico al lado izquierdo de la carretera, eliminando la necesidad de un giro a la izquierda señalizado. El DDI tendría la huella más grande, impactando a más propiedades existentes. Esta alternativa también incluye la eliminación de la señal de tráfico en Wendler Drive y la revisión del acceso para que sea de entrada y salida.

Mantentengase Informado

Visite el sitio web del proyecto en azdot.gov/i10baseline para obtener más información y suscribirse a las actualizaciones del proyecto.

Como Comentar

El público puede proporcionar comentarios antes del 22 de agosto, de las siguientes maneras:

- **En línea:** https://tinyurl.com/i10baselinecomment
- **Teléfono:** 855.712.8530
- **Correo electrónico:** gluna2@azdot.gov
- **Correo:** ADOT Community Relations, 1655 W. Jackson St., MD126F, Phoenix, AZ 85007

Asista a la Reunión Pública Virtual el 8 de agosto (en línea o por teléfono)

¡Regístrese para asistir a la reunión! Visite el siguiente sitio web para registrarse y asistir:

- **En línea (Zoom):** https://tinyurl.com/i10baseline
  ID de reunión: 859 6049 1133
- **Teléfono:** 669.900.6833 (español)

Cronograma anticipado

Se espera que el estudio concluya en 2024. Actualmente, el proyecto no cuenta con fondos para su construcción. A continuación se incluye el cronograma anticipado de actividades de estudio y las oportunidades para participar.

Mayo 2023	Agosto 2024	Diciembre 2024
Reunión pública de alcance	Reunión pública para alternativas de diseño	Informe de concepto de diseño (DCR)

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras leyes y autoridades contra la discriminación, el Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran una adaptación razonable basada en el idioma o la discapacidad deben comunicarse con Gael Luna al 480.604.4785 o gluna2@azdot.gov. Las solicitudes deben hacerse lo antes posible para garantizar que el Estado tenga la oportunidad de abordar la adaptación.

如需获取其他格式或语言的副本或服务，请联系 Gael Luna，电话：855.712.8530，邮箱：gluna2@azdot.gov，或访问网站：azdot.gov/i10baseline

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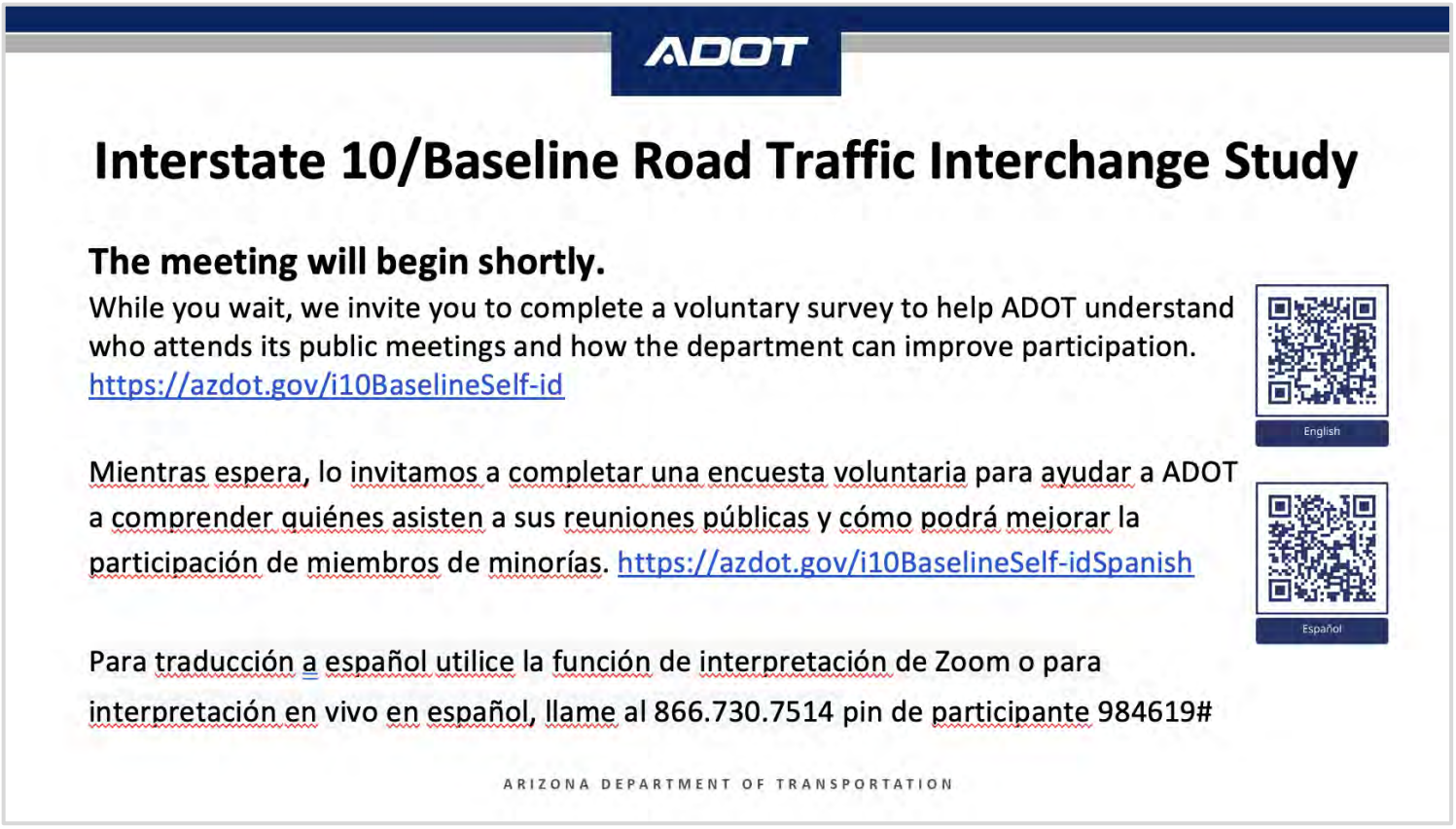
ADOT Project No. F0523 01L

Presentation and Script



Good evening. The meeting will begin shortly.

While you wait, we invite you to complete a voluntary survey to help ADOT understand who attends its public meetings and how the department can improve participation. The survey is available by scanning the QR code on your screen, and the link is also being provided in the meeting chat.

Visit azdot.gov/i10BaselineSelf-id

Con su participación en esta encuesta voluntaria, ADOT podrá determinar quien participa en las reuniones públicas y como podrá mejorar la participación de miembros de minorías. La encuesta también le ayudará a ADOT a cumplir con requisitos federales. También hemos colocado un enlace a la encuesta en el chat

Espanol: azdot.gov/i10BaselineSelf-idSpanish

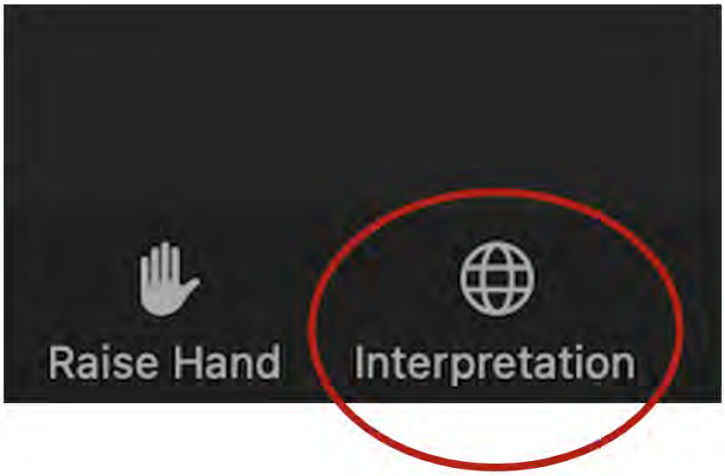
ADOT

Spanish Interpretation

- Spanish call-in number: 866.730.7514
- Pin: 984619#
- Zoom interpretation feature

Interpretación al español

- Por teléfono: 866.730.7514 (español)
- Pin de participante: 984619#
- Función de interpretación de Zoom



ARIZONA DEPARTMENT OF TRANSPORTATION

This meeting will be presented in English and interpreted in Spanish through a separate call-in number and online language channel. If you would like to hear the presentation in Spanish by phone, please call 866-730-7514. The PIN number to enter is 984619 followed by the pound sign. If you are online you can click on the Interpretation symbol at the bottom of your screen as shown on this slide to hear the meeting presented simultaneously in Spanish.

Once this slide is completed you will see the interpretation button on your screen as shown here. To listen to this meeting in Spanish through the online meeting, click the interpretation icon in your meeting/webinar controls then click Spanish. If you would like to hear Spanish only, click “Mute Original Audio”

Esta reunión se presentará en inglés e interpretada en español a través de un número de teléfono separado y por un canal de idiomas en línea. Si desea escuchar la presentación en español por teléfono, por favor llame al 866-730-7514. El número PIN a ingresar es 984619 seguido por la almohadilla. Si está en línea, presione el símbolo de Interpretación en la parte inferior de la pantalla, como se muestra en esta diapositiva, para escuchar la reunión presentada simultáneamente en español.

Una vez completada esta diapositiva, verá el botón de interpretación en su pantalla, como se muestra aquí. Para escuchar esta reunión en español a través de la reunión en línea, presione el ícono de interpretación en los controles de la reunión/seminario web y, a continuación, presione español. Si desea escuchar solo en español, presione "Silenciar audio original”

Habrá una breve pausa mientras permitimos que los participantes se unan a la sala de interpretación en español.

There will be a short pause while we allow participants to join the Spanish interpretation room.

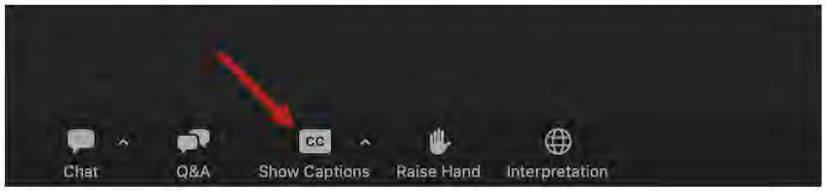
Good evening, everyone and welcome to the public meeting for the Interstate 10/Baseline Road Traffic Interchange Study.

My name is Gael Luna, Community Relations Project Manager with the Arizona Department of Transportation

I-10/Baseline Road Traffic Interchange Study

- All participants have been muted to avoid background noise.
- Following the meeting presentation, we will take questions and comments online and by phone.

  Instructions will be provided.
- To turn on closed captioning, select that option from the menu.



ARIZONA DEPARTMENT OF TRANSPORTATION

Before we get started, a few housekeeping items. Participants joining us are currently muted. I'll describe the meeting format and how to participate in just a moment, but first, if you are having any technical issues right now, you may need to hang up or log off, then redial or reconnect.

Please note this meeting is being recorded. The recording will be posted to the project website.

If you would like to turn on closed captioning, click Closed Caption on the bottom of your screen to start viewing closed captioning. Click Live Transcript, then select Show Subtitle.

Tonight's format is a short presentation followed by an open question-and-answer session. After the presentation, we'll provide instructions on how to ask a question or comment by phone or online. If you would like, you can submit written questions at anytime during the presentation using the Q&A function, which is located at the bottom of your screen and shown on this slide. Keep in mind that after tonight's meeting, you will have the opportunity to ask further questions or provide additional comments through August 22. We'll tell you how to do that at the end of the meeting.

ADOT'S NONDISCRIMINATION NOTICE TO THE PUBLIC

The Arizona Department of Transportation (ADOT) hereby gives public notice that it is the Agency's policy to assure full compliance with Title VI of the Civil Rights Act of 1964, Title II of the Americans with Disabilities Act of 1990 (ADA), and other related authorities in all of its programs and activities.

ADOT's Title VI and ADA Programs require that no person shall, on the grounds of race, color, national origin, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

Any person who believes his/her Title VI or ADA rights have been violated, may file a complaint. Any such complaint must be in writing and filed with the ADOT Civil Rights Office within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. For additional information about ADOT's Civil Rights programs and the procedures to file a complaint, contact ADOT Civil Rights Office via the information listed below:

ADOT Civil Rights Office
206 S. 17th Avenue, Mail Drop 155-A
Phoenix, AZ 85007
602.712.8946 FAX 602.239.6257
CivilRightsOffice@azdot.gov

Danielle Valentine
Title VI Program Coordinator
DValentine@azdot.gov

ARIZONA DEPARTMENT OF TRANSPORTATION

ADOT complies with Title VI of the Civil Rights Act of 1964, Title II of the Americans with Disabilities Act of 1990, and other related authorities in all of its programs and activities.

Any person who believes his/her Title VI or ADA rights have been violated, may file a complaint by contacting the ADOT Civil Rights Office at 602-712-8946 or by email at civilrightsoffice@azdot.gov within 180 days of the alleged violation.

AVISO PÚBLICO DE LA LEY DE NO-DISCRIMINACIÓN DE ADOT

El Departamento de Transporte del Estado de Arizona (ADOT) informa al público que la agencia tiene como regla asegurar el cumplimiento de el Título VI de la Ley de los Derechos Civiles de 1964, del Título II de la Ley de Estadounidenses con Discapacidades de 1990 (ADA) y otras normas relacionadas con todos sus programas y actividades.

Los programas del Título VI y ADA de ADOT exigen que a ninguna persona se le excluya de participar, se le nieguen beneficios o de ninguna otra manera sea sujeta a discriminación en ningún programa o actividad de ADOT por motivo de raza, color, país de origen, o discapacidad.

Cualquier persona que crea que se han violado sus derechos bajo el Título VI o el ADA, puede presentar una queja. Esta queja debe presentarse por escrito a la Oficina de Derechos Civiles de ADOT dentro de ciento ochenta (180) días a partir de la fecha en que se alega que ocurrió la discriminación. Para recibir más información sobre los programas de Derechos Civiles de ADOT y los procedimientos para presentar una queja, por favor póngase en contacto con la Oficina de Derechos Civiles de ADOT con la información que aparece abajo:

ADOT Civil Rights Office
206 S. 17th Avenue, Mail Drop 155-A
Phoenix, AZ 85007
602.712.8946 FAX 602.239.6257
CivilRightsOffice@azdot.gov

Danielle Valentine
Title VI Program Coordinator
DValentine@azdot.gov

ARIZONA DEPARTMENT OF TRANSPORTATION

We will have a brief pause to allow individuals to read this information in Spanish while it is described on the Spanish channel.

ADOT tiene como regla asegurar el cumplimiento total del Título VI de la Ley de los Derechos Civiles de 1964, del Título II de la Ley de Estadounidenses con Discapacidades de 1990 (ADA) y otras normas relacionadas con todos sus programas y actividades.

Cualquier persona que crea que se han violado sus derechos bajo el Título VI o el ADA, puede presentar una queja. Por favor póngase en contacto con la Oficina de Derechos Civiles de ADOT a 602.712.8946 o civilrightsoffice@azdot.gov.

Auxiliary Aids and Services

In compliance with Title II of the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the Arizona Department of Transportation (ADOT) does not discriminate against qualified individuals with disabilities on the basis of disability in its programs, services or activities.

ADOT will make reasonable modifications to ensure that individuals with disabilities have an equal opportunity to enjoy ADOT's programs, services and activities.

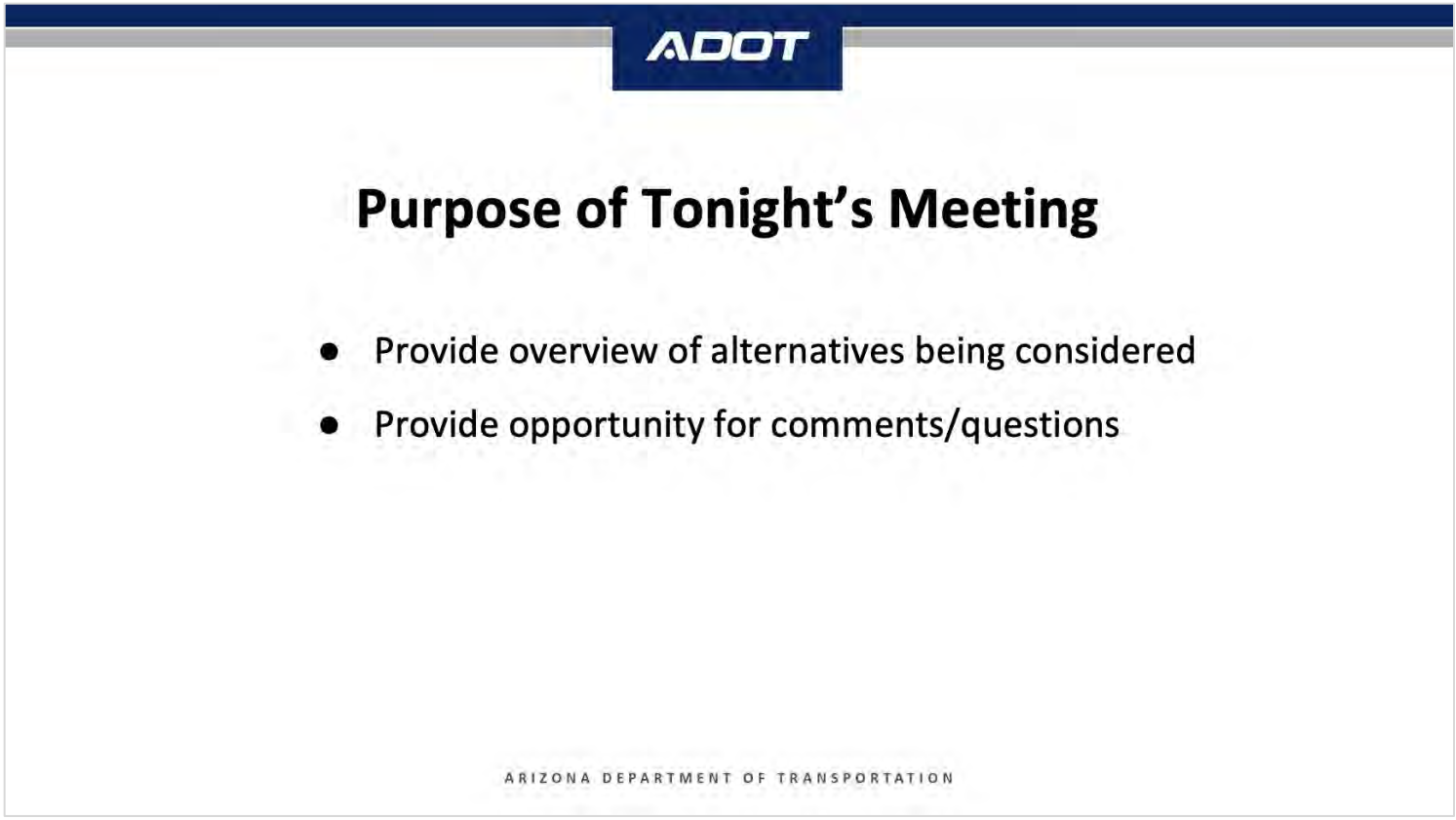
If you require an accommodation, please notify an ADOT staff member.

For additional information or questions about ADOT's External ADA Program, please contact the Civil Rights Office at 602.712.8946.

ARIZONA DEPARTMENT OF TRANSPORTATION

ADOT will make reasonable accommodations to ensure that individuals with disabilities have an equal opportunity to enjoy ADOT's programs, services, and activities.

If you require an accommodation, please contact Gael Luna at 480.604.4785 or gluna2@azdot.gov

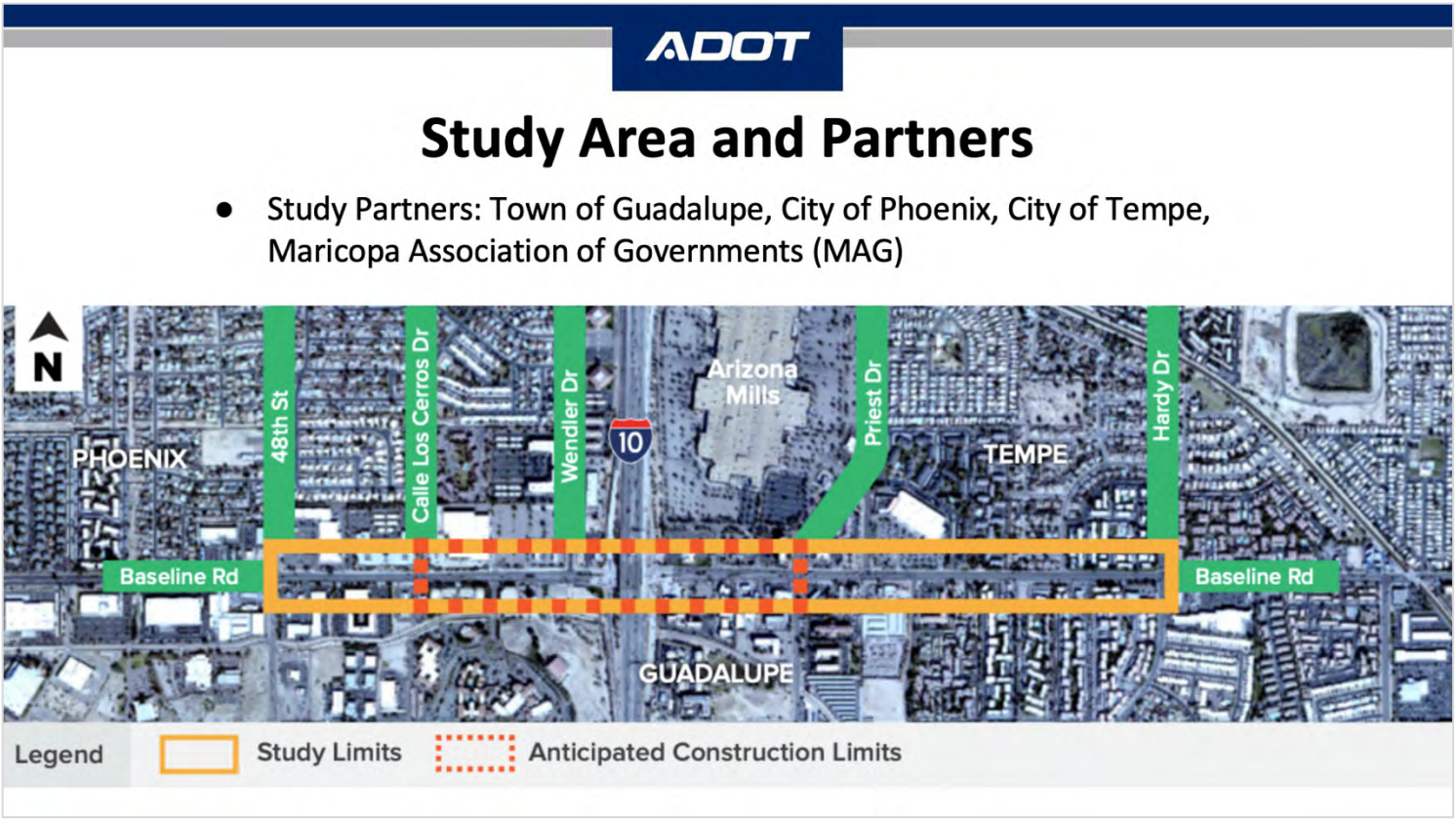


Thank you again for joining us for the I-10/Baseline Road Traffic Interchange Study public meeting.

The purpose of this meeting is to provide an overview of the interchange design alternatives currently being considered to improve traffic flow and safety.

We will also give an update on the study schedule, and provide an opportunity for questions and feedback, as well as outline the various ways to provide comments during this phase of the study.

Now, I will hand the presentation off to Mark Gilliland, the Project Manager from Aztec Engineering.



Thank you, Gael, for the introduction.

The I-10/Baseline Road traffic interchange study looked at Baseline Road from 48th Street at the west end and Hardy Drive at the east. The maximum construction limits along Baseline Road are anticipated to be between Calle Los Cerros Drive and Priest Drive. Within these limits Baseline Road touches four jurisdictions: the cities of Phoenix and Tempe, the Town of Guadalupe, and ADOT.

Study Purpose & Need

- Reduce traffic congestion
- Improve traffic flow through the study corridor
- Reduce crashes
- Accommodate pedestrian and bicycle traffic, safety and connectivity concerns
- Develop design alternatives and recommend an alternative for final design

ARIZONA DEPARTMENT OF TRANSPORTATION

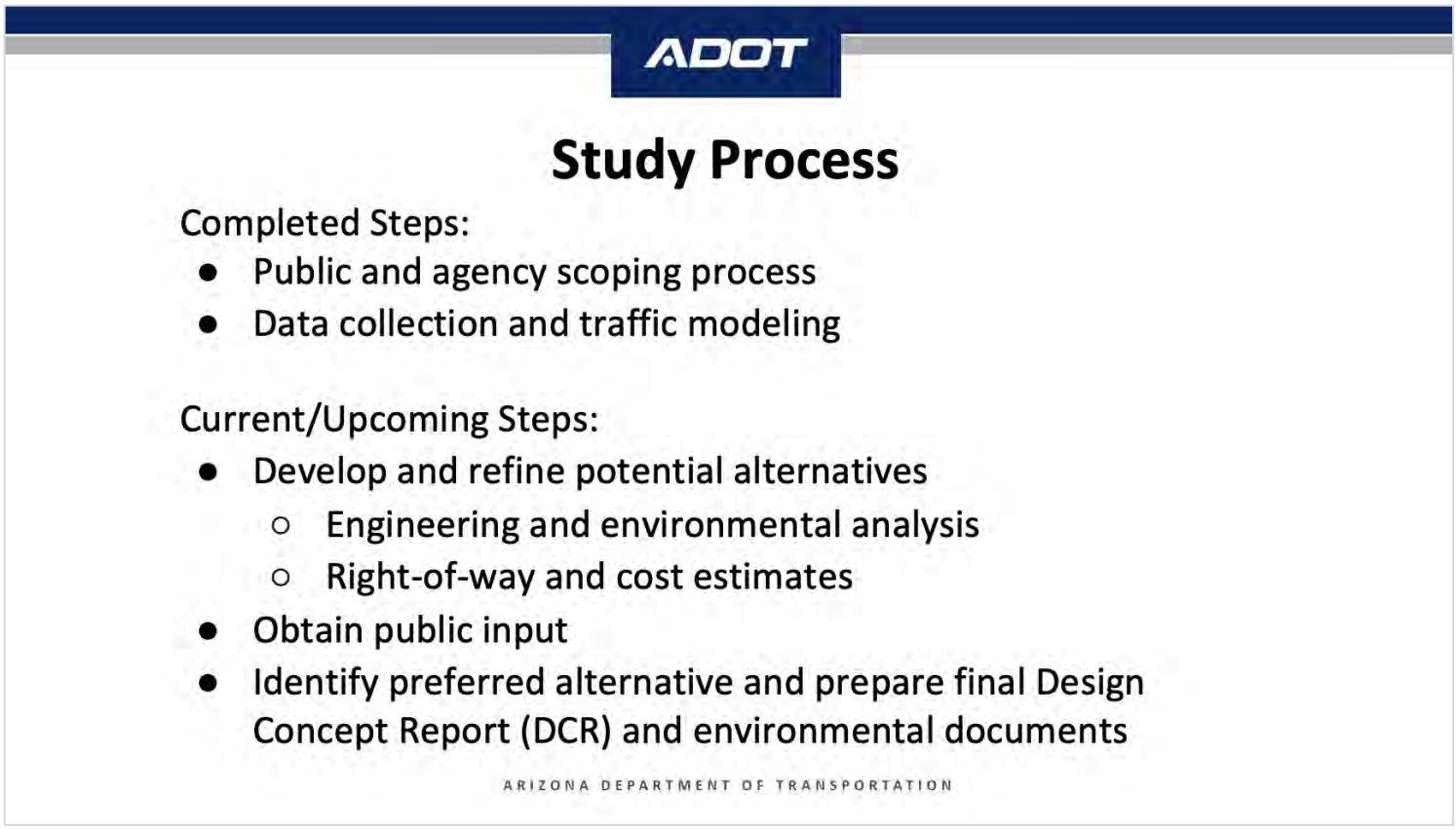
Baseline Road at Interstate 10 is a major arterial road serving approximately 55,000 vehicles per day and experiences heavy congestion and delays. There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential properties, which contributes to congestion and crashes.

The corridor has a higher rate of crashes compared to the regional average. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public.

The study is evaluating design alternatives to improve the interchange and address these issues.

At the conclusion of the study, ADOT will select a preferred alternative for further action.



The study started in early 2023 and is following an established engineering, environmental and public input process.

The study includes the development of an engineering design concept report and environmental document, which evaluates any environmental impacts of the alternatives and mitigation measures.

The study team conducted public outreach in 2023 to gather community concerns, priorities and input. This included a public meeting and public survey conducted in May 2023, as well as a website and extensive public notification.

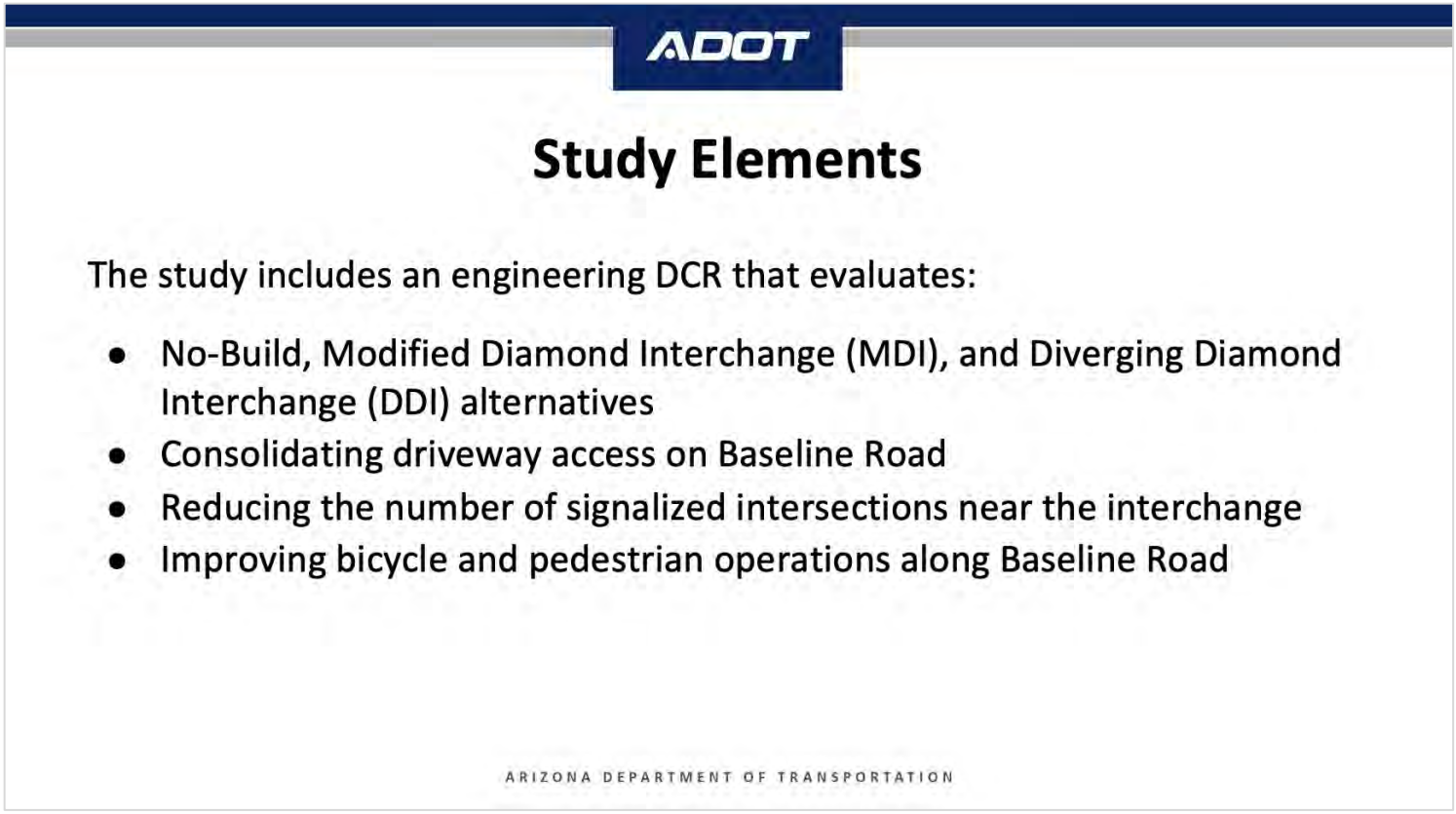
The team also collected data such as field surveys and traffic counts and performed traffic modeling to determine future traffic flows with and without improvements.

We are developing and evaluating design alternatives for the interchange improvements, including initial engineering, environmental, right of way and projected costs for the interchange improvements.

We worked in close collaboration with our project partners, including MAG, the cities of Tempe and Phoenix, the town of Guadalupe and the Federal Highway Administration, to develop two possible interchange design alternatives.

This second public meeting is being held to present these build design alternatives for your input. We will also be presenting information on the no build, or do nothing alternative, as a comparison.

Following public and local jurisdiction input on the alternatives, the team will select a preferred alternative and prepare a final Design Concept Report and associated environmental documents.



The Design Concept Report is developing, evaluating and comparing preliminary design alternatives, which includes the following items:

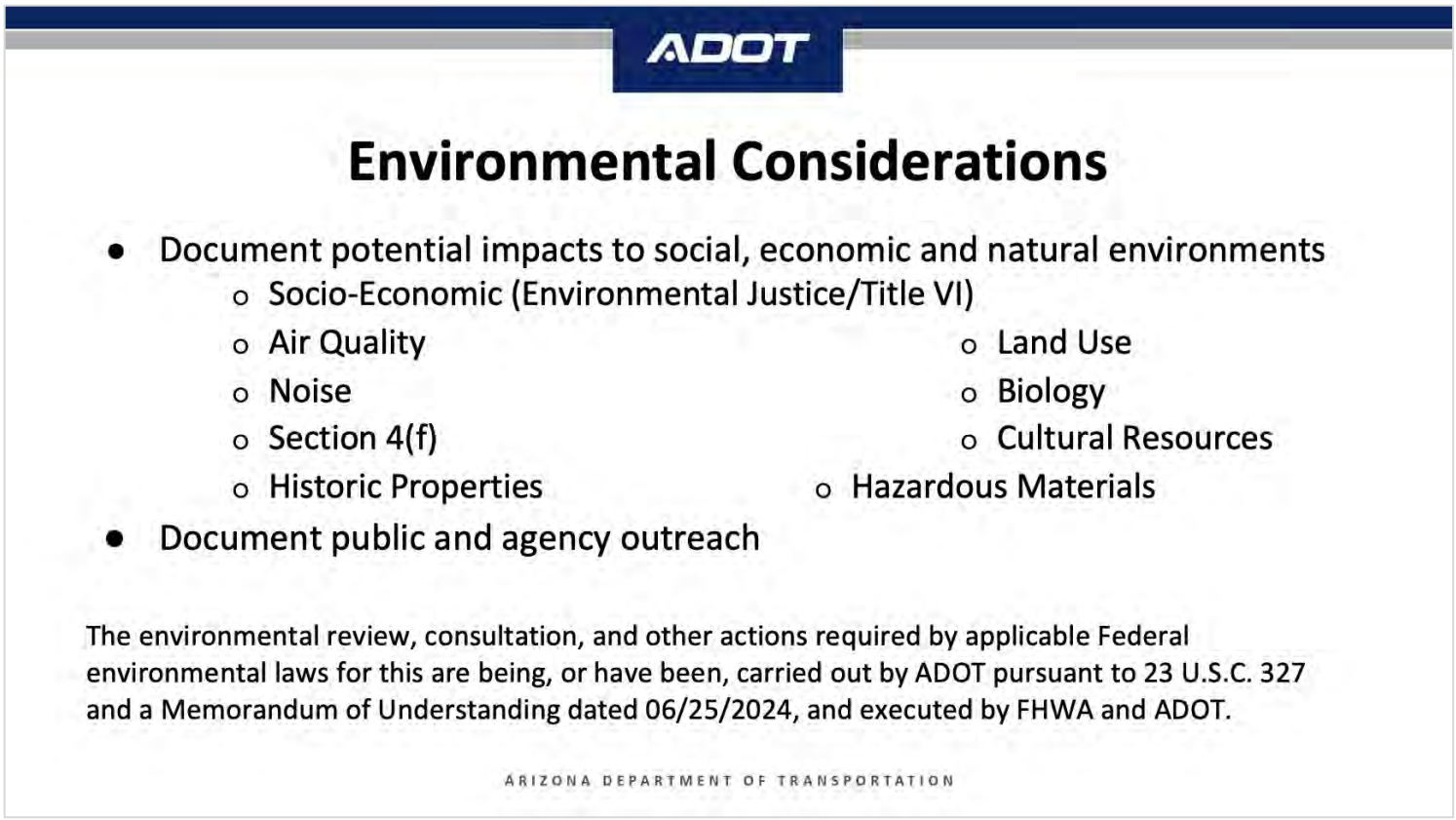
Modifying the existing diamond interchange to a Modified Diamond Interchange (MDI) or converting the existing interchange to a Diverging Diamond Interchange (DDI)

Reducing the number of driveways on Baseline Road to allow for better traffic flow

Reducing the number of signalized intersections in close proximity to the interchange, and

Improving pedestrian and bicycle operations along Baseline Road by widening and upgrading sidewalks to current ADA standards

This evaluation includes an engineering and environmental analysis. It's important to note that this study will only identify potential right-of-way impacts and access changes. If a Build alternative is selected, and once ADOT receives environmental approval, final design will begin and then ADOT will identify specific right-of-way needs and the right-of-way acquisition process can begin.



The study team will evaluate the environmental conditions in compliance with environmental regulations such as the National Environmental Policy Act (NEPA) and the Clean Air Act. This process will document potential impacts to social, economic, and natural environments, including:

- Socio-Economic (Environmental Justice/Title VI)
- Air Quality
- Land Use
- Noise
- Biology
- Section 4(f)
- Cultural Resources
- Historic Properties
- Hazardous Materials

The team will also document public and agency outreach for the project record.

No Build Scenario

- No improvements to the existing interchange or to Baseline Road
- Existing roadways and traffic signals remain unaltered

ARIZONA DEPARTMENT OF TRANSPORTATION

The No Build scenario would not make any improvements to the existing interchange or to Baseline Road. The existing roadways and traffic signals would remain unaltered. This scenario would not improve traffic congestion, safety, or bicycle and pedestrian facilities.

Modified Diamond Interchange (MDI) Alternative

- Keeps the interchange and ramp configuration as they are
- Adds right turn lanes on Baseline Road and I-10 on- and off-ramps to improve traffic operations

ARIZONA DEPARTMENT OF TRANSPORTATION

The Modified Diamond Interchange alternative would keep the interchange and ramp configuration as they are, while adding some modifications to improve traffic operations.

This includes adding a new eastbound right turn lane and extending the existing right turn lane on Baseline Road at I-10, and additional lanes on the exit and entrance ramps.

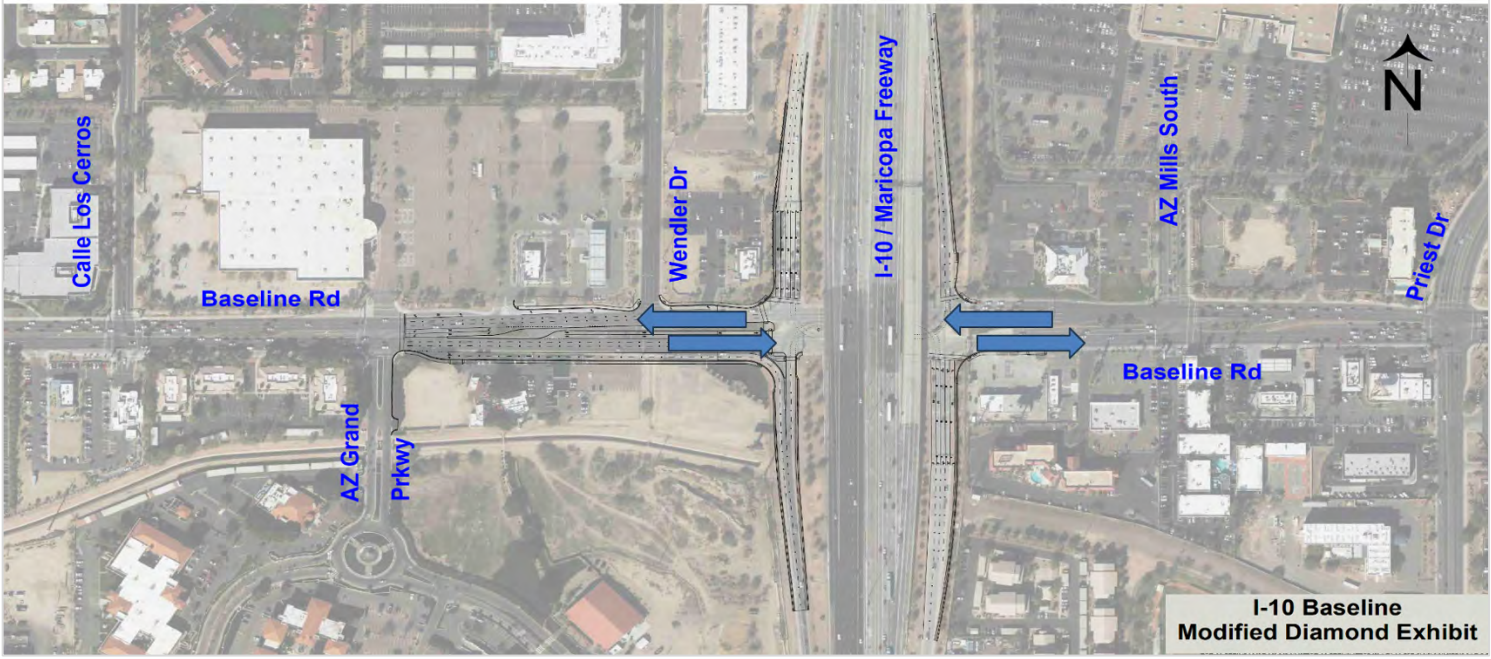
Modified Diamond Interchange (MDI) Alternative

The MDI Alternative is depicted in this exhibit. The improvements are shown in a heavier black line. The limits of construction along Baseline Road are from Arizona Grand Parkway to just east of the interchange.

Modified Diamond Interchange (MDI) Alternative

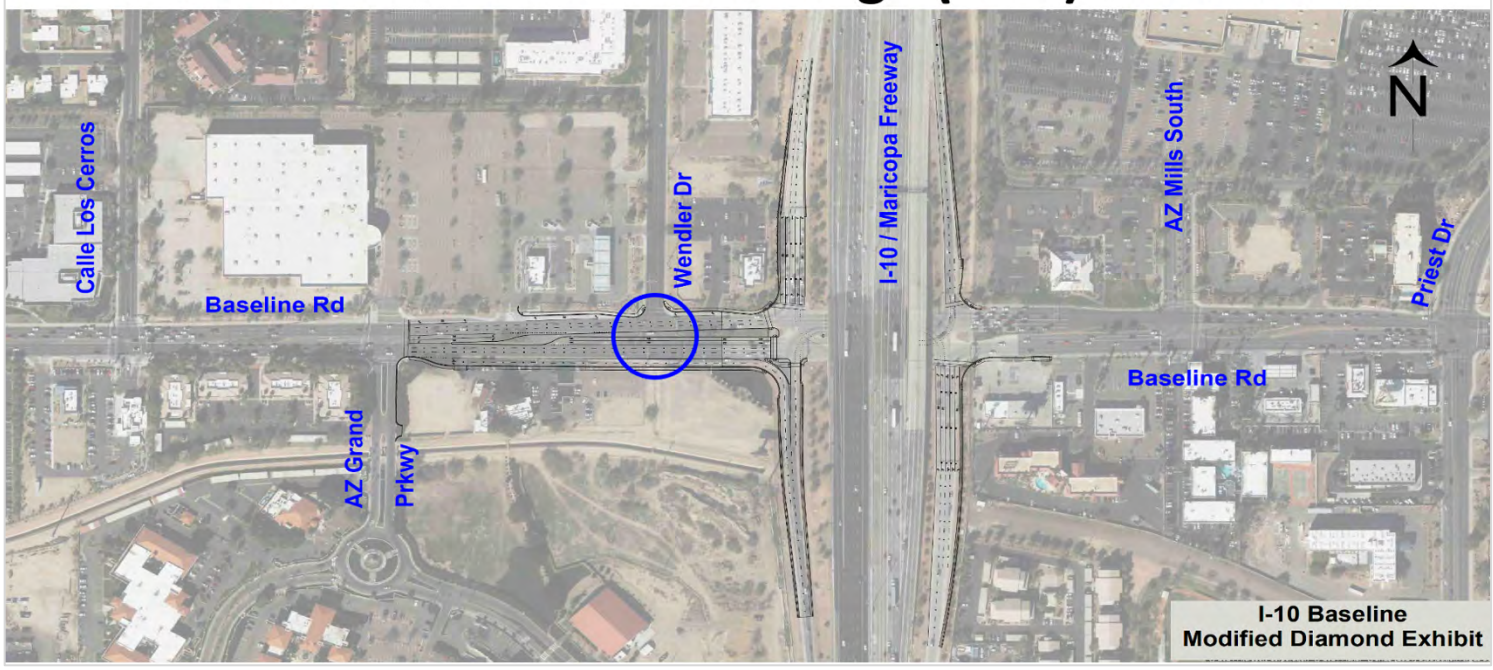
This exhibit depicts the additional eastbound right turn lanes and receiving lanes on the eastbound I-10 on-ramp. This is a very heavy traffic movement and the additional lanes allow more turning vehicles to store in the turn lanes and not impede Baseline Road through traffic.

Modified Diamond Interchange (MDI) Alternative



The number of through lanes on Baseline Road will remain the same, but removing more turning traffic from the through lanes will increase the number of vehicles served per signal cycle and will improve travel times along this corridor.

Modified Diamond Interchange (MDI) Alternative

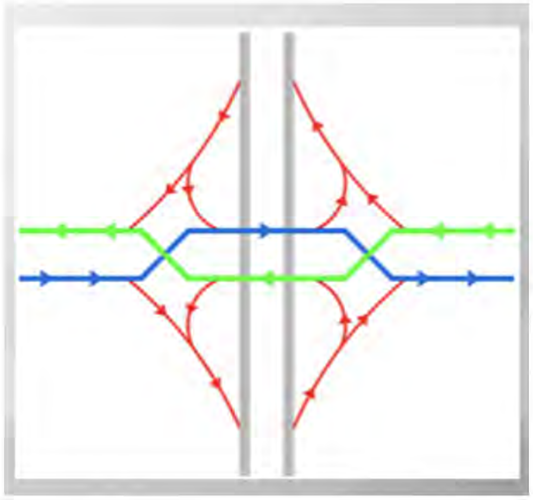


This alternative also includes the removal of the traffic signal at Wendler Drive and revises the access to be right-in, right-out. This will improve the flow of traffic on Baseline Road by reducing conflict points and extending the available queue area approaching I-10.

ADOT

Diverging Diamond Interchange (DDI) Alternative

- Converts the interchange into a new configuration
- Allows through and left-turning traffic to proceed simultaneously



ARIZONA DEPARTMENT OF TRANSPORTATION

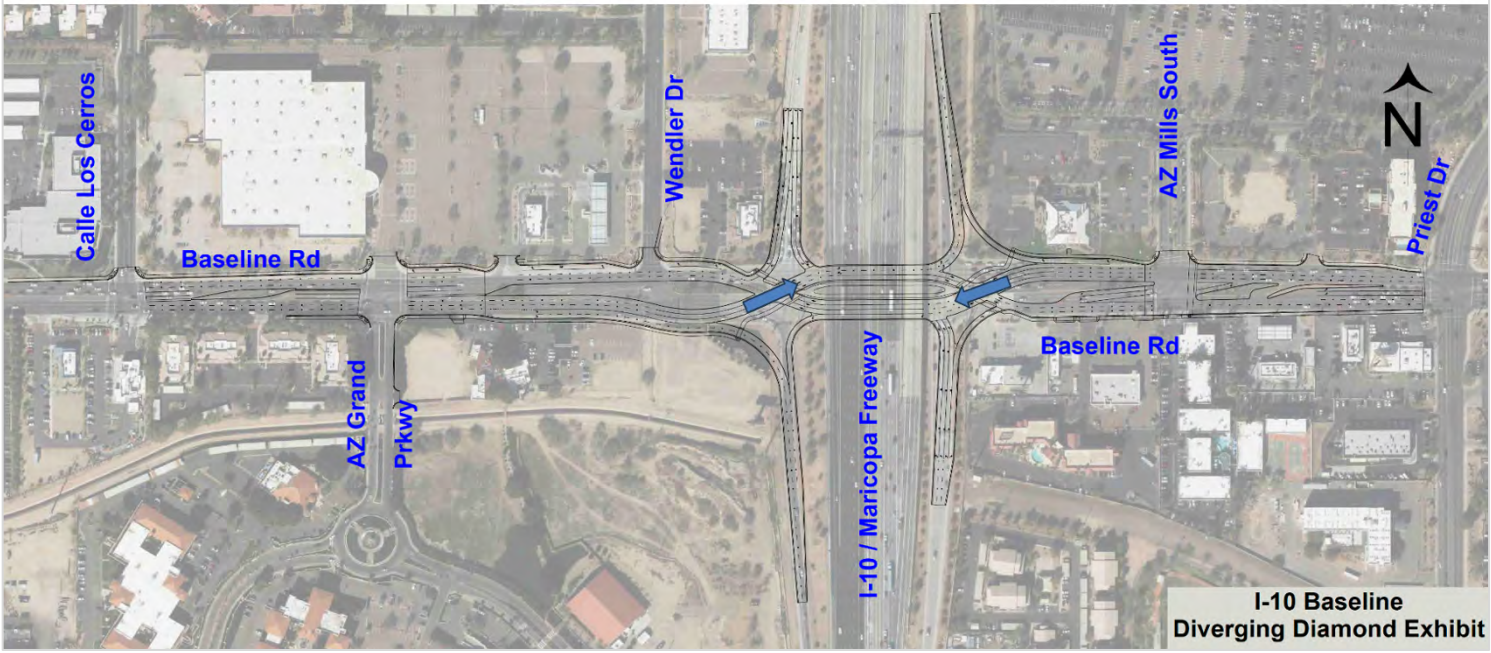
The second build alternative being considered is the Diverging Diamond Interchange. The DDI is a relatively new type of interchange that provides efficient traffic movements and reduces conflict points between traffic movements to improve safety.

A DDI increases traffic flow by temporarily transitioning traffic to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left-turn.

Diverging Diamond Interchange (DDI) Alternative

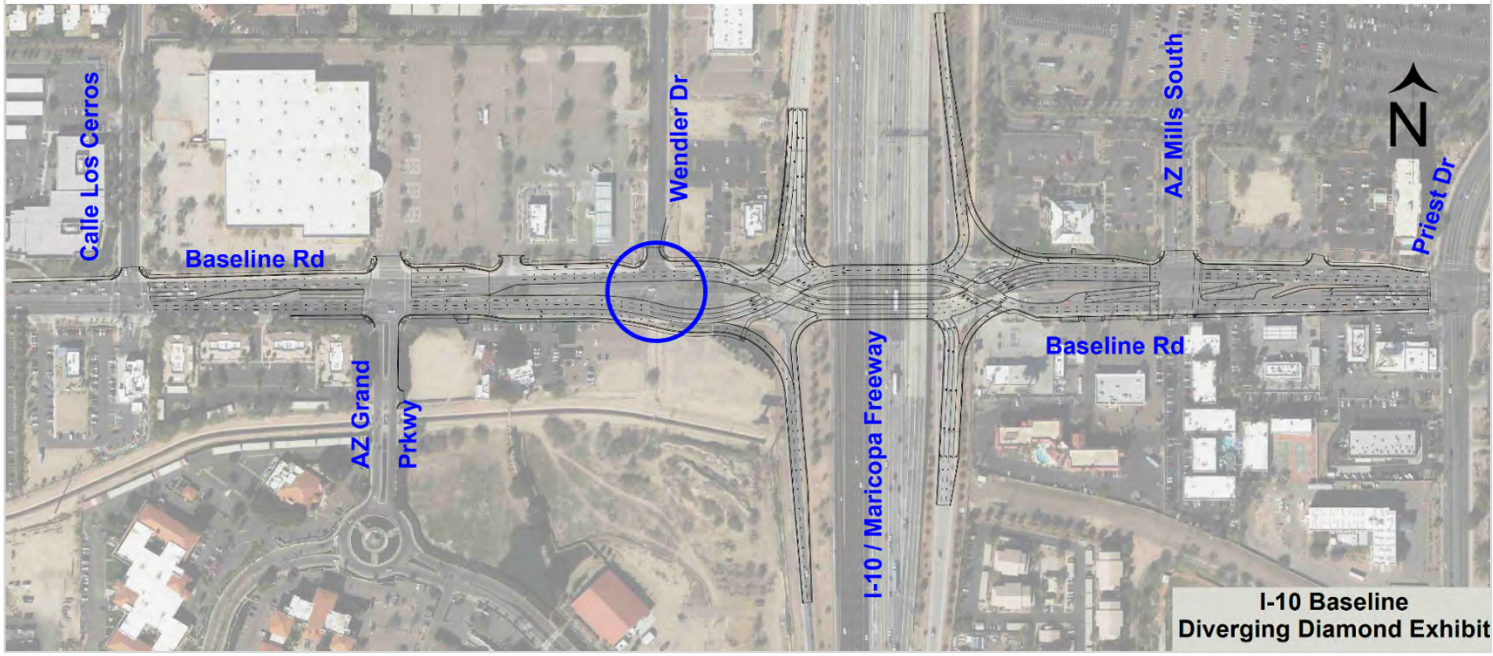
The DDI Alternative is depicted in this exhibit. Like the MDI, the DDI improvements are shown in a heavier black line. The limits of construction along Baseline Road are from Calle Los Cerros Drive to Priest Drive.

Diverging Diamond Interchange (DDI) Alternative

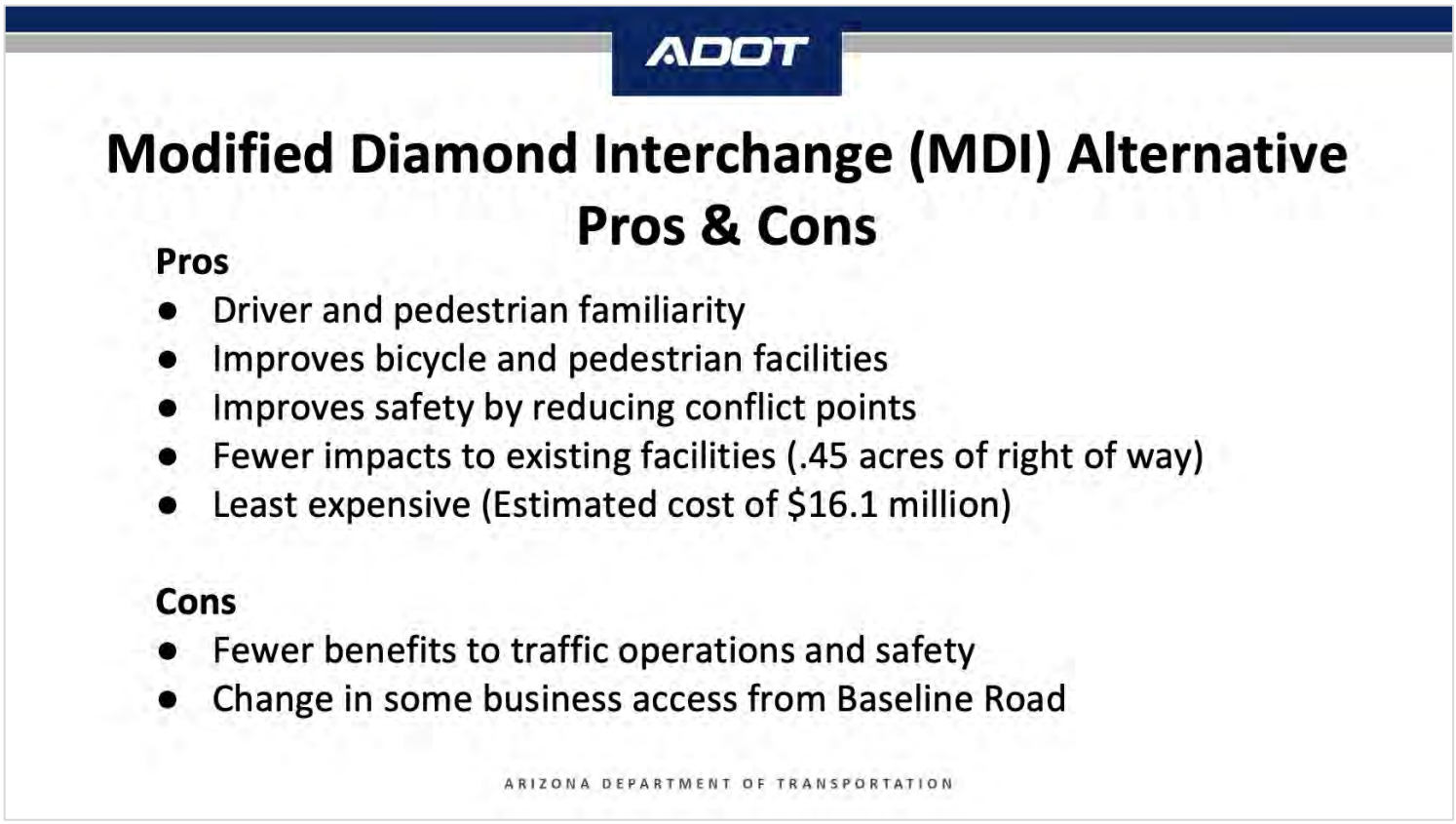


Again, the DDI would increase traffic flow by traffic temporarily transitioning to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left-turn. DDIs are particularly effective at locations that have high volumes of left-turn traffic on and off of freeway ramps and left-turn related safety challenges.

Diverging Diamond Interchange (DDI) Alternative



This alternative also includes the removal of the traffic signal at Wendler Drive and revises Wendler access to be right-in, right-out. This will improve the flow of traffic on Baseline Road by reducing conflict points and extending the available queue area approaching I-10.



Next, I'd like to point out the pros and cons of each build alternative. Some of the pros associated with the MDI Alternative are as follows:

Drivers and pedestrians are already familiar with this configuration

Improvements to pedestrian and bicycle facilities by widening and upgrading sidewalks to current ADA standards

Reduced conflict points and improved safety on Baseline Road

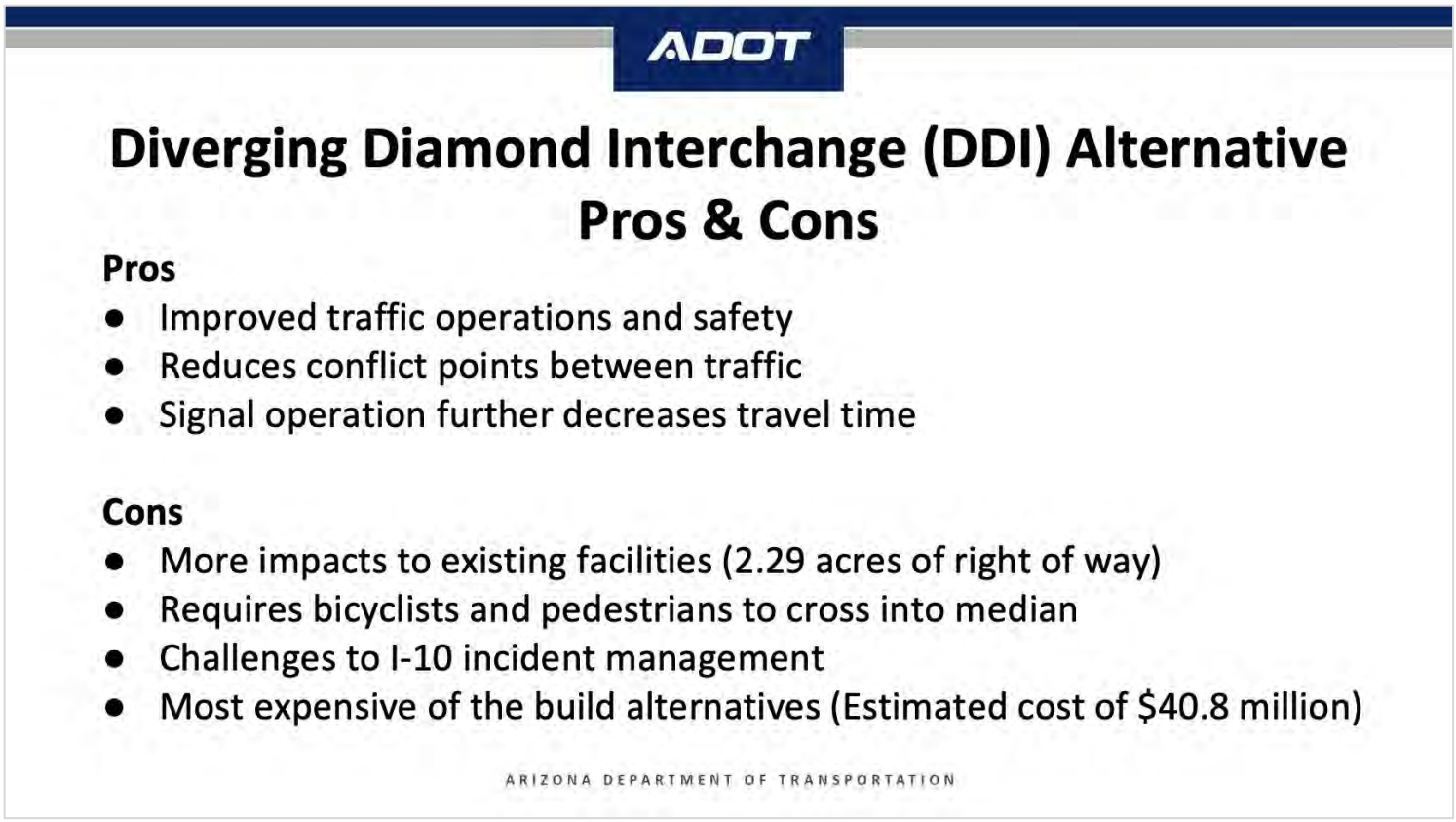
Fewer impacts to existing utilities, right of way and businesses

Least expensive and shortest construction duration of the build alternatives being evaluated

Some of the cons associated with the MDI Alternative are as follows:

Fewer benefits to traffic operations and safety compared to the DDI alternative

Reduction in access to Aunt Chilada's and Denny's properties from Baseline Road



Some of the pros associated with the DDI Alternative are as follows:

Improved traffic operations and safety

Reduces conflict points, especially for the high volume left turn movements

Simpler signal operation allows more time to be allocated to Baseline Road through movements, decreasing corridor travel time

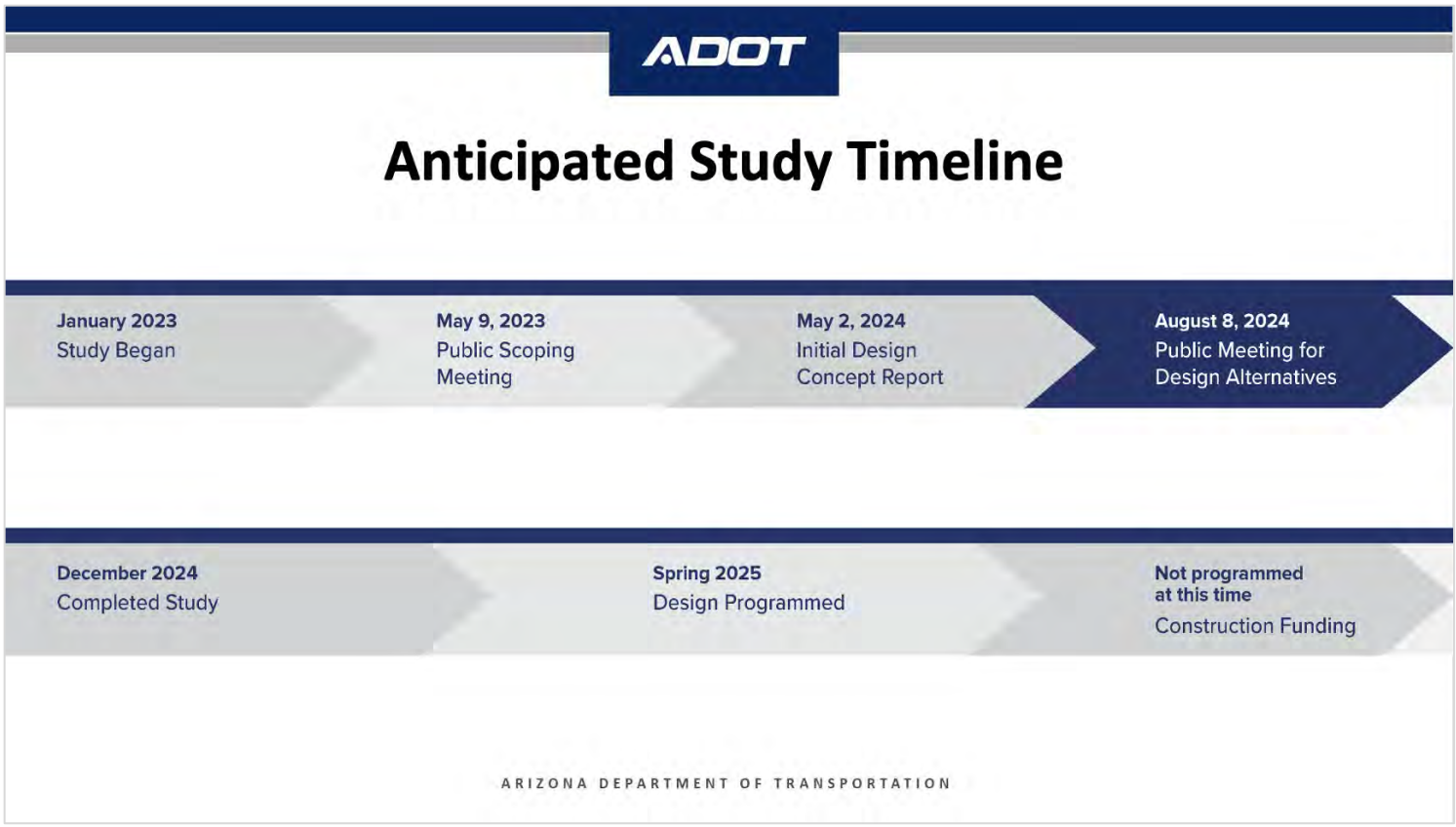
Some of the cons associated with the DDI Alternative are as follows:

More impacts to existing utilities, right of way and businesses than the MDI, including a full take of the parcel on the southeast corner of the interchange

Requires bicyclists and pedestrians to cross into the Baseline Road median

Reduces I-10 incident management by eliminating through movements on the ramps

High right-of-way and construction cost and will take the longest to construct



This graphic shows the anticipated study schedule, moving from left to right:

Study Began in January 2023

ADOT held a Public Scoping Meeting on May 9, 2023

The Initial Design Concept Report was submitted on May 2, 2024

We are here tonight at the Public Meeting for Design Alternatives

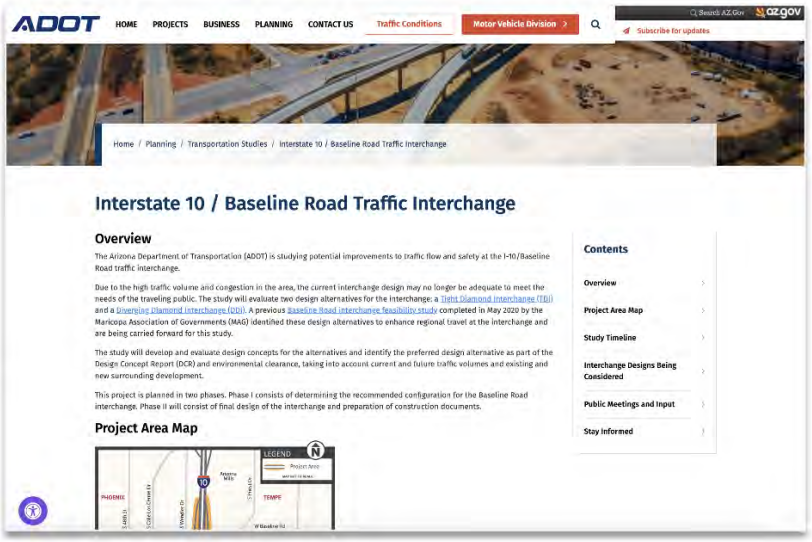
The study is anticipated to be completed in December 2024 with design programmed in Spring 2025

Funding for construction is not currently programmed

Now I'll turn it back over to Gael.

More Information and Mailing List

- Visit project website: azdot.gov/i10baseline
- View presentation
- Sign up for project mailing list to be notified of updates at azdot.gov/i10baseline



ARIZONA DEPARTMENT OF TRANSPORTATION

Thank you, Mark!

For more information on the study, you can visit the project website at: azdot.gov/i10baseline

We encourage you to visit the website to sign up for the project mailing list.

Comments

How to provide comments through Aug. 22, 2024:

- Tonight's meeting
- Online Survey: tinyurl.com/i10baselinecomment
- Email: projects@azdot.gov
- Phone: 855.712.8530
- Mail: ADOT Community Relations
  1655 West Jackson, MD 126F
  Phoenix, AZ 85007

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Your input is important, and we appreciate you taking the time to learn more about the study and provide your feedback. ADOT is accepting comments on the alternatives through August 22 in the following ways:

During this meeting, which I will cover in just a moment

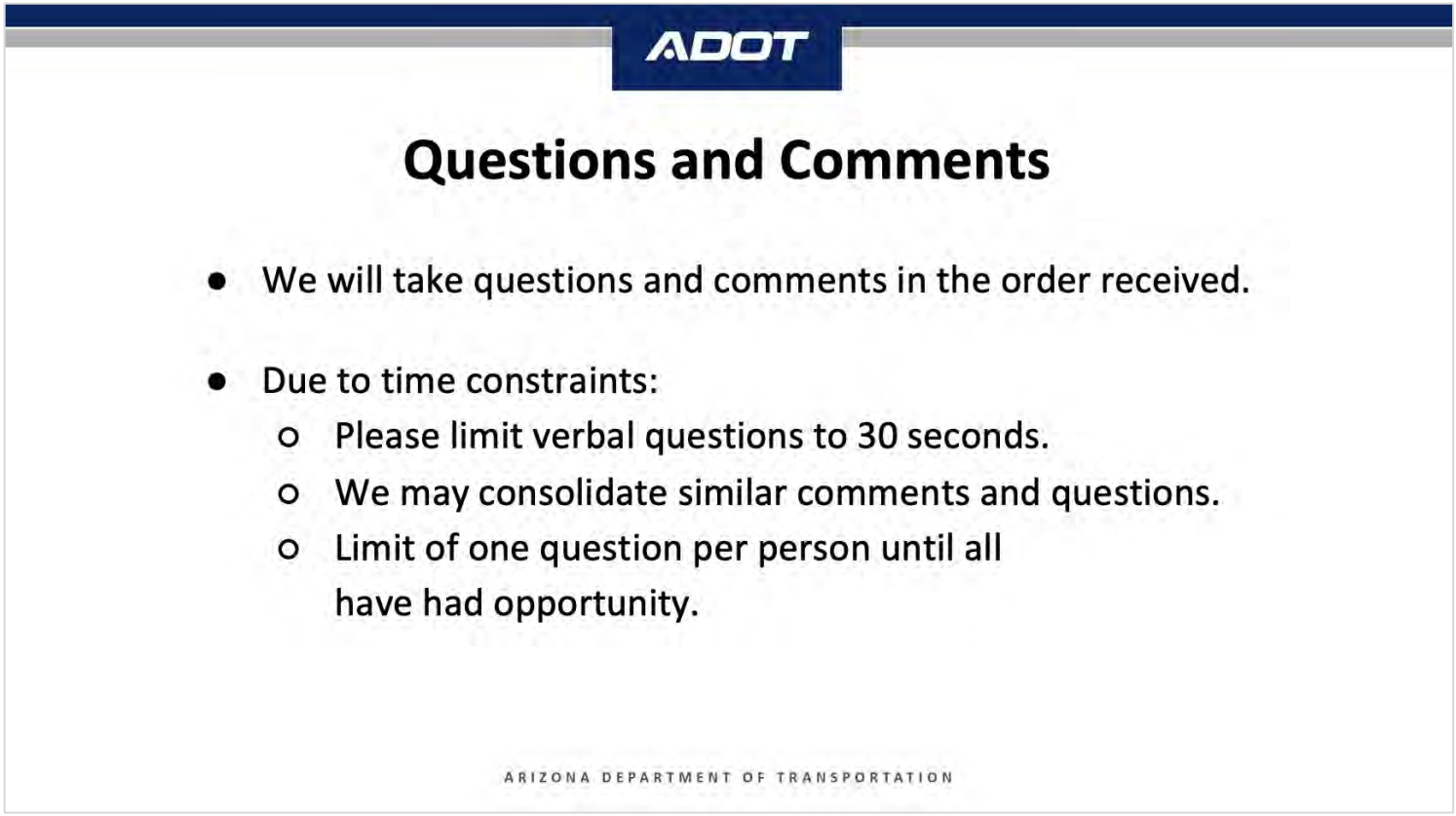
You can complete the online comment form by scanning the QR code on the screen or clicking the link in the chat box

You can send an email to projects@azdot.gov

You can call 855-712-8530

And you can visit the project website at azdot.gov/i10baseline

You can submit questions through the online comment form at tinyurl.com/i10baselinecomment, or you can mail your comments to: ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007



Now we'll begin the question and comment portion of the meeting.

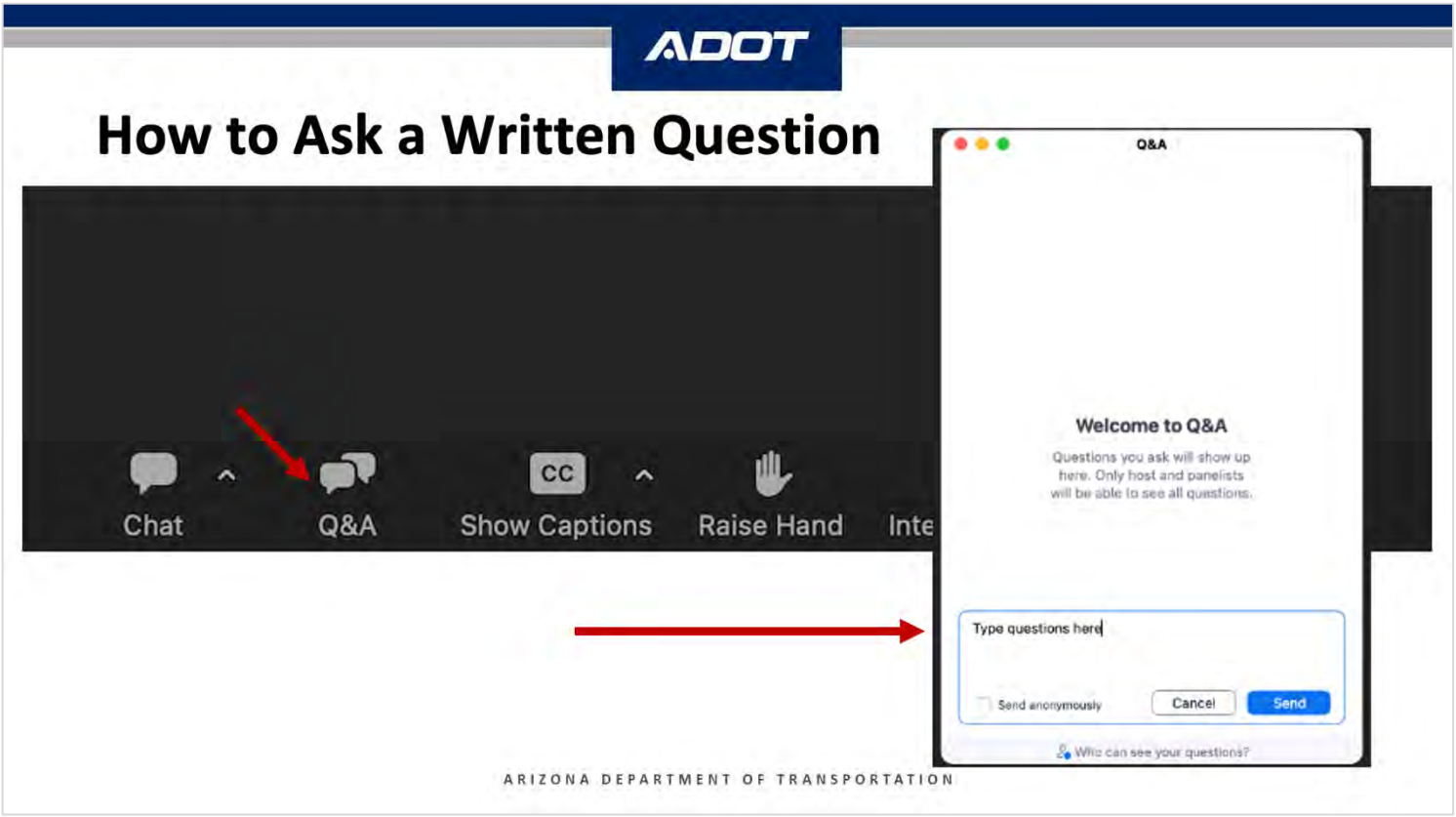
We will be taking questions and comments in the order that they are received.

Due to time constraints and to allow others time to comment:

Please limit verbal questions to no more than 30 seconds.

We may combine similar questions or comments.

and we ask that you limit yourself to one question until everyone has had an opportunity to ask their question or make their comment.

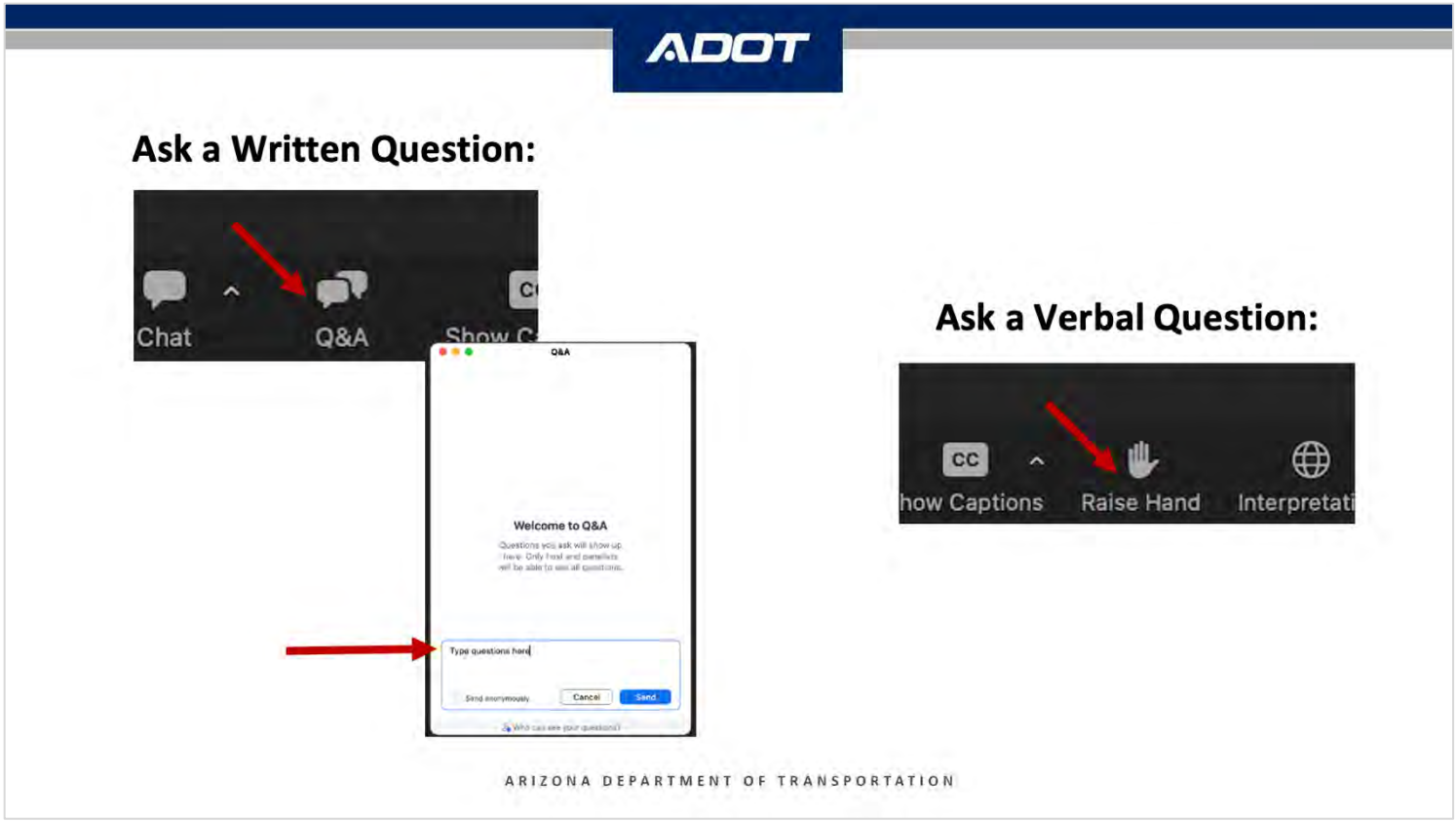


If you are participating in the online meeting, you can submit a written question or comment using the Q&A function.

For our Spanish speakers, when you provide a question or comment in Spanish using the Q&A function, a Spanish-speaking project team member will translate it, and you will hear the response to questions in the Zoom Spanish language channel and Spanish call-in line.

The second way to participate, if you are joining the meeting online, is to raise your hand by clicking on the Raise Hand icon at the bottom of your screen. When you raise your hand, the presenter will unmute you and call on you when it is your time to speak so you can be heard. Those who ask a question in Spanish will have it repeated in English by our interpreter and hear the response interpreted in Spanish.

For attendees joining us on the phone, please enter star 9 to indicate you would like to speak and we will receive the hand raised signal. When we are ready for your question/comment, our host will ask you to unmute yourself by pressing star 6. At this time, I would like to introduce Tom Baca.



Thank you, Gael. Good evening. I'm Tom Baca, a member of the project's outreach team. I'll be helping take your questions and comments this evening. Just as a reminder, in order to cover as many questions as possible, we may be paraphrasing and consolidating similar questions so that we can cover more topics and information. We may not have time to get to all of them but will provide answers in the meeting summary that will be added to the project website. We already have a few entered in the Q&A so we'll start with those and then go to anyone with a hand raised online and then on the phone. (Begin reading questions.)

Just as a reminder, if you're online and want to ask a question or make a comment verbally, just click on the Raise Hand icon at the bottom of your screen. If you are on the phone, press *9 to raise your hand. I'll call on you when we're ready for your question or comment and let you know to unmute yourself by pressing *6.

If you're on the Spanish language phone line just state your question and our interpreter will relay your question to our panelists.

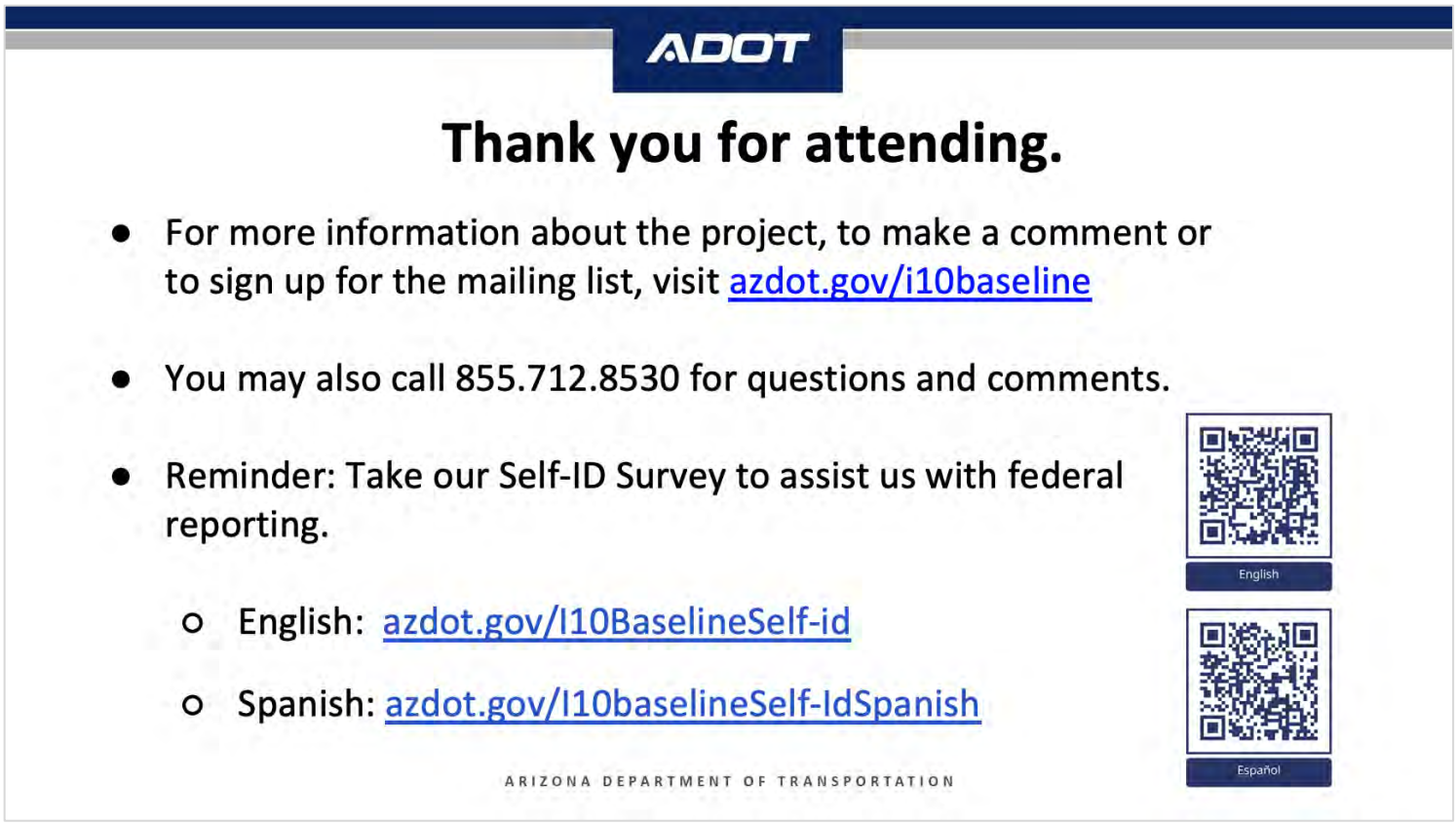
Now I see we have someone on the phone with their hand raised with the last four digits of their phone number being XXXX. You can unmute yourself now by pressing *6 and share your question or comment.

We're at 7:00 when the meeting was scheduled to close. However, we still have a few questions to take so we'll keep going until about 7:15 to get more in.

It's time to close the meeting. We do have a few questions we'll not have time to answer in the meeting tonight but will respond to in writing and add to the meeting summary.

Thank you for participating in tonight's public meeting and for sharing your questions and comments with ADOT and the project team.

Now back to Gael to close the meeting.



Before we close, I'd like to remind you that this presentation was recorded and will be posted to the project website.

We would like to encourage you to visit the website for more information and to sign up for the mailing list. We have posted the website link in the chat for your convenience.

Comments will be accepted until August 22. A link to the comment form is also available in the chat. The web address is tinyurl.com/i10baselinecomment

If you have any follow-up questions or comments, please use the comment form or contact me at projects@azdot.gov

Also, if you have not already done so, please take the Anonymous Self-ID Survey. We have placed the link to the survey in the chat as well.

Thank you very much for your interest in the project and your participation

Online Survey/Comment Form

I-10/Baseline Road Traffic Interchange Study | Public Comment Form

Please use this form to provide comments on the I-10/Baseline Road Traffic Interchange Study design alternatives. Comments will be accepted through Aug. 22, 2024.

For more information, visit https://azdot.gov/I10Baseline

What do you ***like*** about the No Build alternative?

(For more information on this alternative, click here.)

Long answer text

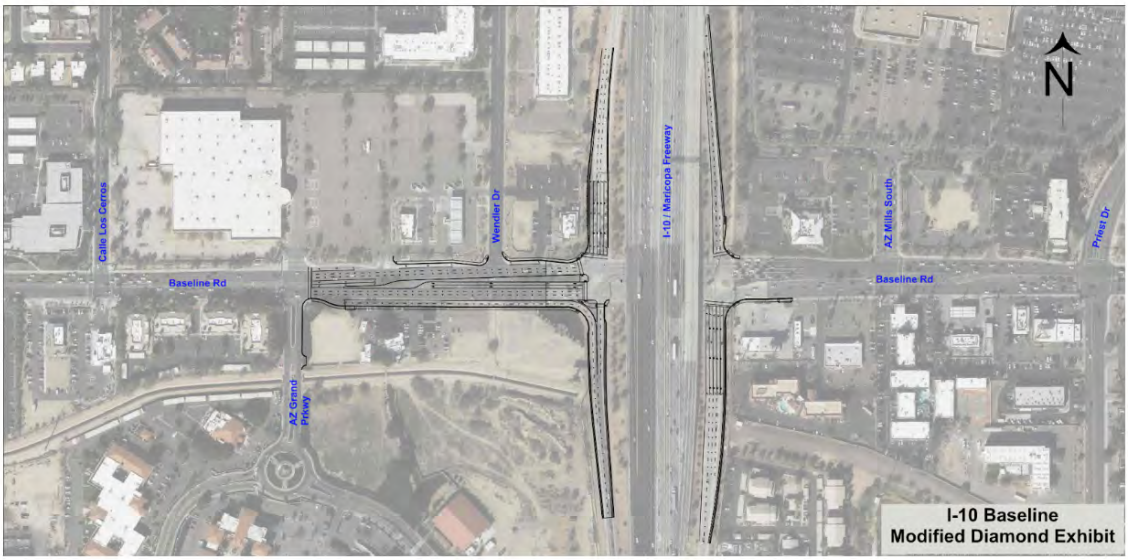
What do you ***dislike*** about the No Build alternative?

(For more information on this alternative, click here.)

Long answer text

What do you ***like*** about the Modified Diamond Interchange (MDI) alternative?

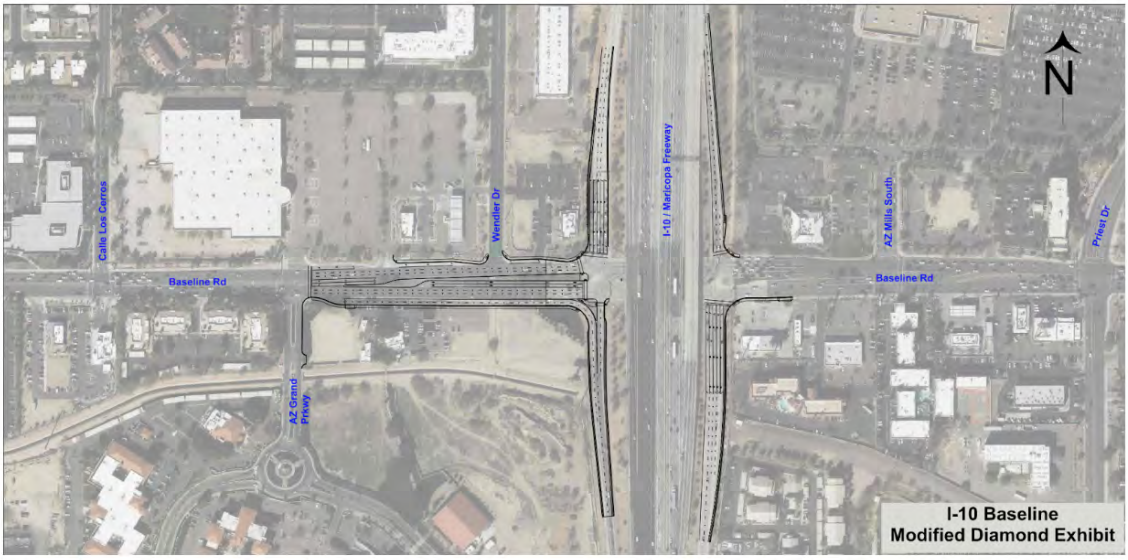
(For more information on this alternative, click here.)



Long answer text

What do you ***dislike*** about the Modified Diamond Interchange (MDI) alternative?

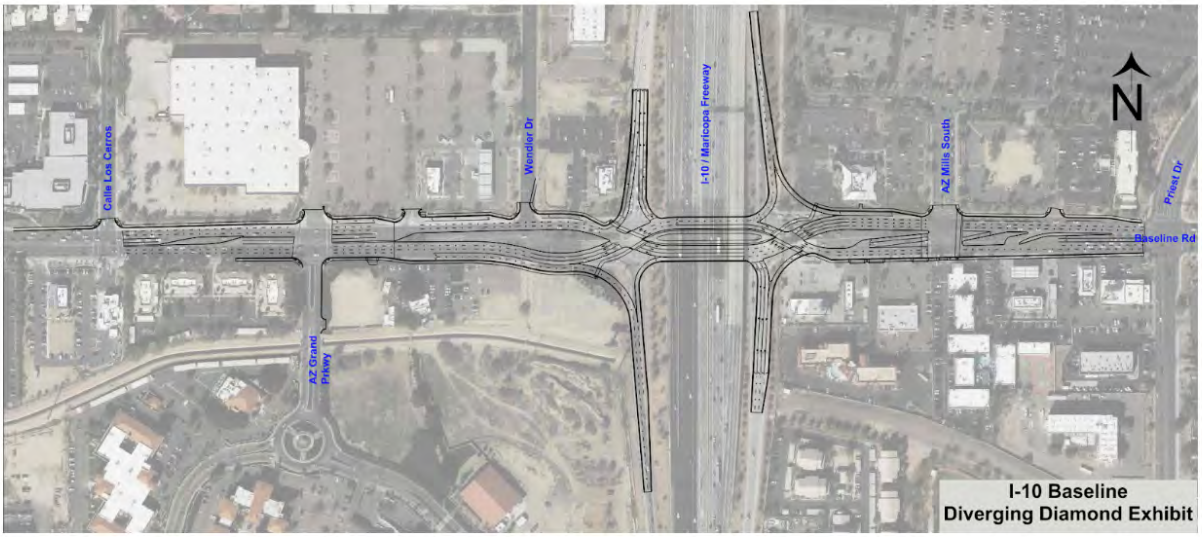
(For more information on this alternative, click here.)



Long answer text

What do you ***like*** about the Diverging Diamond Interchange (DDI) alternative?

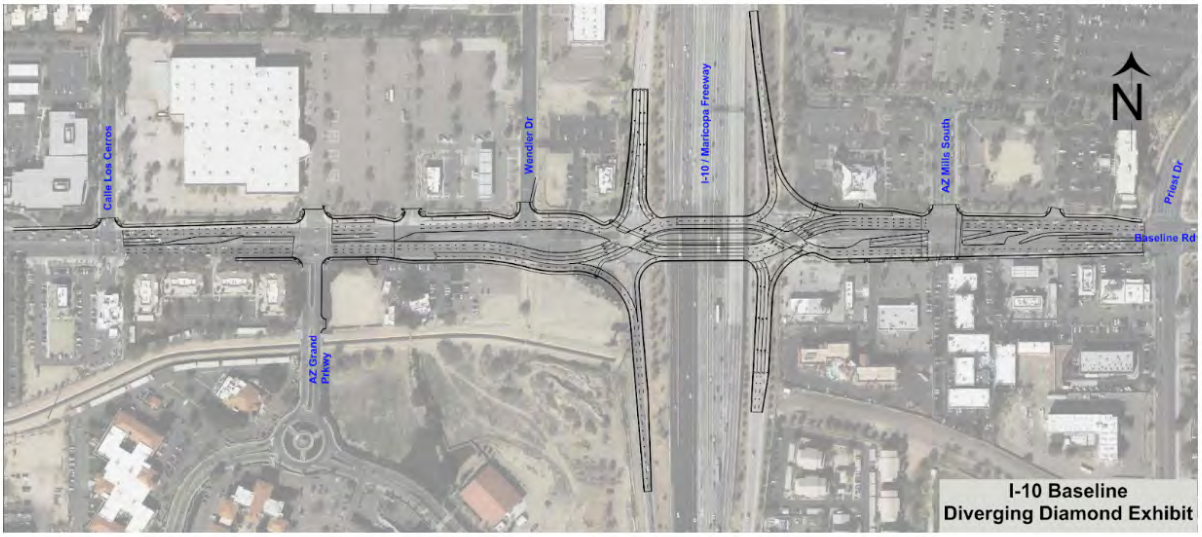
(For more information on this alternative, click here.)



Long answer text

What do you ***dislike*** about the Diverging Diamond Interchange (DDI) alternative?

(For more information on this alternative, click here.)



Long answer text

Provide any additional comments below:

Long answer text

Zip Code *

Short answer text

Name

Short answer text

Email

Short answer text

Self-Identification Survey (English)

ADOT Self Identification Survey - Interstate 10: Baseline Road Traffic Interchange Study

The Arizona Department of Transportation's goal is to ensure that every effort will be made to prevent discrimination through the impact of its programs, policies, and activities. ADOT will take reasonable steps to provide accommodations based on language or disability. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation. By completing this voluntary survey, ADOT will be able to determine who attends its public meetings and how the department can improve participation.
The survey will also help ADOT fulfill federal reporting requirements.

Title VI of the 1964 Civil Rights Act, as amended, 42 USC 2000d, and U.S. Department of Transportation regulations provide that "no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Other Title VI Nondiscrimination related authorities:
- Federal-Aid Highway Act of 1973
- Section 504 of the Rehabilitation Act of 1973
- Americans with Disabilities Act of 1990
- Executive Orders 12898 & 13166

Para Espanol: https://azdot.gov/i10BaselineSelf-idSpanish

aaroncjohnson78@gmail.com Switch account

Not shared

* Indicates required question

Completing this survey is voluntary. If you choose to respond, please mark all that apply.

Race/Ethnicity *

- [ ] White
- [ ] African American/Black
- [ ] American Indian/Alaskan Native
- [ ] Native Hawaiian/Other Pacific Islander
- [ ] Asian
- [ ] Hispanic/Latino

Submit Clear form

Self-Identification Survey (Spanish)

ADOT Encuesta para identificarse - Interstate 10: Baseline Road Traffic Interchange Study

El objetivo del Departamento de Transporte de Arizona es asegurar que cada esfuerzo se llevara a cabo para prevenir discriminación en el desarrollo de sus programas, políticas y actividades. ADOT también tomará todas las medidas razonables para ofrecer el acceso a servicios y actividades para personas con limitaciones ya sea por el idioma o por discapacidad. Las solicitudes deben hacerse lo más pronto posible para asegurar que el equipo encargado del proyecto tenga la oportunidad de hacer los arreglos necesarios. Con su participacion en esta encuesta voluntaria, ADOT podrá determinar quien participa en las reuniones públicas y como podrá mejorar la participación de miembros de minorías. La encuesta también le ayudará a ADOT a cumplir con requisitos federales.

El Titulo VI del Acto de Derechos Civiles, la ley 42 USC 2000d y otros reglamentos del Departamento
de Transporte de los Estados Unidos, aseguran que "ninguna persona en los Estados Unidos será negada
los beneficios de o será discriminado de cualquier programa o actividad que recibe asistencia de
fondos federales por su raza, color de su piel u origen nacional". Otras autoridades relacionadas con la NoD iscriminación de Título VI:
- La Ley Federal de Asistencia Vial de 1973 (FederalAid Highway Act of 1973)
- Sección 504 de la Ley de Rehabilitación de 1973 (Section 504 of the Rehabilitation Act of 1973)
- Ley de ciudadanos Americanos con Discapacidades de 1990 (Americans with Disabilities Act of 1990)
- Ordenes Ejecutivas 12898 y 13166 (Executive Orders 12898 and 13166)

For English: https://azdot.gov/i10BaselineSelf-id

aaroncjohnson78@gmail.com Switch account

Not shared

* Indicates required question

El completar esta encuesta es voluntaria. Si usted decide responder, por favor marque todas las respuestas que le corresponden.

Etnicidad/Raza *

- [ ] Nativo de Hawái/Otra isla del Pacífico
- [ ] Asiático
- [ ] Hispano/Latino
- [ ] Amerindio/Nativo de Alaska
- [ ] Caucásico/Blanco
- [ ] Afroamericano/Negro

Submit Clear form

Appendix B
Public Meeting Notices / Advertising

GovDelivery Email Notices
July 18

Join ADOT for the Interstate 10/Baseline Road traffic interchange virtual public meeting Aug. 8

Arizona Department of Transportation sent this bulletin at 07/18/2024 03:10 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3a8fa99

ADOT

SHARE

Join ADOT for the Interstate 10/Baseline Road traffic interchange virtual public meeting Aug. 8

Learn about and provide input on the potential design alternatives for the interchange.

The Arizona Department of Transportation invites you to participate in a virtual public meeting on **Aug. 8 at 6 p.m**. to learn about and provide input on potential design alternatives for improving the Interstate 10/Baseline Road traffic interchange.

ADOT is developing a Design Concept Report (DCR) and conducting an environmental study to improve multimodal traffic flow and safety at the I-10/Baseline Road interchange. The DCR will identify and evaluate potential design alternatives for the interchange and will recommend a preferred alternative.

Attend the Meeting!

The virtual public meeting will be held:

- Thursday, Aug. 8 at 6 p.m.
- **Register to attend the public meeting:** https://tinyurl.com/i10baseline

The meeting will include a presentation by the study team, followed by an opportunity for questions and comments from attendees. Following the meeting, the presentation will be available on the project website at azdot.gov/i10baseline.

We Want to Hear from You!

Comments are being accepted through Aug. 22, 2024, in the following ways:

- Attend the virtual public meeting
- Online Survey: https://tinyurl.com/i10baselinecomment
- Email: gluna2@azdot.gov
- Phone: 855.712.8530
- Mail: ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, ADOT does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons who require a reasonable accommodation based on language or disability should contact Gael Luna at 855.712.8530 or gluna2@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras normas y leyes antidiscriminatorias, el Departamento de Transporte de Arizona (ADOT) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran asistencia (dentro de lo razonable) ya sea por el idioma o discapacidad deben ponerse en contacto con Gael Luna al 855.712.8530 o gluna2@azdot.gov. Las solicitudes deben hacerse lo más antes posible para asegurar que el Estado tenga la oportunidad de hacer los arreglos necesarios.

要查看此信息的中文版本，请访问 www.azdot.gov/I10Baseline。您还可以致电亚利桑那州交通部 855.712.8530 询问有关 I-10/Baseline 道路交通交汇处公开会议的信息。

要查看此資訊的中文版本，請造訪 www.azdot.gov/I10Baseline。您也可以致電亞利桑那州交通部 855.712.8530 詢問有關 I-10/Baseline 道路交通交匯處公開會議的資訊。

Reminder to update your subscriber preferences

Want to be notified of traffic restrictions on other ADOT highway corridors, projects and studies happening around Arizona? Update your subscriber preferences here.

Schedules are subject to change based on weather and other unforeseen factors. For more information, please call the ADOT Bilingual Project Information Line at 855.712.8530 or go to azdot.gov/contact and select ***Projects*** *from the drop-down menu. For real-time highway conditions statewide, visit ADOT's Traveler Information Site at www.az511.gov, Need to know where a milepost is? Click on the "Mile Markers" icon on the map at www.az511.com. For real-time highway conditions statewide, visit ADOT's Traveler Information Site at www.az511.gov, download the AZ511 app or call 511.*

July 25

REMINDER: Join ADOT for the Interstate 10/Baseline Road traffic interchange virtual public meeting Aug. 8

Arizona Department of Transportation sent this bulletin at 07/25/2024 01:22 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3aacc12

ADOT

SHARE

REMINDER: Join ADOT for the Interstate 10/Baseline Road traffic interchange virtual public meeting Aug. 8

Don't forget to mark your calendar to join the Arizona Department of Transportation's (ADOT) virtual public meeting on **Aug. 8 at 6 p.m.** to learn about and provide input on the potential alternatives for improving the I-10/Baseline Road traffic interchange.

ADOT is developing a Design Concept Report (DCR) and conducting an environmental study to improve multimodal traffic flow and safety at the I-10/Baseline Road interchange. The DCR is identifying and evaluating potential design alternatives for the interchange, and will recommend a preferred alternative.

Attend the Meeting!

The virtual public meeting will be held:

- Thursday, Aug. 8 at 6 p.m.
- **Register to attend the public meeting:** https://tinyurl.com/i10baseline

The meeting will include a presentation by the study team, followed by an opportunity for questions and comments from attendees. Following the meeting, the presentation will be available on the project website at azdot.gov/i10baseline.

We Want to Hear from You!

You can submit your comments through Aug. 22 in any of the following ways:

- Online Survey: https://tinyurl.com/i10baselinecomment
- Email: gluna2@azdotgov
- Phone: 855.712.8530
- Mail: ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, ADOT does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons that require a reasonable accommodation based on language or disability should contact Gael Luna at 855.712.8530 or gluna2@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras normas y leyes antidiscriminatorias, el Departamento de Transporte de Arizona (ADOT) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran asistencia (dentro de lo razonable) ya sea por el idioma o discapacidad deben ponerse en contacto con Gael Luna al 855.712.8530 o gluna2@azdot.gov. Las solicitudes deben hacerse lo más antes posible para asegurar que el Estado tenga la oportunidad de hacer los arreglos necesarios.

Reminder to update your subscriber preferences

Want to be notified of traffic restrictions on other ADOT highway corridors, projects and studies happening around Arizona? Update your subscriber preferences here.

Aug. 7

TOMORROW: Join ADOT for the Interstate 10/Baseline Road traffic interchange alternatives virtual public meeting

Arizona Department of Transportation sent this bulletin at 08/07/2024 01:34 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3ad6e20

ADOT

SHARE

TOMORROW: Join ADOT for the Interstate 10/Baseline Road traffic interchange alternatives virtual public meeting

The Arizona Department of Transportation's virtual public meeting to learn about and provide input on the alternative to improve the I-10/Baseline Road traffic interchange is happening ***tomorrow*, Aug. 8 at 6 p.m.**

ADOT is developing a Design Concept Report (DCR) and conducting an environmental study to improve multimodal traffic flow and safety at the I-10/Baseline Road interchange. The DCR is identifying and evaluating potential design alternatives for the interchange, and will recommend a preferred alternative.

Attend the Meeting!

The virtual public meeting will be held:

- Thursday, Aug. 8 at 6 p.m.
- **Register to attend the public meeting:** https://tinyurl.com/i10baseline
- **Phone:** 669.900.6833 (Meeting ID:859 6049 1133)
- **Línea de interpretación al español:** 866.730.7514 (Pin de participante 984619#)

The meeting will include a presentation by the study team, followed by an opportunity for questions and comments from attendees. Following the meeting, the presentation will be available on the project website at azdot.gov/i10baseline.

We Want to Hear from You!

You can submit your comments through Aug. 22 in any of the following ways:

- **Online Survey:** https://tinyurl.com/i10baselinecomment
- **Email:** gluna2@azdotgov
- **Phone:** 855.712.8530
- **Mail:** ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

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Reminder to update your subscriber preferences

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Aug. 14

Missed our public meeting on the Interstate 10/Baseline Road traffic interchange alternatives? View the presentation and provide your comments online

Arizona Department of Transportation sent this bulletin at 08/14/2024 04:58 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.
Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3aee3d5

ADOT

SHARE

Missed our public meeting on the Interstate 10/Baseline Road traffic interchange alternatives? View the presentation and provide your comments online

Learn more about the alternatives being considered to improve the I-10/Baseline Road traffic interchange.

Visit azdot.gov/I10Baseline to watch the public meeting presentation and provide your comments.

You can submit your comments through Aug. 22 in any of the following ways:

- **Online Survey:** https://tinyurl.com/i10baselinecomment
- **Email:** gluna2@azdotgov
- **Phone:** 855.712.8530
- **Mail:** ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

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Reminder to update your subscriber preferences

Want to be notified of traffic restrictions on other ADOT highway corridors, projects and studies happening around Arizona? Update your subscriber preferences here.

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Aug. 15

Time is running out. Seven days left to provide your comments on the Interstate 10/Baseline Road traffic interchange alternatives.

Arizona Department of Transportation sent this bulletin at 08/15/2024 04:41 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3af1a3e

ADOT

SHARE

Time is running out. Seven days left to provide your comments on the Interstate 10/Baseline Road traffic interchange alternatives.

The Arizona Department of Transportation invites you to provide comments on the Interstate 10/Baseline Road traffic interchange alternatives. Watch the public meeting presentation to learn more about the alternatives being considered to improve the interchange by visiting azdot.gov/I10Baseline.

You can submit your comments through Aug. 22 in any of the following ways:

- **Online Survey:** https://tinyurl.com/i10baselinecomment
- **Email:** gluna2@azdotgov
- **Phone:** 855.712.8530
- **Mail:** ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

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Reminder to update your subscriber preferences

Want to be notified of traffic restrictions on other ADOT highway corridors, projects and studies happening around Arizona? Update your subscriber preferences here.

Aug. 21

Time is running out. Tomorrow is the last chance to provide your comments on the Interstate 10/Baseline Road traffic interchange alternatives.

Arizona Department of Transportation sent this bulletin at 08/21/2024 03:13 PM MST. If you would like alerts on this and other ADOT news, sign up above to receive our GovDelivery notices.

Having trouble viewing this email? https://content.govdelivery.com/accounts/AZDOT/bulletins/3b04143

ADOT

SHARE

Time is running out. Tomorrow is the last chance to provide your comments on the Interstate 10/Baseline Road traffic interchange alternatives.

Learn more about the alternatives being considered to improve the I-10/Baseline Road traffic interchange.

Visit azdot.gov/I10Baseline to watch the public meeting presentation and provide your comments.

You can submit your comments through **Aug. 22** in any of the following ways:

- **Online Survey:** https://tinyurl.com/i10baselinecomment
- **Email:** gluna2@azdotgov
- **Phone:** 855.712.8530
- **Mail:** ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

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Reminder to update your subscriber preferences

Want to be notified of traffic restrictions on other ADOT highway corridors, projects and studies happening around Arizona? Update your subscriber preferences here.

Print Ad (English)
Arizona Republic – SE Valley Republic
July 24, 26 and 27

Your Input is Requested!

Interstate 10/Baseline Road Traffic Interchange Study

The Arizona Department of Transportation (ADOT) invites you to a virtual public meeting to learn about the current alternatives being evaluated for the I-10/Baseline Road traffic interchange. The goal is to improve traffic flow and safety in the area. Project team members will present project information, answer questions and seek input from attendees.

Virtual Public Meeting

Thursday, Aug. 8, 2024 • 6 - 7 p.m.

HOW TO PARTICIPATE

- **Online (Zoom):** https://tinyurl.com/i10baseline
  Meeting ID: 859 6049 1133
- **Phone:** 669.900.6833 (English)

CAN'T ATTEND BUT HAVE INPUT?
Comments may be submitted by Aug. 22 in the following ways:

- **Online**: https://tinyurl.com/i10baselinecomment
- **Phone:** 855.712.8530 (English/Spanish)
- **Email**: gluna2@azdot.gov
- **Mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

如需获取其他格式或语言的副本或服务，请联系 Gael Luna，电话：855.712.8530，邮箱：gluna2@azdot.gov，或访问网站：azdot.gov/i10baseline

如需獲取其他格式或語言的副本或服務，請聯繫 Gael Luna，電話：855.712.8530，郵箱：gluna2@azdot.gov，或訪問網站：azdot.gov/i10baseline

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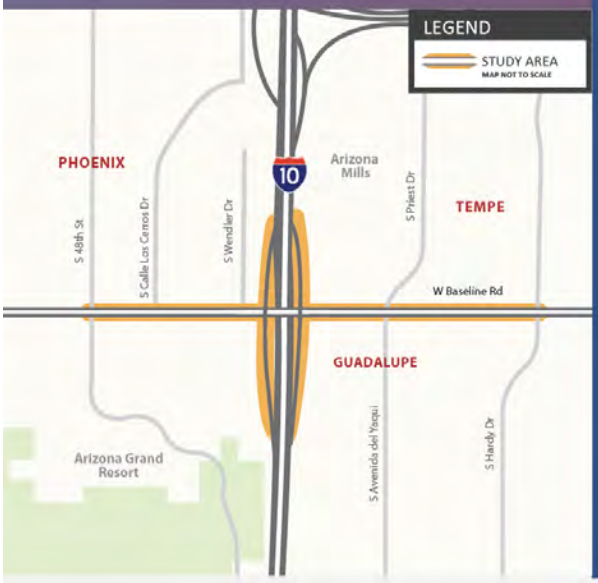
ADOT Project No. F0523 01L

Print Ad (English and Spanish)
Arizona Republic Buyer's Edge
July 24

Your Input is Requested!

Interstate 10/Baseline Road Traffic Interchange Study

The Arizona Department of Transportation (ADOT) invites you to a virtual public meeting to learn about the current alternatives being evaluated for the I-10/Baseline Road traffic interchange. The goal is to improve traffic flow and safety in the area. Project team members will present project information, answer questions and seek input from attendees.



Virtual Public Meeting

When: Thursday, Aug. 8, 2024
Time: 6 - 7 p.m.

HOW TO PARTICIPATE

- **Online (Zoom):** https://tinyurl.com/i10baseline
  Meeting ID: 859 6049 1133
- **Phone:** 669.900.6833 (English)

CAN'T ATTEND BUT HAVE INPUT?

Comments may be submitted by Aug. 22 in the following ways:

- **Online:** https://tinyurl.com/i10baselinecomment
- **Phone:** 855.712.8530 (English/Spanish)
- **Email:** gluna2@azdot.gov
- **Mail:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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ADOT Project No. F0523 01L

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¡Se solicita su opinión!

Interestatal 10/Baseline Road, Estudio del Intercambio de Tráfico

El Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) lo invita a una reunión pública virtual para conocer las alternativas actuales que se están evaluando para el intercambio de tráfico de la I-10 / Baseline Road. El objetivo es mejorar la fluidez del tráfico y la seguridad en la zona. Los miembros del equipo del proyecto presentarán información sobre el proyecto, responderán preguntas y buscarán la opinión de los asistentes.

Reunión pública virtual

Cuándo: Jueves 8 de agosto de 2024
Hora: 6 - 7 p.m.

COMO PARTICIPAR

- **En línea (Zoom):** https://tinyurl.com/i10baseline
  ID de reunión: 859 6049 1133
- **Teléfono:** 866.730.7514 (español)
  pin de participante 984619#

¿NO PUEDE ASISTIR PERO TIENE SU OPINIÓN?

Los comentarios pueden enviarse antes del 22 de agosto de las siguientes maneras:

- **En línea:** https://tinyurl.com/i10baselinecomment
- **Teléfono:** 855.712.8530 (Inglés/Español)
- **Correo electrónico:** gluna2@azdot.gov
- **Correo:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

如需获取其他格式或语言的副本或服务，请联系 Gael Luna，电话：855.712.8530，邮箱：gluna2@azdot.gov，或访问网站：azdot.gov/i10baseline

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ADOT Project No. F0523 01L

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Print Ad (Spanish)
Prensa Arizona
July 25

¡Se solicita su opinión!

Interestatal 10/Baseline Road, Estudio del Intercambio de Tráfico

El Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) lo invita a una reunión pública virtual para conocer las alternativas actuales que se están evaluando para el intercambio de tráfico de la I-10 / Baseline Road. El objetivo es mejorar la fluidez del tráfico y la seguridad en la zona. Los miembros del equipo del proyecto presentarán información sobre el proyecto, responderán preguntas y buscarán la opinión de los asistentes.

Reunión pública virtual

Jueves 8 de agosto de 2024
6 - 7 p.m.

COMO PARTICIPAR

Regístrese para asistir a la reunión.
Visite el siguiente sitio web para registrarse y asistir

- **En línea (Zoom):** https://tinyurl.com/i10baseline
  ID de reunión: 859 6049 1133
- **Teléfono:** 866.730.7514 (español)
  pin de participante 984619#

¿NO PUEDE ASISTIR PERO TIENE SU OPINIÓN?

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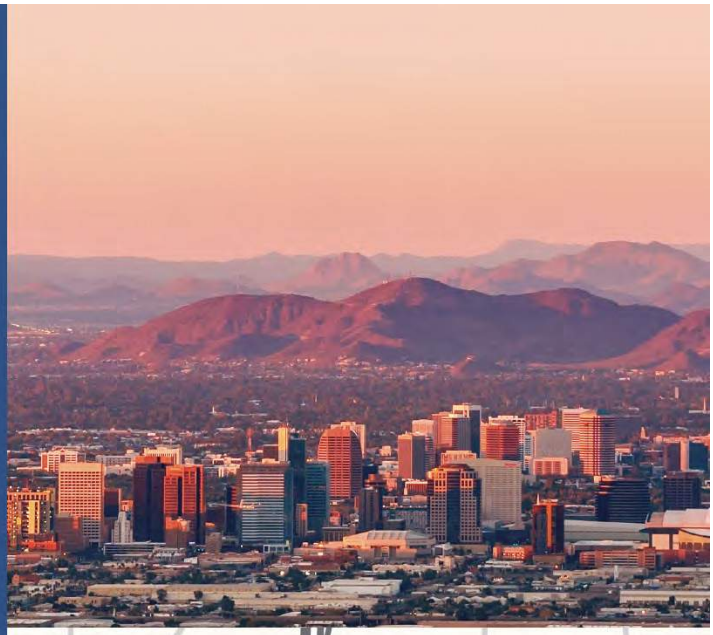
- **En línea:** https://tinyurl.com/i10baselinecomment
- **Teléfono:** 855.712.8530 (Inglés/Español)
- **Correo electrónico:** gluna2@azdot.gov
- **Correo:** ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007



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ADOT Project No. F0523 01L

E-blast

Arizona Republic

July 25

Your Input is Requested!

Interstate 10/Baseline Road Traffic Interchange Study

The Arizona Department of Transportation (ADOT) invites you to a virtual public meeting to learn about the current alternatives being evaluated for the I-10/Baseline Road traffic interchange. The goal is to improve traffic flow and safety in the area. Project team members will present project information, answer questions and seek input from attendees.

Virtual Public Meeting

When: Thursday, August 8

Time: 6 - 7 p.m.

HOW TO PARTICIPATE

- Online (Zoom): https://tinyurl.com/i10baseline
  Meeting ID: 859 6049 1133
- Phone (English): 669.900.6833
- Teléfono (español): 866.730.7514, pin de participante 984619#

CAN'T ATTEND BUT HAVE INPUT?

Comments may be submitted by August 22 in the following ways:

- Online: https://tinyurl.com/i10baselinecomment
- Phone: 855.712.8530 (English/Spanish)
- Email: gluna2@azdot.gov
- Mail: ADOT Community Relations
  1655 W. Jackson Street, MD126F, Phoenix, AZ 85007

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ADOT Project No. F0523 01L

Mailer (Bilingual)

ADOT

We want to hear from you!

Interstate 10/Baseline Road Traffic Interchange Study

You're Invited!

August 8, 2024 • 6 - 7 p.m.
Virtual Public Meeting

The Arizona Department of Transportation (ADOT) invites you to provide your input on design alternatives to improve the I-10/Baseline Road traffic interchange. These improvements are being planned in coordination with the cities of Tempe and Phoenix and the town of Guadalupe.

HOW TO PARTICIPATE

- **Online (Zoom):** https://tinyurl.com/i10baseline
  Meeting ID: 859 6049 1133
- **Phone:** 669.900.6833 (English)

Register to attend the virtual public meeting by visiting the project website at **azdot.gov/i10baseline** or scan the QR code to the right.

Scan here to register

¡Queremos saber de usted!

Interestatal 10/Baseline Road, estudio del intercambio de tráfico

¡Están invitados!

8 de agosto de 2024 • 6 - 7 p.m.
Reunión Pública Virtual

El Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) le invita a proporcionar su opinión sobre alternativas de diseño para mejorar el intercambio de tráfico de la I-10/Baseline Road. Estas mejoras se están planificando en coordinación con las ciudades de Tempe y Phoenix, y el pueblo de Guadalupe.

COMO PARTICIPAR

- **En línea (Zoom):** https://tinyurl.com/i10baseline
  ID de reunión: 859 6049 1133
- **Teléfono:** 669.900.6833 (escriba [illegible] para participar)

Regístrese para asistir a la reunión pública virtual visitando el sitio web del proyecto en **azdot.gov/i10baseline** o escanee el código QR a la derecha.

Escanee aquí para registrarse

Interstate 10/Baseline Road Traffic Interchange Study

Interestatal 10/Baseline Road, Estudio del Intercambio de Tráfico

For more information or assistance

Those without internet access may contact ADOT at 855.712.8530 for information on the I-10/Baseline Road traffic interchange study or to request meeting materials.

Para más información o asistencia

Aquellos sin acceso a internet pueden comunicarse con ADOT al 855.712.8530 para obtener información sobre el estudio de intercambio de tráfico de la I-10/Baseline Road o para solicitar materiales de la reunión.

如需更多信息或帮助
无法上网的人员可以致电 ADOT（电话：855.712.8530），了解有关 I-10/Baseline Road 交通交汇处研究的情况，或索取会议资料。

如需更多資訊或協助
無法上網的人員可以致電 ADOT（電話：855.712.8530），以了解有關 I-10/Baseline Road 交通交會處研究的情況，或索取會議資料。

ADOT

ADOT Community Relations
1655 W. Jackson Street, MD126F
Phoenix, AZ 85007

You're Invited to a Virtual Public Meeting for the I-10/Baseline Road Traffic Interchange Study

Thursday, Aug. 8, 2024
6 - 7 p.m.

ABOUT THE PROJECT

ADOT is developing a Design Concept Report (DCR) and conducting an environmental study to improve multimodal traffic flow and safety at the I-10/Baseline Road interchange. The DCR is identifying and evaluating potential design alternatives for the interchange and will recommend a preferred alternative.

The study team will present the interchange configuration alternatives, environmental considerations and study timeline, and address public questions and comments.

In addition to a **no-build** alternative, the two build alternatives being considered are as follows:

The **modified diamond** alternative would keep the interchange and ramp configuration as they are while adding some modifications to improve traffic operations, including adding new right turn lanes on Baseline Road at I-10 and additional lanes on the exit and entrance ramps.

This alternative includes the removal of the traffic signal at Wendler Drive and revising access to be right-in, right-out.

Además de una alternativa de **no construcción**, las dos alternativas de construcción que se están considerando son las siguientes:

La alternativa de **diamante modificada** mantendría la configuración de intercambio y rampa como está, al tiempo que agregaría algunas modificaciones para mejorar las operaciones de tráfico, incluida la adición de nuevos carriles para girar a la derecha en Baseline Road en la I-10 y carriles adicionales en las rampas de salida y entrada.

Esta alternativa incluye la eliminación del semáforo en Wendler Drive y la revisión del acceso para que sea de entrada y salida.

HOW TO COMMENT

The public can provide comments by Aug. 22, in the following ways:

- **Attend the Virtual Public Meeting on Aug. 8**
- **ONLINE:** https://tinyurl.com/i10baselinecomment
- **PHONE:** 855.712.8530
- **EMAIL:** gluna2@azdot.gov
- **MAIL:** ADOT Community Relations
  1655 W. Jackson Street, MD126F
  Phoenix, AZ 85007

Pursuant to Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act (ADA) and other nondiscrimination laws and authorities, the Arizona Department of Transportation (ADOT) does not discriminate on the basis of race, color, national origin, sex, age, or disability. Persons who require a reasonable accommodation based on language or disability should contact Gael Luna at 480.604.4785 or gluna2@azdot.gov. Requests should be made as early as possible to ensure the State has an opportunity to address the accommodation.

Traffic flow increases with a **diverging diamond (DDI)** by temporarily transitioning traffic to the left side of the road, eliminating the need for a signalized left turn. The DDI would have the largest footprint, impacting more existing properties.

This alternative also includes the removal of the traffic signal at Wendler Drive and revising access to be right-in, right-out.

El flujo de tráfico aumenta con un **diamante divergente (DDI)** al hacer la transición temporal del tráfico al lado izquierdo de la carretera, eliminando la necesidad de un giro a la izquierda señalizado. El DDI tendría la huella más grande, lo que afectaría a más propiedades existentes.

Esta alternativa también incluye la eliminación del semáforo en Wendler Drive y la revisión del acceso para que sea de entrada y salida.

Están invitados a una reunión pública virtual sobre el estudio del intercambio de tráfico de la I-10/Baseline Road

Jueves, 8 de agosto de 2024
6 - 7 p.m.

SOBRE EL PROYECTO

ADOT está desarrollando un informe de concepto de diseño (DCR, por sus siglas en inglés) y llevando a cabo un estudio ambiental para mejorar el flujo de tráfico multimodal y la seguridad en el intercambio de la I-10/ Baseline Road. El DCR está identificando y evaluando posibles alternativas de diseño para el intercambio y recomendará una alternativa preferida.

El equipo del estudio presentará las alternativas de configuración del intercambio, las consideraciones ambientales y el cronograma del estudio, y responderá a las preguntas y comentarios del público.

COMO COMENTAR

El público puede enviar comentarios antes del 22 de agosto de las siguientes maneras:

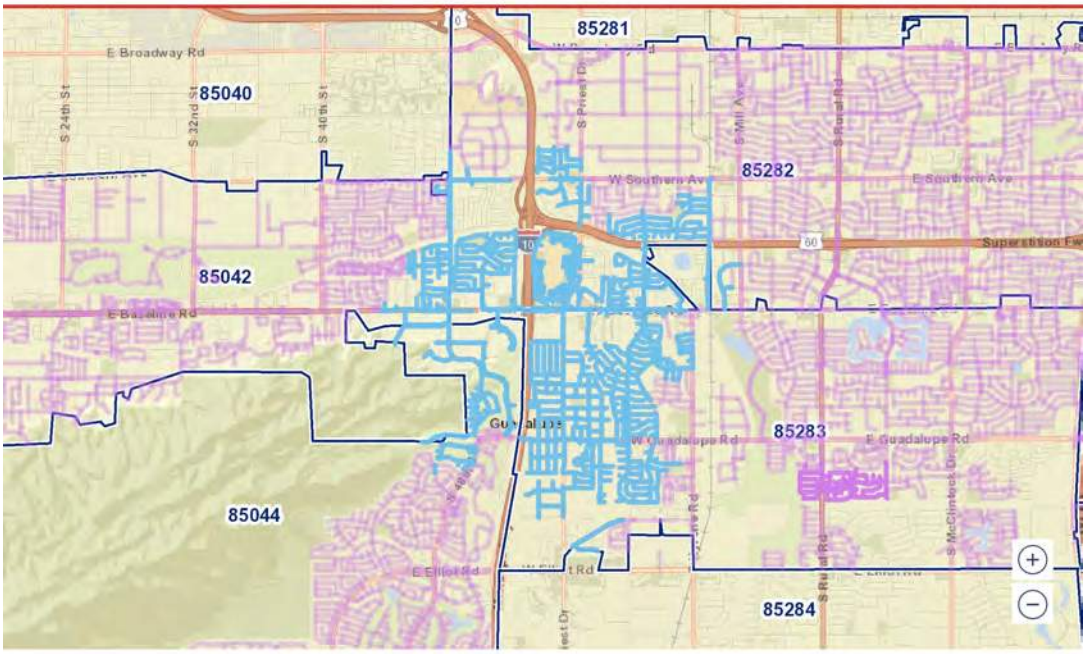
- **Asista a la reunión pública virtual el 8 de Agosto.**
- **EN LÍNEA:** https://tinyurl.com/i10baselinecomment
- **TELÉFONO:** 855.712.8530
- **CORREO ELECTRÓNICO:** gluna2@azdot.gov
- **CORREO:** ADOT Community Relations
  1655 W. Jackson Street, MD126F
  Phoenix, AZ 85007

De acuerdo con el Título VI de la Ley de Derechos Civiles de 1964, la Ley de Estadounidenses con Discapacidades (ADA por sus siglas en inglés) y otras leyes y autoridades contra la discriminación, el Departamento de Transporte de Arizona (ADOT, por sus siglas en inglés) no discrimina por motivos de raza, color, origen nacional, sexo, edad o discapacidad. Las personas que requieran una adaptación razonable basada en el idioma o la discapacidad deben comunicarse con Gael Luna al 480.604.4785 o gluna2@azdot.gov. Las solicitudes deben hacerse lo antes posible para garantizar que el Estado tenga la oportunidad de abordar la adaptación.

ADOT

ADOT Project No. F0523 01L

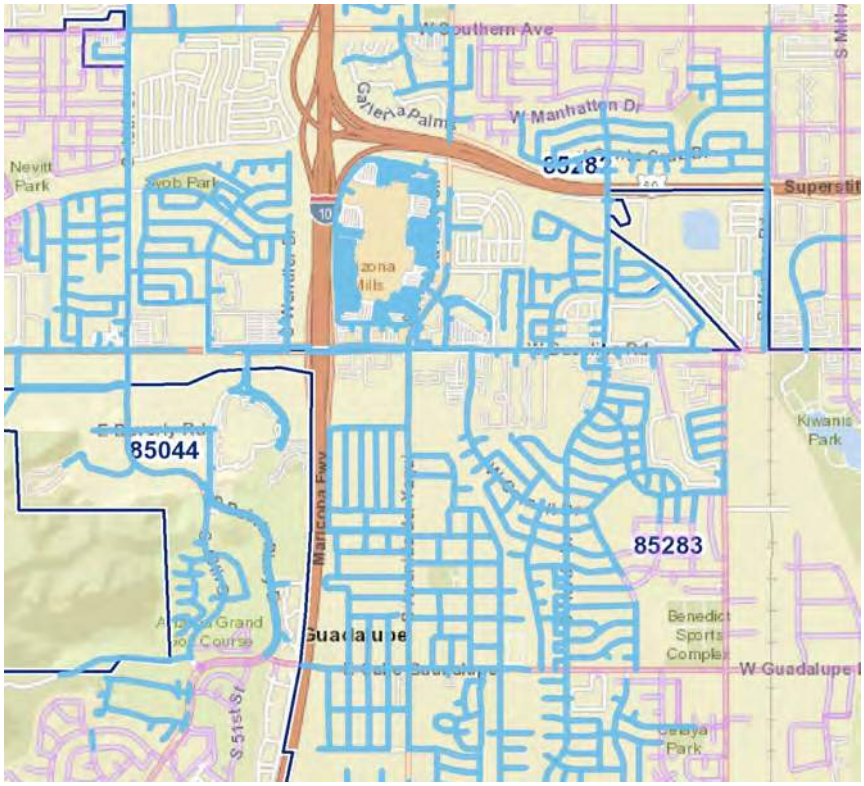
EDDM (Every Door Direct Mail) Routes*



Map Key Hide

- Selected Route
- Hovered Route
- Business Only Route
- P.O. Box
- Selected P.O. Box
- Search Position

Zoomed In*



*Delivered to routes highlighted in blue

Social Media Posts

Facebook
July 25

Arizona Department of Transportation
July 25 ·

Save the date! Join the I-10/Baseline Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline.

11 4

Like Comment

Aug. 1

Arizona Department of Transportation
August 1 ·

Mark your calendar! Join the I-10/Baseline Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline

12

Like Comment

Aug. 5

Arizona Department of Transportation
August 5 ·

Don't forget! The virtual public meeting for the I-10/Baseline Traffic Interchange Study is 6 p.m. Thursday, Aug. 8.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline

11 1 1

Nextdoor
July 18

State of Arizona
ADOT Communications Office of Community Relations • 18 Jul

Save the date! Join the I-10/Baseline Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline

Posted to Subscribers of State of Arizona in 3 areas

1 · 2,036 Impressions

July 25

State of Arizona
ADOT Communications Office of Community Relations • 25 Jul • Edited

Save the date! Join the I-10/Baseline Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline

Posted to Subscribers of State of Arizona in 3 areas

3 · 2,554 Impressions

Aug. 7

State of Arizona
ADOT Communications Office of Community Relations • 7 Aug • Edited

Don't forget! The virtual public meeting for the I-10/Baseline Traffic Interchange Study is being held tomorrow, Aug. 8, at 6 p.m.

For more information on the study, how to provide your comments and how to attend the virtual public meeting, visit the study website at https://azdot.gov/I10Baseline

Posted to Subscribers of State of Arizona in 3 areas

1 · 2,826 Impressions

Aug. 14

State of Arizona
ADOT Communications Office of Community Relations • 14 Aug

Missed the I-10/Baseline Traffic Interchange Study virtual public meeting? No worries! The presentation is now available online. You can provide your comments through Aug. 22 at the link below or by email, phone or mail. Visit the project webpage for more information.

– Online Survey: https://tinyurl.com/i10baselinecomment
– Study Website: https://azdot.gov/I10Baseline

I-10/Baseline Road Traffic Interchange Study | Public Comment F...
docs.google.com

Posted to Subscribers of State of Arizona in 3 areas

· 2,922 Impressions

Aug. 15

State of Arizona
ADOT Communications Office of Community Relations • 15 Aug

Time is running out. Seven days left to provide your comments on the Interstate 10/Baseline Road traffic interchange alternatives.

ADOT invites you to provide comments on the Interstate 10/Baseline Road traffic interchange alternatives. Watch the public meeting presentation to learn more about the alternatives being considered to improve the interchange by visiting azdot.gov/I10Baseline

You can provide your comments through Aug. 22 by visiting tinyurl.com/i10baselinecomment or by email, phone or mail. Visit the project webpage, azdot.gov/I10Baseline, for more information.

Posted to Subscribers of State of Arizona in 3 areas

· 3,083 Impressions

X

July 25

Arizona DOT @ArizonaDOT · Jul 25

Save the date! Join the I-10/**Baseline** Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information, visit the study website at azdot.gov/I10Baseline

1 4 2 3.8K

Aug. 1

Arizona DOT @ArizonaDOT · Aug 1

Mark your calendar! Join the I-10/**Baseline** Road Traffic Interchange Study virtual public meeting on Aug. 8 at 6 p.m. to learn about and provide your input on the alternatives to improve multimodal traffic flow.

For more information, visit azdot.gov/I10Baseline.

1 4 3.2K

Aug. 4

Arizona DOT @ArizonaDOT · Aug 4

Join us for a virtual meeting on Thursday, Aug. 8, at 6 p.m. to get an update and give your input about planned improvements at the I-10 traffic interchange with **Baseline** Rd.

More info: azdot.gov/I10Baseline.
Registration: tinyurl.com/i10baseline.

2 3 4.1K

Aug. 7

Arizona DOT @ArizonaDOT · Aug 7

Don't forget! The virtual public meeting for the I-10/**Baseline** Traffic Interchange Study is being held tomorrow, Aug. 8, at 6 p.m.

For more information, visit the study website at azdot.gov/I10Baseline.

1 6 3K

News Release

Newsrooms: Attached is a map of the I-10/Baseline Road Interchange study area for your consideration. Credit Arizona Department of Transportation or ADOT.

For Immediate Release: Aug. 2, 2024
Contact: ADOT Public Information Office
news@azdot.gov

Aug. 8 virtual meeting will focus on I-10/Baseline Road interchange

ADOT to provide update, gather input about future design alternatives

PHOENIX – The Arizona Department of Transportation will host a virtual meeting the evening of Thursday, Aug. 8, to provide an update and gather public input about planned improvements at the Interstate 10 traffic interchange with Baseline Road.

ADOT is evaluating potential design alternatives designed to improve traffic flow for vehicles, pedestrians and cyclists ahead of recommending a preferred alternative.

The virtual meeting, which will include a presentation by ADOT's study team, will start at 6 p.m. Thursday, Aug. 8. You can register to attend the meeting by visiting tinyurl.com/i10baseline. The meeting also will allow ADOT study team members to answer questions and accept public comments.

Due to heavy traffic and congestion near I-10 and Baseline Road, ADOT is studying improvements to the interchange to meet the future needs of travelers. One alternative is a modified diamond interchange and another is a diverging diamond interchange. A no build alternative also is being evaluated.

More information about the potential options for the interchange is available at azdot.gov/i10baseline.

If you can't attend the online meeting, ADOT also will accept comments through Aug. 22 via an online survey at tinyurl.com/i10baselinecomment. Comments may also be emailed to gluna2@azdot.gov; by phone at 855.712.8530; or by mail to ADOT Community Relations, 1655 W. Jackson Street, MD 126F, Phoenix, AZ 85007.

ADOT is working with several agencies on the I-10/Baseline Road interchange study, including the Federal Highway Administration, the cities of Phoenix and Tempe and the Maricopa Association of Governments, which serves as the freeway planning agency for the greater Phoenix region.

Direct Outreach

Aug. 15, 2024

The following is a summary of a meeting that occurred between representatives of Christie's Cabaret and the Arizona Department of Transportation (ADOT) 3 p.m., Aug. 15, 2024, to discuss the design alternatives presented in the Aug. 8, 2024 Interstate 10/Baseline Road Traffic Interchange Study virtual public meeting.

ATTENDEES:
Christie's Cabaret; 1675 W Baseline Rd, Tempe, AZ 85283
Olivier Mirza, Engineering Project Manager, Arizona Department of Transportation
Gael Luna, Community Relations Project Manager, Arizona Department of Transportation

SUMMARY
Olivier Mirza presented a recap of the design alternatives, highlighting potential impacts to the Christie's Cabaret parcel and the surrounding parcels. Olivier stated that an alternative has not been selected at this time and that the selection will be made after the public comment period ends on Aug. 22, 2024 and likely by December of 2024. Olivier provided a brief overview of the right of way acquisition process and public involvement process.

Christie's representatives expressed strong favor for the modified-diamond interchange alternative, describing it as financially responsible and minimally impactful. They further expressed their concerns about impacts related to the diverging-diamond interchange (DDI) alternative to their business during construction and the potential right of way impacts that included concerns about displacement of parking spaces, signs, and access, and unknow impacts to the permittitting of improvements on the property. Christie's is presently planning an expansion and renovation of their facilities that necessitates no fewer than the number of existing parking spaces.

Gael Luna provided a brief explanation of the public involvement process and assured representatives of Christie's Cabaret that public comments are seriously considered in the selection of an alternative and final design. Gael stated that he would contact the Town of Guadalupe to notify them that Christie's Cabaret wishes to be contacted regarding their permitting concerns and additional concerns related to potential ordinance mandating minimum setbacks for parking and monument signs. Gael noted that, once an alternative is selected, ADOT will notify stakeholders by email.

KEY CONCERNS
- Potential impacts of right of way acquisition related to the DDI alternative.
    - Displacement of parking.
    - Displacement of monument signs.

    - Access closure or restrictions.
    - Impacts to the town of Guadalupe permits for planned facility expansion and renovation.
    - Potential conflicts with setback requirements for parking.
- Cost of the DDI alternative.
- Additional time to construct the DDI.
- Impacts of construction of the DDI on local businesses.

Aug. 21, 2024

This is a summary of a small group meeting that occurred on Aug. 21, 2024 with businesses west of the Interstate 10/Baseline Road traffic interchange in the city of Tempe and town of Guadalupe.

ATTENDEES:
Christie's Cabaret; 1675 W Baseline Rd, Tempe, AZ 85283
Truelieve Dispensary; 1821 W Baseline Rd #101, Guadalupe, AZ 85283
Catherine Hollow, Principal Civil Engineer/City Traffic Engineer, City of Tempe
Jeff Kulaga, Town Manager, Town of Guadalupe
Amanda Nelson, Assistant to the Town Manager, Town of Guadalupe
Olivier Mirza, Engineering Project Manager, Arizona Department of Transportation
Gael Luna, Community Relations Project Manager, Arizona Department of Transportation
Nikki Green, Community Relations Supervisor, Arizona Department of Transportation

SUMMARY OF COMMENTS:
Truelieve: It's one thing to close one driveway; it's another thing to close both of them and make people go further to get to our business. That's our biggest concern. [With the DDI alternative], we would probably relocate our business. Our preference is to leave it as it is and finish the construction that is already ongoing. However, if we had to choose between the two options, we would prefer the MDI alternative.

Christie's: We are firmly behind the MDI and don't want anything to do with the DDI whatsoever. We are concerned about the loss of our landscaping, parking and the overall disruption to our business.

Jeff Kulaga with the town of Guadalupe asked how the process for moving forward with the preferred alternative works once a preferred alternative is selected. Olivier explained that the alternative would be selected prior to December 2024, that study documents and documentation of public comments will be published to the project website, and stakeholders will be notified once it is published.

Aug. 29, 2024

This is a summary of a small group meeting that occurred on August 29th, 2024 with businesses along Wendler Drive in the city of Tempe and just east of the Interstate 10/Baseline Road traffic interchange in the city of Tempe and town of Guadalupe.

ATTENDEES:
Gary Graumann, Representative of the Fry's Electronics Owner
Charles Kioto, Waffle House
Carol Livingston, Celerion
James Hoffman, Celerion
Dana Ireland, Owner of Celerion Building
David Iwanier, Orsett Properties
Leighton "Scott" Feuer, Orsett Property Management (Arrive Logistics and OneMain Buildings)
Kevin Hartman, Fuel Operations Manager, Fry's Fuel Center
Mark Morrill, Lead for Fry's Food
Nicole Dreier, KRAF, Inc. (Burger King)
Eric Dreier, KRAF, Inc. (Burger King)
Ron Broatch, KRAF, Inc. (Burger King)
Catherine Hollow, City Traffic Engineer, Tempe
Myesha Harris, City of Phoenix
Olivier Mirza, Engineering Project Manager, ADOT
Gael Luna, Community Relations Project Manager, ADOT

SUMMARY OF COMMENTS:
Representatives of businesses and properties along Wendler Drive expressed general dissatisfaction with the proposed removal of the traffic signal at Baseline Road and Wendler Drive and changing access to Wendler Drive to right-in/right-out. The business at the NW corner of Calle De Ceros and Baseline stated that people used to miss Fry's electronic entrance and they would end up making U-Turns on their property to drive back to Fry's. They were concerned that more drivers would then utilize their property for u-turns rather than making a u-turn at the nearest cross-street traffic signals to Wendler Drive. Concerns were expressed about the long-term viability of businesses along this street should the proposed change take effect and about the safety of u-turns compared to left-turn access at the existing traffic signal. Businesses expressed concerns that outreach conducted by ADOT was not adequate. Dana Ireland, stated that they spoke with the City of Tempe and they were told that they are able to fix the congestion at the TI by adjusting the signals timing along Baseline Rd, however they were not able to do so because the City of Phoenix would not cooperate/coordinate with them on signal timing at 48th street.

A representative with the city of Tempe stated that u-turns are not preferred, supported the safety concerns of the businesses and indicated that this proposal is from ADOT and does not reflect the city of Tempe's preference.

KEY CONCERNS:

- Access restrictions impacting the long-term viability of businesses on Wendler Drive.
- U-turns required to access Wendler Drive being potentially less safe than the existing left turns at the signalized intersection.
- Loss of time resulting from additional travel distance required to access Wendler Drive.
- Drivers using private property for u-turns rather than the signalized intersections.
- Long-term viability of businesses should access changes be implemented.
- Insufficient public outreach.
- Conflicts with the city of Tempe's preference against using u-turns for accessing Wendler Drive.

QUESTION/COMMENT TABLE:

Q/C	AFFILIATION	QUESTION/COMMENT
Q	Celerion	How is the traffic supposed to flow under these alternatives?
A		Traffic on Wendler Drive attempting to access eastbound Baseline Road would turn right onto westbound Baseline Road and make a u-turn at Arizona Grand Parkway. Eastbound traffic attempting to access Wendler Drive would continue to Arizona Mills Circle and make a u-turn at the light. Both signals would be protected/signalized left turns.
C	Celerion	It is likely that people will use our parking lot as an alternative u-turn location.
Q	Burger King	Was there any traffic modeling done showing the signal being maintained at Wendler? This change is likely to kill out business
C	Burger King	I don't think people are going to do a u-turn. My guess is that they are going to go back through the neighborhoods and join the freeway at a different location.
C	Celerion Owner	All of your numbers are tied to a COVID vacancy factor. These buildings and their viability is tied to access back to I-10. It makes no sense to me that u-turns are a safety alternative to a signalized left turn. The Arizona Grand is also going to have a significant expansion, so the u-turn makes even less sense. There are 250,000 square feet of leasable space on Wendler Drive that will need that access
C	Celerion Owner	It's your opinion [that the traffic signal should be removed]. It was someone else's opinion to put it in.
C	Orsett Properties	I agree with everything stated by [Celerion Owner]. I don't see how this is not going to be impactful. It feels like a lot of these buildings are on life support.
Q	Celerion Owner	Who are you trying to fix this for?
A	Olivier Mirza	We are trying to make these improvements for regional benefit and the traveling public.
C	Celerion Owner	I would argue that the "no build" alternative is the best option for all of the businesses on Wendler Drive. If you polled all of the businesses here, they would say they only heard about this in the past 30 days.
C	Celerion Owner	I think what we need to do now is have a city of Tempe meeting with all of these stakeholders and come back to ADOT with a unified voice. That's my recommendation.

C	Burger King	I don't think a good attempt was made to reach out to us. This will completely destroy our business. We will not be viable with this kind of access. Our vote would be to not change this.
A	Gael Luna	Gael Luna provided a summary of public involvement activities for this study to-date that included mention of the following activities: Public Scoping Meeting ● 18,000 mail pieces delivered ● 36 businesses canvassed ● 5 emails sent to 25,000 ADOT subscribers ● Meeting held on May 9, 2023 Alternatives Public Meeting ● 18,000 mail pieces delivered ● 36 businesses canvassed (three canvassing trips) ● 6 emails sent to 25,000 ADOT subscribers ● 3 small group meetings with local businesses ● Public meeting held on Aug. 8, 2024
	Celerion Owner	I bought my building 16 years ago and there has always been left turn access to Wendler. When the Burger King and Fry's gas station went in, we got a signal.
C	Burger King	Our vote would be to not change this. Our business will not be viable if the access at Wendler Drive is changed to right-in/right-out.

Communications and Public Involvement
Governor

Katie Hobbs,

Jennifer Toth, Director
Teresa Welborn, Deputy Director, Chief Operating Officer
Jon Brodsky, Communications and Public Involvement Director

Sept. 2, 2024

This is a summary of a meeting with representatives of the Arizona Grand Resort, their legal counsel, engineering consultant, Arizona Department of Transportation and Arizona Attorney General's office. This meeting was convened at the request of the Arizona Grand Resort to discuss the build alternatives proposed as part of the Interstate 10/Baseline Road Traffic Interchange Study.

ATTENDEES:
Aaron Abraham, Burch & Cracchiolo, Legal Counsel for the Arizona Grand Resort
Ed Bull, Burch & Cracchiolo, Legal Counsel for the Arizona Grand Resort
Dawn Cartier, Engineering Consultant to the Arizona Grand Resort
Ennis Dale, Grossman Company Properties General Counsel
Jake Gray, Arizona Grand Resort
Misty Guille, Arizona Attorney General's Office
Dennis Haley, Arizona Department of Transportation
Gael Luna, Arizona Department of Transportation
Michael Pedulla, Arizona Grand Resort

SUMMARY OF COMMENTS:
Representatives of the Arizona Grand Resort stated their opposition to the removal of the Wendler Drive traffic signal at Baseline Road, stating that the resort intends to provide access to future development of currently vacant parcels, south of the SRP canal, at the Baseline Road/Wendler Drive intersection. Resort representatives also stated opposition to removal of any existing access driveways to their property along Baseline Road. A representative of the Arizona Grand Resort stated that the resort is not necessarily opposed to the addition of a driveway on Arizona Grand Parkway to access the parcel located between Arizona Grand Parkway and I-10 north of the South Branch Highland Canal - although, another individual representing the resort expressed concerns about how adding such a driveway as an alternative to access on Baseline Road could complicate traffic flow and cause significant queuing.

The ADOT Project Manager provided an explanation for why the Wendler Drive intersection and Baseline interchange improvements are needed, noting congestion and travel time impacts. The engineering consultant to the resort stated that their traffic analysis does not indicate that users of resort facilities are significantly impacted as they largely do not travel the area during peak hours.

A subsequent meeting in two weeks time was requested. This is to give the resort consultant time to perform their own traffic analysis/evaluation.

QUESTIONS AND ANSWERS:

Q: How will drivers access the vacant portions of the resort's parcel along Baseline Road if the suggested improvements are made?
A: One driveway access directly from Baseline Road is provided and an additional access driveway is proposed along Arizona Grand Parkway.

Q: Will the eastbound Baseline Road to eastbound I-10 right turn be signalized?
A: This movement will not require signalization and will be free flow.

Q: Has feedback on the proposed alternatives been received from any other businesses near Baseline Road?
A: Yes. A number of businesses on Wendler Drive have stated their opposition to the removal of the Baseline Road/Wendler Drive traffic signal.

Q: Will eastbound traffic on Baseline Road be able to access the resort's Baseline Road parcel from the eastbound I-10 on-ramp
A: This is not feasible as it is a grade-separated and access-controlled on ramp.

Q: Will the billboard along eastbound I-10 north of the South Branch Highland Canal be impacted by right-of-way acquisition?
A: Based on the preliminary plans, this billboard does not seem to be in conflict.

KEY CONCERNS:

- Removal of access driveways along Baseline Road and the Baseline Road/Wendler Drive traffic signal impacting future access and use of currently vacant parcels adjacent to the South Branch Highland Canal.
- Complication of traffic flow on Arizona Grand Parkway due to the addition of an eastward driveway near the Baseline Road/Arizona Grand Parkway intersection.
- Future convenient access to Arizona Grand Resort facilities.

Appendix C
News Stories

Chandler News

I-10-Baseline juncture a planner's challenge

By Paul Maryniak, Arizonan Executive Editor Aug 5, 2024

Over 60,000 motorists use the intersection of I-10 and Baseline Road in Tempe and most of them get snarled in one direction or another through the complicated juncture.

(ADOT)

An intersection used by over 60,000 motorists a day, the I-10-Baseline Road junction may pose one of the most vexing road junctures in the East Valley – especially for Tempe and Ahwatukee motorists.

Solving that bottleneck to improve safety and efficient vehicle movement has challenged traffic planners for any number of reasons.

For one thing, the "intersection" is more than just a pair of perpendicular thoroughfares in planners' eyes.

ADVERTISEMENT

Planners consider it including a stretch of Baseline Road from Hardy Drive to 48th Street, although their have been trained since 2020 on a roughly quarter-mile segment between Priest Drive and Calle Los Cerros.

Within that stretch of Baseline, traffic in both directions snarls as motorists wait to get on the interstate in either direction.

In turn, I-10 traffic exiting from both directions backs up as it waits to get onto Baseline.

Compounding the congestion are at least seven driveways that provide entrance and exit to Arizona Mills mall north of Baseline and an assortment of businesses on the south side that includes the Arizona Grand Resort and the Pointe at South Mountain residences.

At least a half dozen traffic signals at some of those driveways further contributes to the daily traffic backup.

An Arizona Department of Transportation paints the challenge this way:

"There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development, which contribute to congestion and crashes.

"The corridor has a higher rate of crashes compared to the region. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes."

And to make matters even more challenging for planners, four different government entities – ADOT, Tempe, Phoenix and Guadalupe – have jurisdiction over pieces of the segment that has vexed traffic engineers.

ADOT has taken the lead among those agencies to figure out a way to ease traffic flow on both Baseline and the I-10 exit ramps.

But right now, all it has money to do is continuing to decide which of three course of action to take and design it.

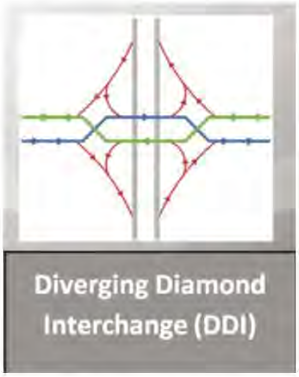
That is, if it decides somethiong other than one alternative: to do nothing at all, eventually meaning that as the Valley's motoring population continues to grow, so too will the number of cars and trucks that make I-10-Baseline a nightmare for almost anyone who walks, drives or rides a bike.

The other two alternatives are variations of diamond configurations aimed at taking some of the I-10-bound traffic from Baseline more directly to the interstate to ease the flow for those motorists staying on Baseline.

ADOT has come up with two solutions that will again be the subject of an online town hall open to the public at 6 p.m. Thursday, Aug. 8. People can sign up at tinyurl.com/i10baseline.

It is developing a "design concept report" and conducting an environmental study to improve traffic flow and safety at the I-10/Baseline Road interchange.

While one alternative "solution" is doing nothing at all, the two variations of diamond intersections could impact some of the businesses but divert some of the interstate-bound traffic a bit around Baseline so traffic could proceed more efficiently.



The most expensive solution to the logjam at I-10 and Baseline Road is called a "diverging diamond interchange" that would call for additional ramps to and from I-10, impacting a number of adjacent businesses.

(ADOT)

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"We are not affecting any residential homes on this project," one ADOT planner stressed repeatedly during an online townhall last May, conceding the businesses on either side of Baseline could be impacted.

How much of an impact that might involve is yet to be determined.

The cheaper of the two configurations is a "compact diamond interchange," which ADOT calls "the most commonly used interchange type for freeway connections to local roads" in the county.

It would keep the interchange and ramp configuration as they are while adding new right turn lanes on Baseline Road at I-10 and additional lanes on the exit and entrance ramps.

The signal would be removed at Wendler Drive, and exit and entrances to that street would be right-turn-only.

This alternative would have a smaller footprint and affect fewer private properties, ADOT says.

The more elaborate solution is the diverging diamond interchange, a relatively new type of configuration ADOT that improves movement and "reduces conflict points," according to ADOT.

"A DDI increases traffic flow by temporarily transitioning traffic to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left-turn," the agency explains.

"DDIs are particularly effective at locations that have high volumes of left-turn traffic on and off of freeway ramps and left-turn related safety challenges."

Because this approach would involve additional exit and entrance ramps for I-10 motorists, this "alternative would have the largest footprint and would impact more existing properties," ADOT said.

It also will cost more.

Right now, the cost has not been determined because ADOT is still gathering more input to determine which of the three options it should take.

If it settles on one of the diamond configurations, it then has to develop a final design, work up cost estimates, plan for potential eminent domain acquisitions of nearby parcels and then find the money to pay for construction.

ADOT has no money to build it in its five-year capital plan.

A spokesman said paying for any improvement would depend on the Nov. 5 election – specifically the Proposition 479, which would extend until 2045 the half-cent sales tax that pays for many of the pricier road projects in Maricopa County.

And even if that proposition passes, motorists won't see any relief at the I-10-Baseline intersection any time soon.

As Mark Gilliland, an engineer and the consultant project manager from AZTEC Engineering, told people who tuned in for the online townhall last year:

"A final design will take time. Right-of-way acquisition, utility relocations would take time and construction would take even further time."

Learn more and speak up

ADOT is still interested in hearing from the public about the I-10 Baseline project.

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The meeting will include a presentation by the study team, followed by questions and comments from attendees.

You can learn about the project at azdot.gov/i10baseline.

If you can't make the online meeting but want to share your thoughts, you can:

Go to tinyurl.com/i10baselinecomment

Email: gluna2@azdotgov

Phone: 855-712-8530.

Snail mail: ADOT Community Relations, 1655 West Jackson, MD 126F, PHX, AZ 85007.

The deadline for comments is Aug. 22.

Queen Creek Sun Times

ADOT: Aug. 8 virtual meeting will focus on I-10/Baseline Road interchange

Due to heavy traffic and congestion, ADOT is studying improvements to the interchange to meet the future needs of travelers. One alternative is a modified diamond interchange and another is a diverging diamond interchange. A no build alternative also is being evaluated.

Queen Creek Sun Times Staff
Aug 7, 2024 7:56 AM

A map of the Interstate 10/Baseline Road interchange study area for consideration. | Source: Arizona Department of Transportation

The Arizona Department of Transportation (ADOT) will host a virtual meeting the evening of Thursday, Aug. 8 to provide an update and gather public input about planned improvements at the Interstate 10 traffic interchange with Baseline Road.

ADOT is evaluating potential design alternatives designed to improve traffic flow for vehicles, pedestrians and cyclists ahead of recommending a preferred alternative.

The virtual meeting, which will include a presentation by ADOT's study team, will start at 6 p.m. on Aug. 8. You can register to attend the meeting by visiting tinyurl.com/i10baseline. The meeting also will allow ADOT study team members to answer questions and accept public comments.

Due to heavy traffic and congestion near I-10 and Baseline Road, ADOT is studying improvements to the interchange to meet the future needs of travelers. One alternative is a modified diamond interchange and another is a diverging diamond interchange. A no build alternative also is being evaluated.

More information about the potential options for the interchange is available at azdot.gov/i10baseline.

If you can't attend the online meeting, ADOT also will accept comments through Aug. 22 via an online survey at tinyurl.com/i10baselinecomment. Comments may also be emailed to gluna2@azdot.gov; by phone at 855.712.8530; or by mail to ADOT Community Relations, 1655 W. Jackson St., MD 126F, Phoenix, AZ 85007.

ADOT is working with several agencies on the I-10/Baseline Road interchange study, including the Federal Highway Administration, the cities of Phoenix and Tempe and the Maricopa Association of Governments, which serves as the freeway planning agency for the greater Phoenix region.

Daily Independent

TRANSPORTATION

ADOT public meeting focuses on I-10/Baseline Road interchange

Phoenix, Tempe, MAG working with state on study

(ADOT)

Posted Sunday, August 4, 2024 1:42 pm

INDEPENDENT NEWSMEDIA

The Arizona Department of Transportation will conduct a virtual meeting Thursday to provide an update about planned improvements at the Interstate 10 traffic interchange with Baseline Road.

ADOT is evaluating potential design alternatives designed to improve traffic flow for vehicles, pedestrians and cyclists ahead of recommending a preferred alternative, state transportation officials said.

The virtual meeting, which will include a presentation by ADOT's study team, will start at 6 p.m. Aug. 8. To register: tinyurl.com/i10baseline. The meeting also will allow ADOT study team members to answer questions and accept public comments.

Among alternatives for the intersection is a modified diamond interchange and another is a diverging diamond interchange. A no-build alternative also is being evaluated.

For more: azdot.gov/i10baseline.

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DEADLINE

Days remain to comment on I-10/Baseline Road interchange plans

(ADOT)

Posted Tuesday, August 20, 2024 9:06 am

INDEPENDENT NEWSMEDIA

The Arizona Department of Transportation has been asking the community for weeks to comment on interchange alternatives at Interstate 10/Baseline Road, and the deadline to do so is coming.

Comments can be registered with state transportation officials through Aug. 22 in the following ways:

- **Online Survey:** https://tinyurl.com/i10baselinecomment
- **Email:** gluna2@azdotgov
- **Phone:** 855-712-8530
- **Mail:** ADOT Community Relations, 1655 West Jackson, MD 126F, Phoenix, AZ 85007

ADOT is studying potential improvements to traffic flow and safety at the interchange due high-traffic volume and congestion in the area.

There are three alternatives being considered, including a no-build option.

For details on the project and the options under consideration: https://azdot.gov/planning/transportation-studies/interstate-10-baseline-road-traffic-interchange

The project is planned in two phases. The first consists of determining the recommended configuration for the Baseline Road interchange. The second will consist of final design of the interchange and preparation of construction documents.

We'd like to invite our readers to submit their civil comments on this issue. Email AZOpinions@iniusa.org.

Ahwatukee Foothills News

I-10-Baseline juncture a planner's challenge

By Paul Maryniak, AFN Executive Editor Aug 1, 2024 Updated Aug 6, 2024

Over 60,000 motorists use the intersection of I-10 and Baseline Road in Tempe and most of them get snarled in one direction or another through the complicated juncture.

(ADOT)

An intersection used by over 60,000 motorists a day, the I-10-Baseline Road junction may pose one of the most vexing road junctures in the East Valley – especially for Tempe and Ahwatukee motorists.

Solving that bottleneck to improve safety and efficient vehicle movement has challenged traffic planners for any number of reasons.

For one thing, the "intersection" is more than just a pair of perpendicular thoroughfares in planners' eyes.

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Planners consider it including a stretch of Baseline Road from Hardy Drive to 48th Street, although their have been trained since 2020 on a roughly quarter-mile segment between Priest Drive and Calle Los Cerros.

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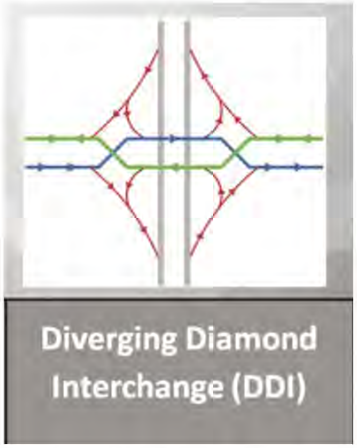

The most expensive solution to the logjam at I-10 and Baseline Road is called a "diverging diamond interchange" that would call for additional ramps to and from I-10, impacting a number of adjacent businesses.

(ADOT)

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It would keep the interchange and ramp configuration as they are while adding new right turn lanes on Baseline Road at I-10 and additional lanes on the exit and entrance ramps.

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"A DDI increases traffic flow by temporarily transitioning traffic to the left side of the road, allowing through-traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left-turn," the agency explains.

"DDIs are particularly effective at locations that have high volumes of left-turn traffic on and off of freeway ramps and left-turn related safety challenges."

Within that stretch of Baseline, traffic in both directions snarls as motorists wait to get on the interstate in either direction.

In turn, I-10 traffic exiting from both directions backs up as it waits to get onto Baseline.

Compounding the congestion are at least seven driveways that provide entrance and exit to Arizona Mills mall north of Baseline and an assortment of businesses on the south side that includes the Arizona Grand Resort and the Pointe at South Mountain residences.

At least a half dozen traffic signals at some of those driveways further contributes to the daily traffic backup.

An Arizona Department of Transportation paints the challenge this way:

"There are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development, which contribute to congestion and crashes.

"The corridor has a higher rate of crashes compared to the region. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes."

And to make matters even more challenging for planners, four different government entities – ADOT, Tempe, Phoenix and Guadalupe – have jurisdiction over pieces of the segment that has vexed traffic engineers.

ADOT has taken the lead among those agencies to figure out a way to ease traffic flow on both Baseline and the I-10 exit ramps.

But right now, all it has money to do is continuing to decide which of three course of action to take and design it.

That is, if it decides somethiong other than one alternative: to do nothing at all, eventually meaning that as the Valley's motoring population continues to grow, so too will the number of cars and trucks that make I-10-Baseline a nightmare for almost anyone who walks, drives or rides a bike.

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And even if that proposition passes, motorists won't see any relief at the I-10-Baseline intersection any time soon.

As Mark Gilliland, an engineer and the consultant project manager from AZTEC Engineering, told people who tuned in for the online townhall last year:

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Learn more and speak up

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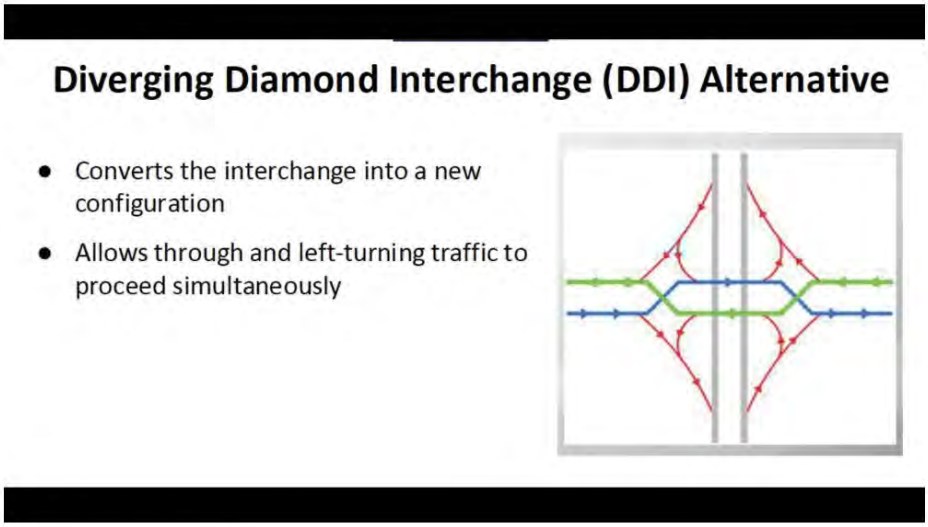
Snail mail: ADOT Community Relations, 1655 West Jackson, MD 126F, PHX, AZ 85007.

The deadline for comments is Aug. 22.

Better Baseline-I-10 option poses more consequences

By Paul Maryniak, AFN Executive Editor Aug 21, 2024



The two proposed solutions for the daily bottleneck that confronts the 55,000 to 60,000 vehicles passing through the I-10-Baseline Road interchange would cost either $16.1 million or nearly $41 million.

And while the more expensive option may have the most positive impact on traffic flow for the many Ahwatukee and Tempe motorists among those thousands of drivers, it also poses more hassles for nearby businesses and even I-10 motorists needing immediate help, a study shows.

The Arizona Department of Transportation last week hosted a virtual town hall where those solutions and their pros and cons were discussed.

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Looming over that discussion is the fact that covering the cost of either option will depend on the Maricopa Association of Governments – whose own funding for hundreds of road projects is at stake on the Nov. 5 ballot with the question on extending the half-cent sales tax in Maricopa County.

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There is a third option for resolving the complex intersection's problems, noted Mark Gilliland, the project manager from AZTEC Engineering that is developing the options following a study of the Baseline corridor between Hardy Road and 48th Street:

Do nothing.

Under that option, he said, "The existing roadway and traffic signals would remain unaltered. This scenario would not improve traffic congestion, safety or pedestrian and bicycle facilities."

AZTEC's recently completed "initial design concept report" states that between 2017 and 2021, a total of 1,499 crashes – 300 a year – occurred along the 1.5-mile stretch Baseline Road between Hardy and 48th.

AZTEC said the average is higher than that of the regional average for crashes, but also notes that the vast majority – 1,067 accidents – involved no injuries.

Nevertheless, the study says, "The traffic interchange at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both directions from the (traffic interchange) and negatively impacts traffic operations at multiple adjacent intersections, east and west of I-10.

"The queueing results in poor progression of traffic during peak hours, excessive delays during peak hours and a high number of crashes. The impacted intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix."

Following a traffic count on multiple days during the course of the study, AZTEC said, "The poor operations at these intersections also exacerbate the queue lengths and worsen travel times along the corridor. The intersections while operating at an overall acceptable LOS (levels of service), the existing conditions do experience multiple movement failures and approach failures.

"Any additional traffic to the current volume levels will result in excessive queueing and a gridlock situation."

Additionally, Gilliland said, said, "The corridor has heavy pedestrian and bicycle traffic with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and lack of dedicated bike lanes due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public."

Part of the problem involves the 10 signalized intersections and 52 driveways, mostly for businesses, along the study area.

"A significant number of deficiencies were identified and analyzed within the project limits of new construction," AZTEC states. "The audit identified 79 deficiencies at the seven specified intersections and 24 deficiencies at sidewalk sections and driveway transitions between the intersections. "

It adds that "every corner at each of the study intersections would have to be reconstructed in order to be made compliant" with federal disability guidelines and "15 driveways within the study area were identified with deficiencies and would require reconstruction."

"The area east of the I-10 freeway on the south side of Baseline Road was found to require the most amount of reconstruction. Overall, a significant amount of reconstruction is expected within the project limits with the implementation of an updated traffic interchange for the I-10 on Baseline Road."

Looking at ways to consolidate driveway access, reduce the signals, improve bicycle and pedestrian safety and expedite traffic flow, AZTEC developed two alternatives to doing nothing – a modified diamond interchange and a divergent diamond interchange.

No decision has yet been made on what to do, as ADOT hopes to complete its study by December with an eye on a final design next spring – if one of the alternatives to "no build" is selected.

Here is a look at the two alternatives to doing nothing.

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Modified Diamond Interchange

Also called a "tight diamond configuration," this cheaper alternative focuses on a stretch of Baseline between Arizona Grand Parkway to just east of the interchange.

It would add eastbound right-turn lanes and receiving lanes on the eastbound I-10 on-ramp, allow more vehicles to queue in the turn lanes so Baseline Road through-traffic is not impeded.

"The number of through-lanes on Baseline Road will remain the same, but removing more turning traffic from the through-lanes will increase the number of vehicles served per signal cycle and will improve travel times along the corridor," Gilliland said.

This alternative also would include removing the Wendler Drive signal, making its access and exit right-turn-only.

Besides the cheaper cost, the advantages of this solution include improved safety – especially for pedestrians and bicyclists.

Also, ADOT would only need to acquire barely a half acre of property owned by adjacent businesses for the related enhancements.

But AZTEC also notes that the alternative would generate "fewer benefits to traffic operations and safety" and that access to some Baseline Road businesses would be impacted.

For example, the manager of Christie's Cabaret last week expressed concern not about access but about the reduced parking the strip club would have since some of its property would be taken.

"My concern is that I won't be able to have enough parking for my occupancy," he said. "What would we do if we go below the necessary parking required?"

Gilliland suggested he provide more details about his concerns and that a meeting with the project team might be arranged.

Gilliland also said access to a Denny's and Aunt Chilada's also would be impacted.

Divergent Diamond Interchange

This relatively new kind of interchange improves Baseline Road traffic flow "by temporarily transitioning traffic to the left side of the road, allowing through traffic and left-turning traffic to proceed through the interchange simultaneously, eliminating the need for a signalized left turn," Gilliland said.

It also would eliminate the signal at Wendler Drive and force only right turns in and out; bring sidewalks up to Americans with Disabilities Act standards; and "decrease corridor travel time," Gilliland said.

But the disadvantages of the more expensive alternative would include the need to acquire 2.29 acres of private property along Baseline and involve more impact on utilities, likely forcing them to be relocated.

It also would require pedestrians and cyclists to cross into the Baseline Road median.

It would also involve “high right-of-way and construction cost and will take the longest to construct,” Gilliland said, estimating it would require at least 18 months of construction disruptions.

And it could impact the access of first responders to accidents or other incidents on I-10 – or what the study calls “incident management.”

“Of the two build alternatives,” Gilliland said, “the modified diamond has the smaller footprint, the smaller impact to, well, to everything. It’s just more similar to what’s there. So, less right of way, less utility relocations, less acquisition. The DDI is significantly more.”

Appendix D
Public Questions and Comments

Online Survey Questions and Comments

What do you *<u>like</u>* about the No Build alternative?
At least it doesn't make things worse like the diverging diamond option would
Cheap, no construction disruption
Cheaper
Construction around the Broadway Curve project has created a nightmare of issues for the last three years. This would be another project that would create headaches for people that live in the area.
Cost
Cost is lowest and allow access to gas station from west side of I-10
Do not like the no-build.
Do not like this option
Doing nothing is not an option.
Due to the large volume of traffic on this on/off ramp I do not believe this is a strong solution
Everyone already knows it.
Everything!
Everything. Change is almost always bad
Hate it improvements are needed.
I am not interested no the " No Build"
I appreciate that it wouldn't impact traffic and functioning of the roadway at this point in time.
I don't like anything about it - it doesn't solve any problems.
I don't like it as it doesn't solve the traffic issue that has existed for some time
I don't like it at all.
I don't like it it's going to make traffic worse
I don't like it.
I don't like it. The area is congested already doing nothing would only compound over time the issues that we have.
I don't like the No Build alternative.
I have no input one way or the other as It does not impact me.
I like getting updates as i live right by the area
I like nothing about this option. This is the least desirable in my opinion. It does nothing to improve congestion in the area.
I like that the no build option does not cost taxpayers anything.
I like the fact that there will be no more wastage of labor and materials on this already wide and expansive interchange.
I like this option. With the new I-10 improvements, this may not even be necessary. Baseline has been a mess since the I-10 work started. Leave it alone and see what happens.
I think creating a under passes on the baseline road especially the first major intersection of 48 th street would remove lots of congestion
I'm not in favor of the No Build, so I really don't like anything about it.
If funding is tight, then perhaps that modified diamond interchange, instead of the DDI because of the required ROW along the southern portion of Baseline Rd. The modified diamond can help alleviate the back-ups during the afternoon rush.
If it helps the traffic issues in the area, then it's a huge positive
in process
It currently works. It's free and no construction.
It does not impact businesses in Guadalupe
It is working, but can be improved.
It prevents extra traffic on Baseline during commute times.
It stays the same and doesn't confuse people
It will be great to not have additional construction after the impacts of the Curve project. We do need a break from the Orange cones
It's familiar

What do you *<u>like</u>* about the No Build alternative?
Its no build
Least disruptive.
less construction downtime
Less construction I guess.
Less construction.
Less continued construction disruption.
Less disruption to traffic
less downtime
Less expensive, least amount of construction and disruption
less immediate impact on traffic due to construction
Low cost
Low impact.
Lowest cost
Lowest Cost
Minimizes disruptions and expenses caused by construction activities
mothing
N/A
No additional cost or construction delays
No construction
No construction
No construction disruption.
no construction...there are so much construction happening along I-10 in the past years and future.
No cost
No cost
No cost and little impact to neighbors
No cost, no adverse impact to local businesses, no additional construction chaos in an area that has been under construction for year
No cost, no disruption.
No cost.
No cost. Access to Wendler (Fry's fuel station) remains as is.
No disruption of traffic
No disruption on I-10.
No disruption to traffic by construction.
No expense
No headache of extensive construction
No impact to traffic due to construction
No interruption, no construction, no cost
No need for new construction
No outrageous government spending, no added inconvenient construction period.
none
Not a good idea, as TI already LOS F
NOT A REAL ALTERNATIVE--CONSTRCTION HAS BEEN GOING ON FOR MONTHS
Not as much disruption
Not expensive
Not having to deal with construction
Not much.

What do you *<u>like</u>* about the No Build alternative?
Not much. It is a horrible stretch of road.
Nothing
nothing
Nothing
Nothing
Nothing
nothing
Nothing
Nothing
Nothing
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nothing
Nothing
Nothing to do Nothing is not a option
Nothing at all.
Nothing other than it is the least disruptive
Nothing something needs to change
Nothing spent, no construction to contend with. Beginning to get a little burned out on the construction.
Nothing, does not help to move traffic efficiently
Nothing, the current interchange is always congested and chaotic.
Nothing, this interchange has needed some form of improvement for at least the last decade
Nothing, traffic on Baseline in this area needs improvement
Nothing!
Nothing!

What do you *<u>like</u>* about the No Build alternative?
Nothing.
Nothing.
Nothing.
Nothing. This intersection sucks and needs to be improved. Too many lights in too short of a distance. Perhaps a rotational light sequence instead of a bi-directional light sequence.
Nothing. Any improvement would be better than none at all
Only that it doesn't cost anything.
Saves money.
See below
Small footprint
That it cost less
The existing interchange, despite its imperfections, has been adapted to the current traffic patterns over time. Altering it could disrupt a well-established system that has evolved to meet our specific traffic demands.
There would be no construction or interruption to traffic.
This is not really an option.
This option is better than the others. We need to slow drivers down to reduce deaths and injuries on roadways. And make drivers look for alternative transportation options. I support the No Build option.
This plan does not waste public funds.
Traffic will continue to be bad in the area. Lights should be removed. Especially accessing I-10 East bound is a nightmare. Cars always jam the right lanes and although there are two, people always only use the one on the right.
While baseline was closed from the 10 getting home was ridiculous so I like no build
Will not chang anything

What do you *dislike* about the No Build alternative?
According to the Spine Study, this the the 2nd most congested interchange of the whole spine... and the highest priority. I don't understand why it is last on the list of interchanges to be improved.
143, 10 and 60 is till a major problem. It is very diffiecult to merg in to the airport intertchange with the traffic merging from the 60 into the 10
Congestion is not addressed
Continued traffic issues at that interchange/intersection.
Current traffic flow is bad
did nothing to the congested traffic. Traffic will be bad as always.
Do not like it, something needs to be done
Does not fix any problems
Does not improve the current problem
Does not improve traffic or safety conditions. Mobility through this intersection especially in the PM is not good. Access to businesses a safety issue.
Does not reduce congestion
Does not solve any problems
Does not solve the problem
Does not solve the safety issues.
Does not solve traffic problem
Does nothing to improve traffic on Baseline
Does nothing, would like to see more capacity for bikes/transit
Doesn't address any of the traffic issues
Doesn’t do anything to relieve traffic issues.
Doesn't fix any problems.
Doesn't help traffic flow going east on Baseline.
Doesn't help traffic issues at I-10/Baseline
doesn't help with the traffic congestion
Doesn't improve anything. Not a good option.
Doesn’t relieve traffic congestion
Doesn't solve anything.
Doesn't solve the traffic mess at the I-10 Baseline interchange.
Doesn’t work to solve congestion issues
Everuthing
Everything
Everything - Traffic is bad.
Everything there must be improvements here.
Everything.
Fails to plan for the future, this interchange will only gets busier over time
Having to deal with traffic
I dislike everything about the no build option.
I dislike that the congestion on Baseline will not be reduced.
I dislike the fact that it offers no improvement in traffic flow in the area.
I do not have anything i dislike about the alternative
I don't have any issues or dislikes.
I have no input one way or the other as It does not impact me.

What do you *dislike* about the No Build alternative?
If there's no action, the traffic congestion will not be relieved.
in process
Interchange will get worse and should be avoided
It changes NOTHING
It does not solve the current condition of the interchange
it does nothing
It does nothing to improve congestion.
It doesn't do anything to fix the congestion
It doesn't fix any of the problems.
It doesn't fix the huge bottlenecks at i10 and baseline
It doesn't help reduce traffic in this area at all.
It doesn't solve anything
It doesn't solve the rush hour traffic issues.
It is extremely difficult (and often dangerous) to get onto the highway with the no built alternative.
It is the most dangerous option. I would like to see the road become safer for everyone.
It leaves congestion as it is.
It makes no consideration for the future
It only pushes the resolution of the problems down the road. It doesn't solve them.
It solves nothing and congestion continues to worsen.
It won't address the terrible traffic issues that we deal with on a daily basis.
It won't solve the traffic issue that has existed for some time.
It woud not be moving the transportation system forward with changes needed
It would not have an impact on the flow of traffic
It's almost unusably congested and chaotic now, so staying almost unusable is an easy alt to dislike.
Keeping it as it is won't solve any problems and congestion will only increase in this area over the coming years potentially un-doing some of the good achieved with the Broadway Curve Improvements project
Keeps that light at Wendle. Already too many T interactions thru there.
Lack of improvement of traffic flow especially being someone who lives in that neighbourhood
Leaves the possibility of traffic back ups onto the freeway - does not seem to improve traffic flow
Leaves things as they are, which may not be ideal. Less safe.
Looks terrible
Lowest cost alternative
Mo improvement at a dangerous intersection
monitor it when the I-10 work is all done. nothing will be done, it may get worse.
More efficient traffic flow from I10 improvements can lead to heavy backups on local ramps at Baseline and associated cross streets Current backups push past 48th street from the west and Priest from the east during peak travel times
Na
Need more improved flow
needs built
Negative impact on all improvements made to I-10
No change is not a good option
No change, no help in improving traffic thru that area!
No construction or space for a passenger train line.
No great traffic flow improvements.
No improvement can be made to traffic congestion
No improvement in traffic flow and backups
No improvement of the congestion.

What do you *dislike* about the No Build alternative?
No improvement to an infuriatingly high-traffic area.
No improvements on a very congested interchange
No meaningful improvements
No progress
No solution to problems in the area
No solution to the current problem
No solution. Something has to be done to improve the I-10/Baseline intersection.
none
Not a realistic option.
nothing
Nothing
nothing
Nothing
nothing changes
Nothing gets done to help improve this area, which badly needs some improvement
Nothing has changed and we still have a problem
Nothing improves, and only gets worse.
Nothing, if it helps fix the traffic issues
Nothing. Keep it as is
Obviously traffic would remain an issue
Same problems
See above
See above - doesn't solve the problem
See below
Seems short sighted and out of touch of what the traffic demand needs are at this location.
Serious improvements are needed here. If not now, when? Traffic is going to continue to increase.
Shorter term solution but would like to better understand if we're trying to solve a problem now or an anticipate problem further in the future. The area has had so much construction that it is hard to know what normal is
So many comments: poor planning, poor leadership and clearly not one leader at ADOT, the City and State take Baseline!
solves nothing
Solves nothing
Sometimes a little slow going to or from the West.
Still major traffic bottleneck with no improvement
That intersection needs improvement for better traffic flow.
That it stops the necessary expansion
That it's just going to prolong what needs to have happen even though it's tough to loose properties for people. But it's a must with our growing community and population.
That the traffic will remain the same and no solution.
The congestion would persist as is - unless other alterations were made that would allow for addtl affective routing.
The idea that no improvements would occur
The interchange is very inefficient and could be changed by reducing close by interchanges or no access to the freeway onto westbound I-10 or eastbound US-60.
The interchange needs to be addressed. Traffic backs up badly on Baseline road in that area, which is a problem that will only get worse as the area continues to grow.
The intersection is a mess and needs to be changed
The intersection would benefit from a rebuild so changing nothing is a lack of foresight
The same problems are still there.
The traffic at this interchange will worsen
The traffic flow is not efficient.
The traffic issues remain if nothing is done.

What do you *dislike* about the No Build alternative?
The wait times to enter the I-10 or exit onto Baseline from the I-10 will just get worse. Also traveling along Baseline through this area is always congested.
The whole interchange is a nightmare. Vehicles exiting the freeway cross multiple lanes of traffic, often dangerously and aggressively, to get to whatever business they are going to. Backup of traffic attempting to access the freeway is awful. Many block the intersection and cross-traffic trying to beat the lights.
There is nothing to dislike about this.
there's too much traffic everyone gets stuck there for multiple light changes
think there should be a better way way to control the traffic
this section of road is such a pain to get through
This will make travel harder
Too many lights, not enough capacity. The current intersection feels claustrophobic because the on/off ramps to I-10 are so tight -- there's not enough room under the freeway for the cars to queue, so you often sit for multiple lights.
Too many traffic lights in too short a distance result in traffic jams even without an accident or other traffic problem.
Traffic jam but we deal with that for 16 years.
Traffic is already a problem and will only get worse
Traffic is clogged everyday on the off ramp to baseline road and it is dangerous because people illegally cut in line
Traffic jams; people driving into intersection after the light turns red and blocking the people who have the green light from moving forwstd
Traffic will be slow and get worse
Traffic will continue to be bad in the area. Lights should be removed. Especially accessing I-10 East bound is a nightmare. Cars always jam the right lanes and although there are two, people always only use the one on the right.
Traffic will continue to be worse
Traffic will increase, yet congestion will not be addressed.
Traffic will only get worse trying to make left hand turn.
we have a big problem in the valley with wrong way drivers. The new use of diamond exchanges and roundabouts, are awful. they very confusing for everyone.
We kick the can down the road, so to speak ...
We need the up grade for safety and traffic control.
We're just going to have more and more traffic in the future going forward.
Will not help manage growth in the area
Will not solve any of the congestion
Would not help the congestion in the area.
would not resolve the multiple safety and traffic flow issues in this area

What do you *<u>like</u>* about the Modified Diamond Interchange (MDI) alternative?
.
A better alternative to handle what is expected to be an increased flow in traffic.
Add lane to reduce traffic jams
Added stacking on exit ramps and a familiar pattern.
Allows for easier right hand turn access on to I-10 South , and access to and from smaller streets right off highways
BEST HELP AND PRICE FOR CURRENT ISSUES
Better than current interchange.
Better than nothing
Better than nothing
better traffic flow
bicycles don't need to cross the median, less disruptive than the diverging diamond alternative
Cheaper, less construction, maybe less construction time?
construction
Cost less
Cost. Easiest to implement. Seems least destructive.
Could make traffic flow better without huge cost
Creates a bit more flow
Does not take up huge Right Of Way, simpler construction.
Doesn't really solve problem
Easier and less construction time.
Easier to do but strategically shortsighted
East bound traffic seems to gain a lane. The removal of the light at Wendler might speed up west bound traffic.
Elimination of the Wendler Dr. interchange
Free flowing right turn lanes onto EB I-10.
Getting rid of the lights at Wendler and Calle Los Cerros would be great. Adding the additional lane for southbound on ramp to I-10 would help the back up.
Gives the illusion of more traffic flow
Has some improvement for traffic flow/safety
Helps a little
helps with traffic congestion
I do not like anything about this design, and do not support it.
I like that it impacts fewer properties and would be less expensive.
I like that it would be a change for the better but if it’s going to get modified then more is better
I like that the footprint is smaller, while also providing some improvements to traffic, maybe construction would be completed faster.
I like the increase in capacity for turning movements, specifically EB Baseline to EB I-10.
I like the MDI alternative because it will reduce congestion on baseline road and improve traffic flow, with less cost to taxpayers.
I like the removal of the light at Wendler.
I like the updates as i live right there in the area
I like this the most, it has a medium footprint and takes care of traffic congestion. I think that this is the best option.
I like Wendler Dr open with a red-light. That area is busy. I like Baseline open.. there are tooo many places to make as closed areas for in & out.

What do you *<u>like</u>* about the Modified Diamond Interchange (MDI) alternative?
I prefer the MDI or DDI-less impact on surrounding physical structures
I think it will help the flow of traffic a little. The Wendler Drive light remove and making it a right in/right out would help the flow of traffic going west.
If nothing else, this is a start. Probably a lot easier to implement, would at least be a good stop-gap.
Improvement to traffic, less impact to neighborhood
Improves that western half of the intersection from I-10 towards the Arizona Grand Resort entrance.
improves the current condition, less costly than DDI
Improves the traffic flow and is less disruptive
Improves traffic in that area, not as disruptive or a lengthy construction period.
Increase flow of traffic removal of light
It adds some turn lanes.
It affects the fewest properties
It helps, but not enough.
It is a simple fix to allow for flex lanes onto the freeway.
It is a simple, clean design and cost effective. Travel through is predictable and smooth.
It is better than doing nothing.
It is some improvement
It is the least expensive and least disruptive solution to help with the congestion
it looks like it might help relieve some pressure on the area, with the extra EB lane in particular
It looks like the best alternative in both cost and construction time. It also looks like an improvement for pedestrians and cyclists.
It looks like the Modified Diamond Interchange (MDI) plan would cause the least disruption. I did not see what it would do to Aunt Chilada's restaurant. We hardly have any restaurants and we need easy access to this venue. We need to keep it alive.
It may solve some of the congestion issue
It may work
It removes the light at Wendler.
It seems like the Best option. Drivers won't be confused by it and it's less expensive than the diverging diamond
It should not impact the businesses in Guadalupe
It totally ignores the needs of the Town of Guadalupe. It is Phoenix and Tempe and traffic level of service improvement centric. That is not necessarily bad, unless the Town of Guadalupe's needs for direct and reasonable access are not considered. Then it is not good at all.
It will be the same, only minor relief in traffic.
It will help reduce some traffic
It will improve traffic flow and cost less than the DDI and be less disruptive.
It would be a fair start (but not great).
It would be completed sooner
It would probably improve traffic flow, but there are a ton of businesses down Wendler that would suffer as a result.
It would somewhat help the flow of traffic at a lower cost
It's a better alternative to the " no build".
It's a cheaper alternative than doing nothing and doesn't impact current businesses as much.
It's a compromise. Less disruptive and expensive than DDI. Less driver education required.
It's a small step in the right direction. The elimination of the light at Wendler is a definite thumbs up to improving flow, but is the MDI enough or just a band-aid.

What do you *<u>like</u>* about the Modified Diamond Interchange (MDI) alternative?
It's moving in the right direction to help solve the problem.
It's needed to alleviate the traffic problem
Least disruption. Typical on-ramp design
Less confusing, getting rid of the traffic light will makes i10 off ramp traffic NOT stuck in the middle of the road with longer lanes
Less congestion, better traffic flow
Less construction
Less cost than DDI
Less expensive than DDI
Less expensive, will help relieve the congestion at the rush hours
Less invasive to the neighborhood
Limited waste of fund with marginal traffic flow improvement
Low cost compromise and helps alleviate traffic congestion
Low impact on surrounding areas and would allow for reduced congestion. Might make some commutes quicker. I think this would be my preferred option of the three provided.
May help with safety issues and lower cost than DDI
Maybe
Middle of the road solution that looks like it will improve some congestion, like extending the right turn lanes
Minimal build
Minimal construction
Minimal impact
Minimal impact to surrounding areas.
Minimizes space used Easier flow for drivers to understand and navigate Efficient use of resources to accommodate current traffic demands
More budget-friendly option than the DDI option, less footprint, likely less time and inconvenience to drivers during construction.
More capacity.
More capacity. Getting rid of the Wendler light is a good idea. Do the same with the Arizona Mills entrance -- turn it into right-turn only access and you're on to something.
more lanes
More lanes sounds like it may improve some of the traffic flow and decrease back up on Baseline Rd approaching the 10
More lanes to turn without the extra impact and costs, time to fix the road. I would be interested to see the other option working. Too many houses built in this area have made traffic so much worse.
More turn lanes and lanes to turn in will help improve congestion.
Mostly keeps things as they are so modification wouldn't be confusing, but having two right turn lanes would be an improvement for traffic flow.
Motorists can actually understand it
not much
Not much
Not much. Seems ineffective
Not that different from current
NOTHING
nothing
nothing
Nothing
Nothing
nothing - go back to streets and left turn lanes

What do you *<u>like</u>* about the Modified Diamond Interchange (MDI) alternative?
nothing - its a waste of time and money
Nothing.
Only minor modifications + should improve traffic flow a bit.
Reduced cost and timeline
Reduced costs at the detriment to greater improvement
Removal of traffic control devices, at least on Wendler.
Requires less disruption while constructing.
Right in and right out to businesses and roads.
Same basic traffic pattern opened up
See below
Seems like it would help to give more room in the turn lanes for people getting on I-10.
Seems like the less bad construction plan
Seems to add more efficency.
Should help traffic flow with minimal cost and construction disruptions
Should improve traffic flow
Simple cheap modifications that will improve the intersection
Simpler than the DDI
Smaller foot print with taking consideration of future changes
Some traffic relief
Somewhat helpful, but not efficient use for reducing congestion
Somewhat improves traffic flow
Still being lazy and poor planners
The cost, not much else.
The East Bound to East Bound 10 turn lanes.
The familiarity of it along with some traffic flow improvements.
The least intrusive. And may be enough.
The possibility of easier access to I-10 East from Baseline East,
The removal of the light at Wendler is much needed
The removal of the Wender light would at least allow more LT to NB I-10 storage

What do you *<u>like</u>* about the Modified Diamond Interchange (MDI) alternative?
The tight diamond interchange is best. I take this route every day to and from work as I live off baseline. 2 things would help- getting rid of the light at Wenden. And syncing up the lights would be better (driving east to get on to the freeway for example, if the first light would turn green then the second light including the left turn on to the 10 west). I will sit at those 3 lights for multiple turns due to this. As for getting off the 10 onto Baseline from the 10 east, it is very annoying that the second to last lane is a turn right, go straight, or turn left. If I try to turn right I often get stuck behind those turning left. There are already 2 other turn left lanes. I like that this would improve but limit construction. Between the Broadway Curve and the endless construction on 48th street, there has been too much construction in this area.
This gives a little improvement, but probably won't address the need well or for as long
This is my choice of the 3 - options. If implemented it will have the least impact on local business.
This is my preferred solution. Increases access to I-10 from Baseline with minimal construction disruption.
This is the best option of the three. It would keep the interchange understandable for drivers (which DDI would not do) but would also allow for increased capacity. The short throat length between Wendler and I-10 necessitates removal of that signal and reorientation of the intersection, and this would accommodate all of that in a budget conscious fashion.
this looks like the best option. minimal construction interference, probably can be done quickest, quicker than DDI, and with less interruption to area businesses and residences along baseline.
This option appears to be the most likely to improve traffic flow. ADOT should condemn the old Frys Electronic site and reroute Wendler drive through the Frys site to align with Arizona Grand Parkway. Other improvements and changes to access along Baseline from 48th Street to east of Priest will be needed to improve traffic flow through this area. The real solution would have been to extend US-60 west through South Phoenix instead of building the South Mountain Freeway. Purchasing the Frys site might also allow for flyover ramps directly from Baseline to US-60.
This seems like a cluster
This will lead to some traffic relief and less construction time than the DDI alternative
This would definitely improve the area but I feel like there's more that could be done
Uses existing right of way.
very good decisions made
Very little, Only creates constant flow to EB-10 from WB Baseline.
With the Broadway Curve project adding dual lanes from Baseline to Elliott on the EB I-10 this option would have an immediate positive impact to relieving EB Baseline traffic.
Would be a little disruption. Less expensive.
would improve traffic flow

What do you *dislike* about the Modified Diamond Interchange (MDI) alternative?
Nothing
$20M and minimal improvements to operations and safety. What is the point? Might as well select the no-build and save $20M
According to traffic counts the EB Baseline 3 lane thru traffic only needs 2 lanes. The outside 3rd lane could be converted to a dual right turn onto the EB I-10 on-ramp. The outside 3rd lane could also be converted into a free flow right turn onto EB Baseline off the WB I-10 Baseline off ramp.
And it doesn't divert traffic like it should
As someone who lives east of this intersection, stopping at the Denny's or the Fry's gas station after the traffic light removal on Wendler Drive will force me to go west and look for somewhere to make a uturn
Bandaid solution
complition time
concerned about the removal of the traffic signal on Wendler
Continued construction
Continues to create condition such a turning across oncoming traffic
Cut off acess to gas station and restaurant.
Does not go far enough to alleviate current and future congestion.
Does not provide a full solution to the problem
Does not provide enough improvement for the effort.
Does not seem to answer long term growth.
Does not solve backups on through traffic on baseline
Doesn't address future increases in traffic in our growing metropolis
Doesn't appear as though it will change much in the long run
Doesn't do enough to fix the problem.
Doesn't fix
Doesn't fix the issue completely as best it can and costs more than no build
Doesn't future proof with growth.
Doesn't go far enough to minimize long-term impact to this busy intersection
Doesn't help entirely
Doesn't meet the growing vehicle demands and traffic.
Doesn't provide best solutions to the traffic mess at the I-10 Baseline interchange.
doesn't seem it would really help.
doesn't seem like the traffic flow would be very good.
EVERYTHING
Everything
Expect flow to be only slightly better than current
Flow may not be as improved as with the DDI
He does not address the backed up traffic that occurs on the east side of the interstate
I dislike that the Wendler light would go away, and the construction phase would be disruptive to traffic in an already over congested area.
I dislike the cost and the disruption during construction.
I do not like that this design will increase speeds, create more noise and encourage more driving. More deaths and injuries from vehicle crashes will occur due to this design. There is zero pedestrian, bike or bus design.
I don't have any strong dislikes about the modified baseline alternative.
I don't really understand this option
I don't think these changes would address the traffic issues sufficiently

What do you *dislike* about the Modified Diamond Interchange (MDI) alternative?
I doubt this solution will ease lines of traffic trying to access the freeway. It's success depends on drivers obeying lane instructions.
I still picture Calle Los Cerros being congested
I work at 4625 S. Wendler and need to get on the I-10 to go home. Removing the light makes it infinitely more difficult for me to get to the highway and will add time to my commute.
I'm not sure it would make enough of a long term improvement
I'm okay with it.
if the area is going to be impacted by construction, the change might as well be the most impactful one. this seems like a shorter term fix that will need to be updated in 5-10 years anyway
Inefficient in reducing traffic congestion
It does not improve safety much
It does not seem like a long term fix
It doesn't appear to add significant traffic capacity. It is not likely to help all that much.
It doesn't appear to make any difference in aalleviating congestion in the area.
it doesn't help the situation enough
It is not enough improvement
It is not enough to helps combat the traffic
It isn't as effective as the ddi
It makes no sense to not just make the most efficient upgrade now
It may cause alot of accidents
It seems like a temporary alternative and that this will need to revisited again in the future.
it seems like putting on a band aid when we need surgery
It still requires traffic lights and left turn signals to slow up Baseline traffic.
It totally ignores the needs of the Town of Guadalupe. It is Phoenix and Tempe and traffic level of service improvement centric. That is not necessarily bad, unless the Town of Guadalupe's needs for direct and reasonable access are not considered. Then it is bad.
It will be a disruption and the impact from the ongoing Broadway Curve project is unknown
It will be an improvement but we need more with the growing population.
It will impact the small business on the north side,
It will not be enough to handle all the traffic during rush hour.
it will tie up traffic, along baseline during construction, and it will take longer to get to Texas Road House, for dinner (LOL). if this helps traffic flow, this is probably the best option.
It's a very minor improvement and not a solution.
It's better than no build but is not the best choice to resolve the traffic issues.
It's not enough of a change to make an improvement
It's not enough to solve the I-10/Baseline intersection traffic problems and not the safest alternative.
It's not going to have a dramatic impact on the congestion.
Just add right turn lanes
Lack of pedestrian and bicycle crossing lanes/bridges.
Less Safe and less effective
Losing the left turn from Baseline E to Wendler, and the left turn from Wendler to Baseline E will be a problem for me.
Love it.
Make for more traffic

What do you *dislike* about the Modified Diamond Interchange (MDI) alternative?
May not be enough for high traffic times to alleviate the left turn congestion
May not do enough for congestion or scale for future growth
Minor modifications are expected to bring minor improvements to quality of service
Missing the opportunity for the greatest improvement in traffic flow
More construction in the area.
More damn construction!
N/A
N/A
N/A
Negative impact to local business. Creates bigger traffic problems Wendler Traffic
No being able to get home
No major improvement on flow through the interchange or for left hand turns. Wait times will continue to rise leading to more yellow and red light runners.
none
Not a lot. It seems that west bound Baseline could use additional lanes. Traffic counts may not warrant.
Not a major change, so might not improve traffic a whole lot.
Not as good as it could be
Not as much improvements in traffic
Not as safe as DDI. More disruptive than no-build.
Not enough change to help current traffic congestion
not enough lanes can be confusing
Not intuitive, not a good permanent solution
Not much different than existing.
Not much, if you're going to do anything, this should be it.
Not optimal for long term planning of traffic flow and increase in usage
Not progressive in its solution.
not the most efficient improvement. If it is going to be under construction anyway for a while, it may be better to provide the most efficient traffic movements.
nothing
nothing
Nothing
Nothing
Nothing - I think this is a good compromise, and the impact during construction wouldn't be too bad.
Nothing at all
Nothing to dislike
Nothing, no issues or dislikes.
Nothing.
Only focus is on West side of I-10, provides nothing for East side
Perhaps not enough change? If traffic is going to be disruptive during the construction, go for the biggest band (DDI).
Probably not enough improvement for traffic flow/safety
Probably not the most efficient fix.
See below

What do you *dislike* about the Modified Diamond Interchange (MDI) alternative?
Seems to be the most efficient from cost-benefits perspective
Shortsighted for long term
Somewhat expensive
Still doesn't really fix the problem.
Still have same back up for I-10 left turns ,
Still leaves the backup under the I-10 overpass.
Still not enough room to queue under the I-10 overpass. Need to also remove the light at Arizona Mills -- there are enough other ways to access the mall. Make it right-turn only.
Still not the best solution
That it doesn't also remove the light at either Calle Los Cerros or Arizona Grand Parkway. Tempe has a ridiculous number of traffic lights around the I-10 interchange, which causes the backups.
That it is simple and is a short solution for the long run.
That it takes property from people.
The chance someone will hit someone is going to go up
The impact on the Denny's restaurant and other business behind them
The removal of traffic signal at Wendler
There are not enough improvements both east and west of the intersection to help with capacity and mobility.
There are still more traffic points where collisions can happen and traffic wait times are still long due to the left hand turn being one of the cycles.
there is nothing i dislike about the alternative
there would need to be some construction
This doesn't take the proposed improvements to the east side of the interchange. What good is addressing only the west side. There also socioeconomic implications with addressing the problem on only the west side of the interchange closest to the resort and Ahwatukee but leaving existing conditions by AZ Mills and land closest to the tribal land for the Guadalupe tribe.
This really doesn’t totally fix the congestion problem
This solution is only a partial solution to the problem. There will continue to be congestion east-bound on Baseline due to the queueing of vehicles that want to access the 10 west and the 60 east. Arizona Mills S should also have the light eliminated by allowing only right turn onto Baseline and only west-bound Baseline a right turn in. East-bound Baseline should go to Priest to turn left to access the mall. S Darrow Dr should also be right turn only onto west-bound Baseline, right turn from Baseline to S Darrow Dr or continue straight on Baseline, right turn only from Wendy's driveway onto Baseline, and no left turn from Baseline in either direction.
This will do nothing to prevent the left turn lanes from blocking the intersections. It will probably make it worse for the EB Baseline to WB I-10 turn lanes (blocking the west side intersection) given the extended turn lanes. More lanes on the exit ramps are not a solution to the problem. The only time traffic backs up on the exit ramps is when left turn traffic on Baseline continuously blocks the intersections light cycle after light cycle.
to confusing -
Too timid
Traffic back up.
We all know straight-thru frontage road setups like this contribute to wrong-way freeway entrances by visually appearing to offer a left turn option at the first light in the diamond. Why even consider these any more?
Will do little to solve the problem, would like to see more capacity for bikes/transit
Will not adequately address the freeway access traffic
Will this be adequate to support future growth and increased traffic?

What do you *dislike* about the Modified Diamond Interchange (MDI) alternative?
Would be outdated by the time it's built

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
A complete rebuild of the intersection would be preferential to leaving it as it is. I believe this kind of intersection would be incredibly beneficial to the area and to reduce traffic by increasing the flow
Address traffic congestion and control
Addresses congestion and scales for future growth
As a commuter who uses this interchange almost daily, this send like the best solution to improve traffic flow.
As far as this style of interchange, we could probably use more of these in the Phoenix area. Baseline and broadway are very busy interchanges because there is no interchange between Baseline and Elliot, or between Baseline and Broadway. Everyone getting off in this vicinity has to use one of these exits, which results in a lot more traffic using them than would use exits further south or further north than this. An alternative would be perhaps to build another ramp at Southern or Guadalupe, but existing interchanges, ramps, and infrastructure in those areas put significant space constraints that would make that impractical. Building more efficient interchanges at the locations we have makes much more sense. More people are likely to use I-10 to get around once the broadway curve project is finished as well. It makes sense to build capacity for the future at these intersections.
Baseline Rd is a high volume road (Baseline Fwy) and this is a high volume interchange. The DDI will flow much more traffic with less wait times reducing pollution, road rage, and hopefully less accidents.
best offered option for improving traffic flow to- and from-I-10
Best option for traffic flow/ safety and it works in other cities (I-494 & S. 34th Ave in Bloomington, MN)
Best plan to accommodate long term traffic needs on a busy interchange connecting Tempe and South Phoenix Accommodates increase traffic flow from I10 improvements
Best solution
Best solution without completely rebuilding the interchange.
Best traffic flow option
Better design to improve traffic flow.
Better to fix it properly now with an eye on the future with the latest in traffic engineering and design.
Better traffic flow
Can see how this could have big positive impact on traffic flow
changes
Creates a lot more flow
Creates lots of jobs and revenue for contractors
Creative design that appears as if it could significant increase in traffic capacity. As long as the freeway merge point doesn't become the new bottleneck and the Baseline lane cross over is gentile enough so traffic doesn't have to slow significantly, it looks like it might significantly help the rush hour traffic backup problem.
DDis help with traffic flow, clearing through traffic efficiently. This alternative also helps by the elimination of a traffic signal and provides right in/out movements.
Definite operations and safety benefits - the whole point of the project. Only option that in my opinion actually serves a purpose.
Don't like them. Almost as bad as traffic circles.
Ease of use, intuitive, and solves the problems
Eliminates the crossing left turns which eliminates the possibility of the intersections being blocked by traffic. The free flowing left and right turns onto the freeway in both directions will greatly reduce traffic backups on Baseline Rd. In my opinion, this is the only alternative for the volume of traffic this intersection handles, not only now but in the future.

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
Everything except EB I-10 off ramp should have min 2 lanes exit EB to Baseline, 2 lanes min WB-10 from WB Baseline
Everything!
Flow seems to be the most efficient
getting off baseline and onto the I-10 seems like the best solution
good decisions
Great flow of traffic to meet the needs of growing demand.
Greatest impact
Greatest improvement for the major issues with the traffic on Baseline
Greatly improves traffic flow and is forward thinking in addressing a busy intersection that will only get busier as time passes
Haven't driven through one but seeing videos about it, the concept seems to work. It would be great to be able to experiment with such unique option. especially the left turn traffic, would be much easier to go right through it. Not having to wait for right turn lane lights would be great too.
Helps reduce the traffic now and for future it’s the best for the development to come
Helps solve all problems relating to entrance, exit of I-10 , along with access to streets immediately around the highway , and a fun new look to a boring intersection
I believe the DDI would solve the traffic's problem. Not only solving it but it will attract the area very well and making it really neat and enhance the city's look.
I do not like anything about this design, and do not support it.
I don't like anything about the DDI alternative.
I don't like it...it will hurt small businesses.
I don’t like making left turns, especially anywhere on baseline lol. DDI’s rule. Also follow me on YouTube: First Person Life Nman
I don't.
I drive through these on a regular basis. Safer and moves traffic faster.
I enjoy having to navigate fewer lights with less weighting
I like that it’s the most aggressive and does more to change traffic flow for the better
I like that there are fewer traffic cycles so wait times are faster and there are less potentials for accidents.
I like that this can make the most improvement and provide the greatest relief to the area in terms of congestion. I also like that the left turn is safer and potentially safer for pedestrians and bicyclist.
I like the DDI alternative's ability to handle more throughput. It's my preferred alternative.
I like the updates as i live right there in the area
I really like this option. I think it solves a lot of the current congestion and back up. I've used the DDI at other areas in the Valley and it helps traffic flow tremendously.

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
I think it will do a better job of keeping traffic moving. The elimination of the light at Wendler remains, but the light at AZ Mills S is still needed. During non-congested times the intersection might slow traffic down a little as cars wend their way through the switch.
I think this is the safest and best option
I think this would be a great alternative. This intersection needs major improvements.
I use this at 17th Ave and it is effective once your get used to it.
I would really like to see a diverging diamond interchange at this intersection.
I've driven through these and understand how efficient they can be. I love everything about it.
I've heard good things about this pattern. It looks very interesting. I like that it reaches further east and west
If increases capacity and reduces conflicts over the MD then excellent alternative.
improves safety and reduces conflict points
Improves traffic the most
increases traffic flow
It eliminates most of the conflict points and facilitates a much greater traffic volume through the interchange.
It eliminates the need for traffic lights and turn signals, so you can drive straight past the freeway without stopping or maybe even slowing.
It is a novel solution
It is cool! it seems to create better flow under I-10
It is the best alternative for the present and the future
It looks confusing but traffic flow should improve greatly.
It totally ignores the needs of the Town of Guadalupe. It is Phoenix and Tempe and traffic level of service improvement centric. That is not necessarily bad, unless the Town of Guadalupe's needs for direct and reasonable access are not considered. Then it is bad.
It will help a little bit
It will help with all of the traffic and congestion.
It will hopefully improve traffic flow
It will provide the best solution to the problem
It would probably improve traffic flow, but there are a ton of businesses down Wendler that would suffer as a result.
It's a better alternative
It’s beautiful and efficient
It's the most effective and safest solution of the options.
Living in Ahwatukee and using the half diverging diamond on Desert Foothills I find the convenience of not having to make another stop fantastic. Having also to use Chandler, Ray, Warner and Elliott, (these should also be looked at in the future) backups are common and then you drive forward to turn left to enter the freeway only to find yourself sitting once again for the green arrow. The DDI should be the only option for any new or reconfigured interchanges in the future. If you’re serious about making an actual improvement this is the only option for me and many others. I’m sure if this comes to fruition people will wonder why this shouldn’t have been done before, if they’ve never used one before.

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
Living in the neighbourhood gives me first hand experience of how incredible the backup can get during rush hour along Baseline Rd as people wait their turn to get through the multiple lights. A plan without needing to wait for a left turn signal sounds like it would significantly improve the traffic backup problems on Baseline Rd. Especially as the Phoenix valley continues to grow, I think investing in this as a longer term solution would be ideal.
Looks cool only on paper. And to those from left-driving countries like UK that may feel temporarily at home.
Looks like a better solution to the problems. Allows traffic to flow more
Looks like a great alternative for reliving the traffic congestion both ways on Baseline and access to enter and exit the I-10
Looks like you can go a lot of different ways - may improve ease of access on intersection
Looks to improve traffic flow.
Might be the greatest improvement.
Most efficient and safest.
moves traffic efficiently and quickly
Much safer and seems to flow traffic better than other design
N/A
no more light to get on and off the freeway there. more lanes makes traffic flow easier
Not really anything.
nothing
NOTHING
NOTHING
nothing
Nothing
Nothing
Nothing
Nothing
Nothing
nothing -
Nothing to like, The individual(s) who suggested this should be terminated.
Nothing, except that it exposes how out of touch the technical traffic engineers are with common sense. The most positive thing about the DDI idea is that it would make the catastrophic roundabout configurations promoted by ADOT seem like good designs.
Nothing, this is a huge build in the middle of the developed area.
NOTHING!!
Nothing. I've utilized this type of intersection in St. George, UTah and it's incredibly confusing. Also, it will destroy access to the businesses in Guadalupe and that is unacceptable.
Nothing. This is a bad idea.
Nothing. Zero. Zilch.
Nothing. DDI's are one of those things that engineers love and drivers despise. The human mind does not work backwards in the fashion DDI requires, and the number of dashcam videos in the public domain showing people unwittingly going the wrong way or stopping out of sheer confusion or striking other drivers bears witness to that fact. The Diamond interchange has worked well for 80 years and is the most commonly utilized resource for a reason. Modifying it to make it more workable for this area is the best option.
Nothing. I don't like it.

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
Nothing. Too confusing and too long a period for public to get adjusted. Accidents will increase trough the adjustment period.
OH NO... Please do not do this. There are enough confused drivers out there!! Maybe OK for Goodyear, Avondale... but there are a lot of out of town people going through here. it will create the worse traffic nightmare the state has ever seen!! IMHO ;-)
Optimal flow improvement
Optimal improvement
Probably the best option to reduce congestion caused by people who are waiting to turn left.
Progressive - seems to positivity improve traffic flow - after people learn how to navigate these intersections should improve accident rates
Quick entrance and exit to the I10. This is my favorite solution
safer and helps with traffic congestion
Safer, modern traffic pattern
Safety & relief of traffic congestion
Safety, safety, safety. Hopefully improve time spent on this ridiculously congested road!
See below
Seems like it will create a better traffic flow.
Seems like it'll provide the greatest traffic flow improvements.
Seems to relieve traffic backups
Should help congestion
Significantly hinders wrong-way freeway entrances.
smart, but way more construction
Solves the safety issue best.
sounds like it provides the most efficient traffic movements.
Sounds like the most efficient long-term fix.
That it controls traffic on both the east and west approaches.
That it will be a better solution for the long term and it's a must with the growth of the valley. It would help clean up the area and make it look nicer for the mall and hotel that brings lots of jobs.
That it would relieve congestion and remove the Wendler traffic light.
The best alternative on terms of traffic flow, growth, and cost. The most efficient to handle the flow of traffic of the three plans.
The increase in capacity is nice.
The most improvement in traffic flow in that areaT
The possibility of easing traffic flow on Baseline and onto or off from the freeway.
They have greatly increased the flow of traffic and reduced congestion in those I am familiar with.
This actually addresses the traffic issues the most because of the smooth flow of through traffic and left turning traffic, which is by far the biggest reason the area has traffic congestion today.

What do you *<u>like</u>* about the Diverging Diamond Interchange (DDI) alternative?
This appears to be a great solution to the traffic flow issue.
This appears to be the best solution to relieve traffic issues in the area by permitting more free flow of traffic at the intersection
This appears to give the most improvement. This area needs all the help it can get.
This improves safety and flow of traffic.
This is a great plan. It seems to be working well at 1-17 and Happy Valley.
This is the approach that I think would bring the greatest improvements to the intersection level of service.
This is the most sensible solution. I have driven on many of these in Texas and they are fantastic
This looks like it would help reduce the backups getting off of Baseline and traveling west on Baseline.
This option looks like it would improve traffic the most.
This seems like the most comprehensive solution addressing the congestion on both east and west sides of the interchange.
This will be the most impactful long term to help with traffic flow issues
this will help improve traffic
This will solve most if not all of the traffic issues in this area.
This would be ideal really.
This would provide efficient entrances onto the freeway and flow of traffic would be very good.
Though I don't clearly understand how it will work, based on the given description it seems it would be the most efficient at controlling traffic flow. Baseline is a mess and with continuing growth in the area, a long term solution should be considered. This seems to be it. Even if it is the priciest option, it will save money on having to restructure again at some point in the future when it becomes once again congested.
Traffic moves the fastest
Traffic will flow smoothly, without the left turn lanes.
Vastly improves traffic flow
Virtually eliminates wrong way driving
While it is the most invasive, it would enhance safety the most.
Will work well, but looks very expensive and complicated.
Would help with traffic flow.
You are putting more traveling lanes in

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
$40M price tag is unfortunate, but is the price we pay to fix urban messes these days.
A lot of cost and time
A LOT of moving pieces and a design that is foreign and confusing to both AZ motorists and numerous tourists. This doesn't even look good on paper
After learning more in videos from other states on how it works, I'm fine with it. The visuals here did not help to get a clear idea on how this works. The small, tiny lines were not great visuals. I had to look up videos from other DOTs in other states to have a visualization of how these worked.
Appears to be a HUGE change at a HUGE price tag and really should have been thought about way back when AZ Mills was built. Too much at this point. So dislike everything.
Basically everything, for reasons cited above at length.
Bigger footprint. Would like to see more capacity for bikes/transit
Can be confusing, clear signage is paramount
construction again.. maybe long time construction. And during construction, the traffic in this area will be horrible and it has already been terrible.
Construction disruptions
Cost
Cost
Cost
Cost , property acquisitions
Cost and Construction disruption
cost and impact on surrounding area
Cost and impact to immediate surrounding community
Cost and time it will take to complete
cost and time to complete
Cost and time to complete
Cost, complexity, inability (or unwillingness) for drivers to use correctly (many can't even use a roundabout), unnecessary, high impact to existing business and area
Cost. Maybe too fancy, don't want people on the wrong side of the road on purpose. DDIs seem to flow smoothly, but some of that maybe due to long waits on the off ramp.
Cost..concern of drivers confusion and entering wrong way freeway ramp
Costs more than the others.
Costs the most.

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
Could be confusing for some drivers.
delays
Disruption to traffic during construction.
Don't see where these relieve congestion. Still long waits at a red light. Bad idea!
downtime in the construction
Drivers will be confused
EVERYTHING -- we don't need all that fancy lane stuff here. We are basic, working folk.
EVERYTHING! The construction phase would not only bring immediate traffic headaches but also long-term changes to familiar routes. Residents and commuters alike would need to adapt to new traffic signals, lane configurations, and possibly altered access points. This transition period could cause confusion and inefficiency, further straining our local roadways.
Everything. I've utilized this type of intersection in St. George, UTah and it's incredibly confusing. Also, it will destroy access to the businesses in Guadalupe and that is unacceptable.
Everythng
Expensive and impacts business
Expensive, the most disruptive option in terms of money, construction time, traffic diversion, might require some education on the part of drivers
First time through is confusing
Gonna take some time and construction
Has ADOT thought about how the traveling public will handle the re-direction of EB/WB travel on Baseline underneath the I-10 bridge? They will have blind spots with the existing median piers on each side of the Baseline realignments as the travel and daylite outside of the bridge? I don't think we have this condition anywhere in the valley with the few DDI's that we have.
Higher cost
Higher cost. Longer construction
Huge Build in the developed area, adjacent signals are the problem, not the TI
I am a little concerned about the impact to the traffic flow on Baseline during construction, but also, living there through the Broadway Curve project, I know it would be some temporary pain for a better future.
I could see people making the case that these are confusing to drive on, but in my experience, they really aren't if the signage is good.
I dislike everything about it. It's confusing, weird, 50% of the traffic will be confused, the other 50% will be angry with road rage. any new driver through the area, will be confused, and probably cause worse congestion than it hopes to alleviate. it looks like a construction nightmare, probably tie up traffic on Baseline, like the city has never seen. and there aren't many alternatives, for getting past I-10, from the west.
I dislike the cost of the DDI alternative, I dislike the complex traffic flow, and I dislike the number of businesses that will be impacted from the extensive construction.
I dislike, again that Wendler light would go away, and construction would potentially take the longest, but the payoff for this option would make the most difference.
I do not like that this design will increase speeds, create more noise and encourage more driving. More deaths and injuries from vehicle crashes will occur due to this design. There is zero pedestrian, bike or bus design.
I don’t fully understand it
I don't think the traffic pattern at this intersection is the problem. It's the drivers who don't understand what a yellow and red light means. Every day I travel through this intersection, and I always watch drivers continue to turn into lanes on red, blocking other drivers from turning, causing the traffic back ups.

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
I know it will take a LOT of time, money and inconvenience while it is being constructed. But if we can live through the Broadway Curve improvement, this should be a piece of cake.
I still think Wendler needs to be rerouted to meet up with AZ Grand. You just need to bite the bullet and compensate the former Frys location owner. If they make it a Costco Delivery, they would not need much of a front parking lot anyway.
I work at 4625 S. Wendler and need to get on the I-10 to go home. Removing the light makes it infinitely more difficult for me to get to the highway and will add time to my commute.
I'm worried about how long it's going to take. My commutes could be even more painful for a long time.
It could be confusing to drivers, but more and more DDIs are being built across the country, so it will become as commonly understood as driving through traffic circles.
It is expensive, very disruptive to the surrounding businesses and confusing for drivers
It sounds incredibly disruptive and CONFUSING
It takes up too much space. It will confuse drivers.
It totally ignores the needs of the Town of Guadalupe. It is Phoenix and Tempe and traffic level of service improvement centric. That is not necessarily bad, unless the Town of Guadalupe's needs for direct and reasonable access are not considered. Then it is bad.
It will harm many small businesses that need to stay alive.
It will impact traffic coming out of my community. We have to watch out for red light runners all the time when we have the light to turn East or West on to Baseline from Calle Los Cerros. It is very difficult for the first responders to get in or out of our community as it is. I suggest that you have meetings with the Tempe Police and Fire Department.
It will take loner, but in the end I feel it's worth it.
It would take some re-education and adjustment of the drivers as they will be driving on the "wrong side of the road" for a short stretch.
It's a learning curve for drivers that may cause confusion for some.
It's a new approach...
It's going to be so confusing if you do this. You need more land to do it right, especially if you still allow left turns into Arizona Mills, Arizona Grand, etc.
It's not something drivers will know what to do
It's the most expensive.
Jomax seems to work well with no accidents
Just the time to build it.
Length of construction and disruption to the area.
Likely longer timeline to completion
Likely to cause massive temporary delays through construction. High-crime area where no one wants to get stuck for long periods of time. Probably very high government spending project.
Looks like a very long term project, expensive and the end result looks more chaotic and confusing
Looks overly complicated for travel going straight on Baseline, and the impact during construction would be significant.
love it
Major change and construction time, and possibly disorienting to drivers

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
Might be complicated for someone not aware or confused by traffic direction , but may be overcome with enough signage?
More costly and takes properties
More downtime.
more expensive and more disruptive during construction
More expensive. More construction. Longer timeline. More impact on surrounding businesses.
Most expensive and disruptive
No additional lanes for pedestrians and bicyclists. Can result in confusion and increased wrong-ways.
Not budgeted, and short term construction impacts (2 years?)
Not currently funded
not disliked
Not enough being done to relieve congestion in either direction of Baseline adjacent to AZ Mills
Nothing
Nothing
Nothing
Nothing
Nothing
nothing
Nothing
Nothing
Nothing
Nothing
Nothing about this option makes good common sense. The DDI is the most expensive and intrusive option. More importantly the DDI option will actually make flow worse and lead to more accidents. This is already the worst interchange area in the city, and is 100% NOT the place to introduce something new, unique and confusing to local and tourist motorists. It also does not present a safe option for cyclists and pedestrians. This option seems like it is favored by technical engineers with no common sense spending other people's money.
Nothing it's better
Nothing.
Nothing. Build it, ASAP!
Nothing. Build it!
nothing. These should be standard designs.
Only that it will be disruptive for a time
Pedestrians and bicyclists will be in dangerous traffic. The plan in general is not bold enough
Probably the costs.
Really confusing, at least to start with. Having to make a U-turn at the Mills entrance to get to the Fry's fuel station, though "only a few feet further," is a hassle, will require more added time than "a few feet" would seem to imply, and poses more danger unless there is a way to keep people leaving the mall on Baseline and turning right on the red from doing so. Since many people ignore "no turn on red" signs, and since we U-turners would be expecting there to be nobody trying to turn right on the red onto westbound Baseline, that would increase the danger significantly. And if, assuming there is a dedicated run-on lane for U-turners to westbound Baseline, being able to move into the right lane in order to turn right on Wendler may be impossible.
See below

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
Seems like a harder to drive alternative because of how the east/west lanes rotate to opposite sides of baseline.
So confusing, will confuse a lot of people and probably won't prevent traffic backup
That it might be complicated at first on the routes. However, I approve this alternative!
That it takes properties from people
That people will freak out because they don't do well with things that are new and different, even when they're the best option to address the problem.
The amount if time and space needed for construction. Also this pattern looks like it might be confusing for drivers adding more accidents to the area.
The closing of in & out areas.
The complicated design, the no left turns which means a driver would have to drive a way down the road to make a U-turn. It just seems complicated and expensive.
The construction time and it doesn't look very pedestrian or cyclist friendly
The construction will take forever and short-term traffic will be horrendous.
The cost
The cost is higher, which isn't great, and I'm sure the traffic on Baseline during construction if this project goes through will be horrible.
The cost of right-of way, however the benefits of streamlined traffic flow and driver delay reductions will offset these costs.
The cost.
The design is confusing, Not safe for pedestrians. Will have a big negative impact to local area businesses and communities with marginal improvement in traffic flow. This plan is not acceptable on any level.
The diverging diamond design differs from the mag 2040 proposal, in that the intersection just west of the freeway remains. In the mag proposal, the Arizona Grand intersection was continued northward and then diagonally Northeast to the street, leaving lots of room for traffic at the light so that it won't back up into the intersection
The learning curve may be challenging. The cost and concern for businesses affected due to increased land needs
The most disruptive in terms of construction and length of the project.
the possibility of no controlled traffic to getting on & off the freeway
the temporary disruption of the construction to flow of traffic will be inconvenient for locals
The unfamiliarity of it and how pedestrians will have to maneuver to get from one side of I10 to the other.
There be two kill zones, where traffic cross, people will not understand new pattern. Therefore they will do stupid things that will get people killed.
there is nothing i dislike about the alternative
There is nothing I dislike I think it's brilliant
They are confusing and this road has a lot of straight thru traffic.
They are expensive to implement and increase road closure time.
This is a unique traffic pattern and will take time to educate drivers on how to safely navigate it.
This is made for moving behicular traffic fast and safely (no turns across traffic) but it makes it less safe for pedestrian traffic. I think this site may be too urban for a diverging diamond design.
this is so incredibly confusing and I do not like it - I feel as though the outcome will not be worth the impact on the surrounding areas.
This is the most intensive option, so of course Cost, property loss, and construction time are the major dislikes. I think the long term objectives with this interchange will make the investment worthwhile.

What do you *dislike* about the Diverging Diamond Interchange (DDI) alternative?
This looks like another long-term project and the Broadway Curve project has already been a long project.
This unfunded option is very co$tly and disruptive to the area. These DDI's would allow more free flow to a very low volume of left turn traffic from EB/WB Baseline road onto to EB/WB I-10 on ramps! Also, with the 4 reverse curves required for the redirection of Baseline travel, it would be very difficult and disruptive to traffic to tread these re-aligned lanes between the existing Baseline median piers?
Timing of lights will be critical for the traffic that crosses on the east and west sides of the freeway as the lanes "switch direction." This will be confusing to some people as it will feel "wrong" to be on the other side of oncoming traffic. Also, potential for those under a chemical influence may go the wrong way. Headlights may also be an issue unless some sort of "sightline" barrier is erected.
Too confusing and too long a period for public to get adjusted. Accidents will increase trough the adjustment period
too expensive and unnecessary and will cause more problems and delays
Too impactful.
Uncommon pattern that may confuse drivers
Unfortunately there would be more ROW takes, but it is what it is.
Utilizes most space and increases cost More difficult for drivers to learn and navigate due to crossing to opposite side of the road Still have weaving traffic exiting the freeway to access the mall on the east and resort in the west
Very confusing
way too much construction
WAY too much impact on local business and a long construction time
why have people drive on the wrong side of the street - to only have a few of these in the valey is way too confusing
Will make more traffic jams
Will need extremely clear pedestrian signage.
Will take educating drivers to adjust to the new pattern
With a larger footprint comes longer construction durations which will impact business more, more land will have to purchased and costs will be higher. Education will play an important factor in the successful adoption of the DDI for traffic congestion to be eased as soon as possible after the lanes are opened as opposed to drivers learning on the fly as they navigate the new traffic patterns.
With no offramp light the Baseline merge in high traffic situations will backup and slow baseline traffic to a crawl
Would take too long and we have had enough construction in this area (PLEASE end construction on 48th street it’s been going on way too long.)

Provide any additional comments below:
143, 10 and 60 is till a major problem. It is very diffiecult to merg into the airport intertchange with the traffic merging from the 60 into the 10
2 comments 1) Is it possible to have a raised bicycle/walkway so that they don't have to be on the ground with cars and such. I'd be fearful of crossing in that area on foot or bicycle. 2) Alternate proposal: it is more expensive and bolder than the modified DDI, but could elevated I10 feeder lines running east and west of the intersection be used to get II0 traffic off of baseline sooner? 3rd comment - I tried sending an email to gluna2@az.gov, but it bounced.
ADOT - why am I just now seeing this?? Where has the community education and opportunities to speak up on this?? Because of your poor planning we are unable to attend the public forum.
Also, we have 3 EB lanes approaching the I-10 EB on ramp and only 2 EB Baseline lanes coming out of the DDI realignment on the east side of I-10? Could we just use one of these lanes for the EB Baseline to EB I-10 on ramp modification.
any chance of getting a pedestrian/cycling bridge going over Baseline on the west side of the I-10?
Any improvements to this section of freeway or any other that impacts commerce should be approved by the municipality it effects before being brought to the general public. Most citizens don't have any working knowledge of the consequences of such decisions.
Are there concerns regarding traffic flow along Baseline Road in the DDI scenario? DDIs are known to fail when through volumes are high. How has this been modeled? The proximity to the signal at Arizona Mills South may be a concern in this configuration.With ~500 feet between the DDI and the signal queuing into the signal may become a concern and coordination between the DDI and signal may be rough due to the spacing and assumed inter-agency cooperation. If ROR is permitted, is there adequate sight distance for the SB off ramp to make a ROR? The turn looks to have a tight radius which would make a slower turn and require more sight distance to vehicles within the DDI. Is it possible, within the current RoW to configure the NB off ramp as a free right? There are only 2 through lanes in the DDI and 3 lanes in the EB direction on the East leg. Are there concerns regarding weaving in the WB direction on the East leg between the Mills signal and the DDI? The #1 through lane becomes a trap lane. Is it possible to offset this entire segment to the south so that no WB through lane from Mills line up with the turn lane and that all vehicles that are stopped at WB Mills to go through are by default proceeding through the DDI with the option for the #1 through lane to move into the left lane as they approach the DDI? The access to the LT at EB Mills is very tight, I assume they have freight regularly access that signal. Have you considered loosening the curb line so vehicles can access the bays more smoothly? What will be in the areas of space without vehicle lanes? They look like good opportunity to provide some beautification in the area.

Provide any additional comments below:
As a lifelong resident of Calle Los Cerros, I have witnessed firsthand the dynamics and challenges of our local traffic system. One key issue that stands out is the 1-10 and Baseline interchange. Despite its current state, I strongly believe that keeping the interchange as it is, rather than pursuing a new construction project, is in the best interest of our community. Here's why: 1. Traffic Disruption During Construction: Building a new interchange would necessitate extensive construction work that could span several years. This would inevitably lead to significant road closures, detours, and increased congestion in the surrounding areas. For residents of Calle Los Cerros and nearby neighborhoods, this means living through a prolonged period of traffic turmoil, which could severely disrupt daily routines and exacerbate already challenging traffic conditions. 2. Increased Traffic Bottlenecks: The existing interchange, despite its imperfections, has been adapted to the current traffic patterns over time. Introducing a new design could unintentionally create new bottlenecks or traffic flow issues. The construction process itself would likely lead to temporary congestion as drivers adjust to altered routes and new traffic patterns. 3. Long-Term Inconvenience: The construction phase would not only bring immediate traffic headaches but also long-term changes to familiar routes. Residents and commuters alike would need to adapt to new traffic signals, lane configurations, and possibly altered access points. This transition period could cause confusion and inefficiency, further straining our local roadways. 4. Historical Context: As someone who has lived in this area for many years, I can attest to the importance of the existing interchange in the historical context of our community. Its current setup reflects decades of adjustment to traffic needs and local development. Altering it could disrupt a well-established system that has evolved to meet our specific traffic demands. 5. Community Impact: The disruption caused by new construction would extend beyond just traffic. Local businesses and residents rely on the current traffic patterns for accessibility and convenience. A major overhaul of the interchange could have unintended negative impacts on these businesses, as well as on the quality of life for residents who depend on smooth traffic flow for their daily activities. In summary, while there may be arguments for modernizing the 1-10 and Baseline interchange, the potential traffic nightmare caused by a new construction project outweighs the benefits. Preserving the current interchange avoids unnecessary disruption, maintains the familiar traffic patterns we have adapted to, and minimizes the impact on our community. For residents of Calle Los Cerros, who have seen the evolution of our local infrastructure, keeping the interchange as it is provides stability and continuity in our daily lives.
By infringing upon more properties would that cause the closure of any businesses?
DDI
DDI is my pick
DDI is my preferred design
DDI looks like a nightmare, especially for this part of town!
Do not build the DDI
Either spend the $40M and do the DDI, or do nothing. The MDI is a waste of time and money.
How are we incorporating non vehicle dependent improvements to this area throughout all of this? transportation is not only vehicle centric...foot traffic at Baseline due to both the mall and lower economic residential nearby indicate we need investments that get PEOPLE moving in ways that are not always car focused. How will we use our tax payer dollars to meet Sustainable Development Goals?
I am a very strong supporter of the DDI solution - It should be implemented wherever feasible as it dramatically decreases T-Bone accidents caused by left turns onto on ramps on a flashing yellow light.

Provide any additional comments below:
I am not happy that this can has been kicked down the road so long that it now is dependent on the voter initiative this fall. MAG transportation committee should be ashamed that they have ruled by squeaky wheel and louder voices instead of following the Spine recommendations.
I commute to 24th street and university every weekday. When there are issues or closures on the 10 baseline traffic is a nightmare.
I don't think it appropriate to comment on any of this seeing that I do not live in Arizona. I follow ADOT to know what is going on and what routes to take when in Arizona in the winter. I think you have one of the best highways in the country. In Arizona it is just too congested.
I drive this daily and it's a nightmare. There are no viable southbound alternatives (coming from the west) other than 48th St but that's a slow and windy road. Something has to be done to meet the current and future needs of this area.
I drive through there every weekend from Phoenix
I feel this is the best solution but understand it is the most costly.
I hope that my vote counts.
I hope you would wait to make any changes until AFTER the Broadway curve project is finished. Too much concern about drivers; NO concern about residents!!!
I humbly suggest the diverging diamond because it makes the biggest improvement
I know this isn't applicable for this intersection specifically, but, as far as highway reconstruction goes, I feel as though a cloverleaf interchange would be so instrumental in many areas. When I am navigating the highways, I so often wish that there were cloverleafs - exits for N/S & E/W are clearly marked (and sometimes easier to visualize), taking the wrong exit is quickly remedied, traffic diversion for accidents can be re-routed pretty easily through the clover, and it provides an opportunity to appropriately slow prior to merging into oncoming traffic without much impact on the departing street. Please consider the cloverleaf interchange in future projects!
I like the partial modification the best.
I live in this are and drive through here at least twice a day, it's horrible, unsafe and I'm happy to see that there are potential solutions to improve this. Even though it would cause the most disruption and largest footprint, I fully support the Diverging Diamond Interchange. This is desperately needed. I will be sure to vote to approve the sales tax to help fund this and other projects.
I live in Tucson but travel through this intersection on both I-10 and east-west along Belone often. Improvements for capacity, mobility and safety are required.
I really like the Diverging Diamond Interchange. If this has been studied and proven to be the best solution I would prefer this even though construction will be a temporary inconvenience
I strongly prefer the DDI interchange as this would provide the best alternative to reducing the traffic congestion at this interchange
I strongly prefer the DDI to solve the current traffic issues. The MDI is just a bandaid and something has to be done.
I think in order to understand your questions, I would have had to have followed this project more closely to learn the terminology or watch a video. I say that as someone who works at Rio Salado and I can look right out the windows to see the amazing progress, but I cannot understand the questions.
I think the DDI alternative is the best choice here. Motorists will get used to it. In metro Detroit, Big Beaver Road at I-75 was converted to a DDI. It's a very busy intersection with tons of regional retail and commercial activity on both sides. Motorists got accustomed to it. Follow the signs and obey the signals and you won't have any problems.
I think the DDI is the best solution to accommodate current and future demands. Design strategies will hopefully mitigate impacts to local businesses. I believe the construction team needs to collect data and account for possible weaving traffic for the mall on the east side and resort on the west to ensure the safest design is created. However, any improvements to the current design would help alleviate existing traffic flow issues
I think the DDI makes the most sense to facilitate traffic thru this busy intersection.
I think we need to spend the money now and not prolong what needs to happen! Clean up that area for good. Don’t bandaid.

Provide any additional comments below:
I think you are too 'close' to the project -- the visuals provided aren't good. They don't illustrate very well the difference in each proposal OR what each proposal actually does! Frankly those little thin black lines are hardly visible! Not clear what was being illustrated! What was needed were those animated graphics that are sent out by ADOT when a portion of I-10 or the 60 is being closed. Those illustrate very well for the average person the traffic flow in simplistic, easy to follow visuals. I would have liked to see that type of visual for each option, in order to understand the differences in traffic flow. I think you guys need a technical writer and a professional graphics illustrator on your team!! Also: the presentation should have emphasized more the cost and time requirements for each alternative. Those are definitely factors in project selection!
I travel from Ray and the 10 to Broadway and Priest for work. I exit the 10 at Baseline because the old Curve was dangerous and the new commuter roads are backed up to Warner and the 10. It used to take me 22 minutes to get to work, now with the new curve it takes me 45. You needed to leave the exit lane from Elliot going west to the curve there so you could get on the 10 and ride that to the Baseline exit. Now you have to merge and that creates a backup. It doesn't look like the Broadway exit off the 10 is open yet, but the commuter roads are so backed up, it isn't worth it to use them. I sure hope this gets better as it has been a long time getting here and now traffic seems even worse than before.
I travel through this intersection often. Traffic delays need to be fixed.
I vote for the DDI alternative!
I would like to continue to receive the roadway updates please :)
I would like to know the names of the incompetent individuals at ADOT who are suggesting the divergent diamond plan.
I'd vote for No Build or MDI, in that order.
I'm a fan of full DDI's, so I would love to see it implemented here
I'm glad the options are being studied.
I'm hopeful that with these options, there may be a way to reduce the number of people who run the redlights and also those who get backed up on Baseline after exiting (westbound).
If this is approved for either the MDI or DDI, please wait until all the Broadway Curve construction is finished and give us a few months of normal traffic before starting.
If you have to make any changes to the Baseline road interchange, the change should be the least costly, with the least impact to neighboring businesses.
in process
Leave as is! I've lived in this area 24 years. The Broadway curve area changes are enough to deal with.
May take time for people to learn how to use the new traffic patterns and cause people to make illegal/dangerous left hand turns because they missed the turn lane.
My family lives within 1 mile of this intersection, and based on daily interaction with other drivers and cyclists in this area I can say without hesitation that the proposed DDI design is a horrible idea that will make things much worse rather than making things better.
My wife and I live less than 1/2 a mile from here (and have for 15 years) and at least one if not both of us drive through it on a nearly daily basis. If you do not eliminate the crossing left turns at this intersection, you will not be solving the problem. The DDI is the only option to increase the traffic capacity of this intersection in a meaningful way. Any other option will be a waste of time and money and will be looked at for re-construction again after 5 years or less.
Need to encourage Fry's Foods to move from 48th to the old Fry's Electronics building, and opening up the path through the parking lot at Fry's Electronics to the Fry's Fuel, especially important if the left turns at Wendler is closed
Need to think long-term and expand to accommodate bicyclists and pedestrians too. And possibly, tram/train lines. Can't make it all car-based.
No further - Have moved from this area but still use the on ramps frequently.
none
Not only talking about the potential construction in this area. There are so much freeway construction in the valley, which is annoying when driving around over the weekend and daily commute...

Provide any additional comments below:
Nothing
Of the 3 proposals given, what design is going to be the best LONG TERM design for future predictions for traffic growth? We can't think now, we have to think 20 years from now. What's viable in the future?
Please consider moving forward with the DDI alternative. More and more housing is being built in the South Mountain area and the traffic is only going to get worse. Please help address this so we aren't stuck in so much traffic every day.
Please go ahead and construct the DDI alternative! It would look fascinating and help with the traffic flow.
Please go with the DDI
Please provide an approach that includes the Town of Guadalupe and the fact this strip of commercial development along the south side of Baseline is their life blood in terms of sale tax revenue. This is totally and completely ignored by the alternative presented. ADOT and others need to approach this project with a focus on equity and the historic harm that I-10 did to the Town of Guadalupe when it was placed at its current location in the 1960s +/-. It destroyed a lot of the Town. What would be a possible to account for this past harm would be to provide a right in and right-out access off the northbound I-10 to Baseline off-ramp which would provide a backdoor access into the Town's commercial development (off the I-10 ramp prior to its intersection with Baseline and on the south side of Baseline) which would help make this area an economic engine for the Town of Guadalupe. Instead, the alternatives proposed do not consider this. This really needs to be reconsidered prior to this project being progressed.
Please, let's finish this project sometime soon. I've lived here 32 years and this interchange has never worked.
Prefer MDI or DDI. There is too much congestion trying to enter or exit the I10 at Baseline Rd. It is unsafe. It would be better to disrupt the businesses/ land at the four corners of the intersection. The congestion will only get worse and an alternative should be done sooner than later.
Prefer the DDI option
Pro DDI, with the caveat that the median islands and the pedestrian island should be well landscaped. This ads walking distance, so the longer path needs to be more appealing that trying to dash across the ramps. Also, unclear from the plan as to how the design addresses bike users.
Since, this project is unfunded it could be done in phases with the low budget MDI constructed now and monitored/evaluated with the new Broadway Curve improvements. This option would give some relief to EB Baseline to EB I-10 traffic immediately!
So glad something is being done about this area. This is easily one of the most congested areas I visit regularly. I typically avoid it at all costs due to traffic.
Solutions to the problem which would eliminate the Wendler issue: Reopen the old entrance to the former Fry's electronics and provide a dedicated lane that gives access to BK, Fry's gas station, Denny's, etc. Then neither the MDI or the DDI would cause a major headache.
Tempe has installed far too many traffic lights in that short stretch of Baseline Road, which causes daily traffic backups. As I'm writing this, at 8:30PM on Thursday, Google maps shows that there's a slow down between the Arizona Grand and Calle los Cerros traffic lights!
Thanks for taking input
The concrete barrier on the north side of the 60 at Priest is propelling a lot more noise and vehicle exhaust fumes into the Tempe South Mountain Community and into Knoell Garden Villas. I previously emailed ADOT about this issue and received no response.
The DDI sounds like the best long term solution for our area, despite the short-term impact of construction and the cost
The diverging diamond working at Happy Valley ! Please use!
The lack of three-level options offered, such as is being considered for I-17 and Indian School, is short-sighted. The QOS at this interchange is already bad and will continue to worsen, and the volume of traffic suggests the need for additional grade separation. Given the former Fry's Electronics property is not in use, the project should consider re-aligning Wendler and Pointe Parkway to a common intersection.

Provide any additional comments below:
The regional improvements are real improvements. The collector/distributor roads around the I-10 and Baseline/Broadway Curve are great - when people figure them out. Baseline improvements are needed and I trust ADOT to coordinate the same great solutions.
The traffic is only going to get worse as usage along Baseline increases. We should choose the DDI or else we will find ourselves redesigning the area almost immediately after doing anything less.
There are a ton of people who work on Wendler just north of Baseline, which is a major cause for the traffic issue. There is only one way in and out of the area. If you could combine the DDI or MDI alternatives with an additional way for us to enter/exit the area, it would make a significant difference.
There has been so much construction in the area with the I10 work.
This area is expanding and more cars are are using it there's a necessity for new and improved roadways
This interchange area NEEDS a solution. I looked at the maps provided with the alternatives suggested and then had to search online to view videos of how the DDI actually works. Providing a link to one of the DDIs that ADOT has already completed in Arizona would probably be helpful.
This interchange sees massive amounts of traffic compared to some interchanges in the state that have DDI, this part of the valley needs this as well. Think about all the holiday traffic around this area around the discount mall. This is also the exit most of us who live on the north side of South Mountain take everyday.
Traffic on Baseline is bad. Going east to then go south on I-10 is horrible during peak traffic. So much development with housing in the area has made this road a nightmare with so many cars. I would like to see some lights eliminated. a constant traffic flow option like the diamond interchange would be helpful I think.
We all know the DDI would be best for service, but because of the size of the intersection, and associated cost, I would not be surprised or unhappy if the MDI was selected as the final decision.
We need more bike and transit options, safer options
We need the solution with the least disruption to our fragile community.
We should be working on improving mass transit, biking and pedestrian usage for roads. Widening roads and making roads faster will only create more deaths and injuries for all users. I do not support designs that will make life more dangerous.
We support the DDI as the best solution
What is future potential for light rail extension from Central Ave along Baseline to Priest and looping into line in Tempe or Mesa?
What the neighborhood thinks is very important
Whatever gets done, do NOT close I-10 to do the work. Why is this not being done the same time as the Broadway Curve project?
Whatever option is chosen, PLEASE make the exit ramps from the I-10 a No Right Turn area. It's incredibly unsafe. And putting up a couple of signs isn't that expensive or hard.
Whatever solution is selected the whole traffic light sequencing needs to be revamped to take into account the busiest times of day. What accommodations are going to made for pedestrians and cyclists?
Whatever traffic studies were conducted obviously were not done after 5PM M-F or during any Holiday. WB10 backs up to Guadalupe Rd. in the right 2 lanes exiting baseline or trying to get to the 60 and no design shown helps that at all.
Would ultimately like the DDI option , as it attempts to solve all problems
Yes I like the new design
You don't have enough right-of-way along either side of the freeway -- that's the real problem which you don't seem to address. It's claustrophobic and the sightlines are really horrible. You'd almost be better off starting over and creating a massive roundabout under the freeway -- or making all of the ramps right turn only and then putting in U-turn features at Arizona Grand and at Priest

Public Meeting Zoom Webinar Q&A Questions and Comments

#	Question	Answer
1	What do you mean by “Diamond Interchange”?	The existing I-10/Baseline Road Interchange is a Diamond Interchange. It is the most commonly used interchange type for freeway connections to local roads. The ramps generally take the shape of a diamond.
2	Why not add EB Baseline double right turn lanes to EB I-10 to the DDI alternative?	The DDI alternative considers double right turn lanes to eastbound I-10.
3	what is the apples-apples 1) no build vehicle capacity, 2) the MDI vehicle capacity, 3) the DDI vehicle capacity	Based on the anticipated traffic volumes, in the no-build alternative, all of the intersections in the study area will be oversaturated and operating at a failing level of service. The two build alternatives are anticipated to provide improved level of service to key movements through the study corridor through 2050.
4	what are you doing to accomodate the employees on Wendler that want to access the freeway? how will you prevent those drivers from using Calle los Cerros and the adjacent neighborhood as a big turnaround?	Employees at businesses on Wendler will have u-turn access at Arizona Grand Parkway.
5	Does the soon to be constructed Western Canal pedestrian bridge over I-10 impact this study, since it may help cyclists and pedestrians at this crossing?	The multiuse bridge currently under construction as part of the Interstate 10 Broadway Curve Improvement Project will not impact this study.
6	If Prop 479 passes, the MAG RSTIIP allocates $26,090,000 to the I-10 Baseline TI. If the MDI is selected, can construction begin as soon as design is approved? If the DDI is selected, how will the difference in funding be provided?	Right now, we have funding for the final design but we don’t have construction funding yet. This will be contingent on Prop 479. If the preferred build alternative is selected, whether MDI or DDI, there is time to make funds available.
7	Have the businesses and property owner who will be affected by the build alternatives have been contacted? Have they provided any feedback?	We had a previous public meeting, and now that we have shared these two alternatives with the public, we will do focused outreach to contact businesses in the area. We are also more than happy to answer any questions those businesses may have.
8	As a representative of the Arizona Grand Resort, which owns and operates Aunt Chiladas, we have serious concerns about how our access and parking may change and how these improvements will affect what we consider the “front door” to our property. How can we gather more information regarding the construction options, specifically more detailed designs?	Project team members would be happy to have another meeting with you to discuss the alternatives in more detail.
9	can you clarify funding again? is there dedicated funding?	Right now, we have funding for the final design but we don’t have construction funding yet. This will be contingent on Prop 479.
10	I'm the general manager of Christie's tempe and I have concerns about losing parking when I lose the property. my concern is that I won't be able to have enough parking for my occupancy. what would we do if we go below the necessary parking required?	The project team is currently evaluating two alternatives with different impacts to your property. We are gathering public input to assist with selecting an alternative. The specific impacts will depend on which alternative is selected. If you would like to request a meeting, please contact Gael Luna at gluna2@azdot.gov or 480.604.4785.
11	Will businesses with direct access from Baseline in this corridor be able to remain viable with either of the build options?	The main benefit of the project is to improve traffic flow through Baseline and the corridor. It will be a vast improvement over the no build.
12	I am sure it will vary depending on the modification choice, how will construction affect the already congeswted traffic…especially on the heels of the Broadway Curve construction that has been goig on for a couple of years	By the time this project’s construction starts, the Broadway Curve Project will be completed. During the construction of Baseline Road, the roadway will remain open to traffic. The construction of the I-10 ramps will require closures. The access to existing businesses will be maintained along Baseline Road during all phases of construction.
13	Calle Los Cerros is the main way in and out of the Tempe South Mountain Community. It appears that both alternatives will impact people, and first responders from turning East from Calle Los Cerros. How will you make it easier for people to enter or leave from/ on Baseline.	Both alternatives maintain the existing intersection at Baseline Road and Calle los Cerros.
14	MDI - Doesn’t make any improvements to flow going onto Northbound I-10? DDI - Does it eliminate a traffic light at I-10?	The MDI does improve the flow for WB/NB I-10. It provides more storage for left turns and removes the queuing of the right turns, to improve the overall flow of I-10 operations. The DDI does not eliminate the light, but it reduces the back up going through the interchange.

#	Question	Answer
15	what happens if your right of way take causes the Guadalupe business properties to no longer be functional? either from lack of parking or too small of a site?	Specific right-of-way needs will be identified during final design, and the right-of-way acquisition process would then begin. Right-of-way acquisitions follow ADOT's Right-of-Way Procedures Manual which can be found on ADOT's webpage. Once the right-of-way plans are reviewed and approved by ADOT, the property owner will be contacted to set up a time for an appraisal of the property. Once a just compensation offer has been approved by ADOT, a written offer to purchase will be presented to the owner, along with the project plans, title report, purchase agreement, and other required documents for the owner to complete a thorough review. The owner can then accept the State's offer or make a counter offer either requesting a new appraisal or changes to other terms in the agreement.
16	Is there a u-turn on westbound traffic at AZ Grand and Baseline?	Yes. Westbound traffic on Baseline Road will have u-turn access at Arizona Grand Parkway.
17	Is all traffic still at ground level with the DDI, or are there ramps so one direction rises over another direction of traffic?	The DDI ramps will be similar to the way ramps are built now, and will not add additional levels to the interchange.
18	Thank you. We look forward to setting up a meeting.	We're glad you could join us tonight.
19	How does the WB I-10 exit 3 lane left turn operate when WB Baseline is flowing? Is it signalized or is a yield. I do not know of any other 3 lane lefts in town that are in a yield condition. Happy Valley has a similar DDI but the left turns are signalized that seems to defete the purpose.	The three left turn lanes are signalized. They do not conflict with movements on Baseline Road.
20	Have you considered shutting down access to AZ Mills from baseline and having all access from Priest. It would reduce accidents.	Closing Baseline Road driveways at Arizona Mills Mall was considered, but after coordination with our project partners and stakeholders in the city of Tempe and town of Guadalupe, closing Baseline Road driveways at Arizona Mills Mall is no longer being considered.
21	We already have lost a lot of local businesses in the area since COVID... Which PLAN, does the area lose the least amount of businessess?	The DDI alternative will require more right-of-way acquisition than the MDI alternative. The MDI alternative will have less impact on local businesses.
22	why did the reroute of Wendler change?	As part of the DCR phase, we go through more traffic analysis and alternative evaluation. Based on traffic counts of drivers making left turns onto Wendler and left turns out of Wendler, the numbers did not warrant a signalized intersection.
23	In 2018 the Spine showed a possible Frontage Rd from Wendler thru the parking lot at the former Frys elec parking lot? Can zoning work there? Otherwise Wendler is useful to A lot of neighbors , worker, employees, patrons.	The number of vehicles per hour that are using this intersection at Baseline Road and Wendler Drive at peak time is low and does not warrant a traffic signal at that intersection or rerouting Wendler Drive.
24	Would you please explain how these plans accommodate pedestrians and bicycles? Will bus pullouts be maintained/provided?	Both build alternatives will widen the sidewalks to 8' on in each direction of Baseline Road within the project limits and correct all driveways, traffic signals and sidewalk ramps that are not currently ADA/MUTCD/PROWAG compliant within the project limits. Bicycle lanes are not included in either build alternative, but bicycles can be accommodated better with 8' wide sidewalks. We will be maintaining transit access and bus stops.
25	do both the MDI and DDI show decicated bike and ped facilities along baseline? Is transit access/bus impacted?	Both build alternatives will widen the sidewalks to 8' on in each direction of Baseline Road within the project limits and correct all driveways, traffic signals and sidewalk ramps that are not currently ADA/MUTCD/PROWAG compliant within the project limits. Bicycle lanes are not included in either build alternative, but bicycles can be accommodated better with 8' wide sidewalks. We will be maintaining transit access and bus stops.
26	If the WB three lane exit is signalized, isn't this the same as the proposed diamond?	In both alternatives, the ramps are signalized. In the DDI alternative, there are fewer phases as part of the signal operations.
27	It's important to look at the potential business/employee capacity on Wendler- counts are low NOW, maybe not in 5-10 yrs	ADOT uses traffic modeling developed by the Maricopa Association of Governments (MAG), which uses existing and future land uses, employment and population growth to estimate traffic volumes. The study includes a traffic analysis documenting the existing and projected future no-build traffic delay and compares it to the future delay for each of the proposed alternative improvements.

#	Question	Answer
28	Wendler access is very importan to me. I am used to heading east on Baselline from 48th street and turning left onto Wendler. A passage through the former Fry's Electronics parking lot would really help.	Thank you for your comment. It will be noted in the meeting summary and shared with the project team.
29	does the mdi allow for widening of the sidewalks to meet Ada standards?	Both build alternatives will widen the sidewalks to 8' on in each direction of Baseline Road within the project limits and correct all driveways, traffic signals and sidewalk ramps that are not currently ADA/MUTCD/PROWAG compliant within the project limits.
30	is the reason for the traffic counts being down on Wender, bacause the Frys buidling not being occupied?	Frys has its own access on Baseline Road. It did not have much of an impact on the traffic counts on Wendler Drive.
31	How much more efficient (is that measure as cars per minute) is the DDI vs MDI	The DDI alternative provides a little more efficiency than the MDI alternative.
32	The DDI appears to only have two left turn lanes exiting I-10 to go east on Baseline. Isn't there three left turn lanes currently? That's a heavy movement to the mall. Will two lanes handle the volume?	We believe a two-lane left turn from westbound I-10 to eastbound Baseline Road is appropriate with the efficiencies gained from the signal phasing with the DDI alternative.
33	Is there an animation of how these changes would look, to get a better visual?	No, unfortunately at the current stage we do not have a visual. When a preferred alternative is selected, an animation will be created.
34	We fought to Not allow BurgerKing ad Frys fuel until ADOT fixed the interchanges. Now you want me to go west on Baseline, to 48th, north to Southern, east to priest and back to baseline for my burger, gas?	There is an opportunity for drivers to make a u-turn at Baseline Road.
35	When this is finished, do the engineers designing these plans assume responsibility if problems arise after the fact?	There is a significant amount of design, engineering, and evaluation that goes into the selection process. The study team is responsible for following state and federal design guidelines.
36	can you summarize construction start and finish dates?	This project is currently not funded for construction. For the MDI, construction will take approximately one year. Construction of the DDI is estimated to take approximately one and a half years.
37	I agree with the last person. U-turns, even with a signal, cause extra danger and delay.	U-turns will be made at signalized intersections, so the risk of a crash is similar to a left-turning vehicle, but merely increases the distance traveled by a few feet.
38	Will you be able to make right turns on reds due to the u turns?	Right turns on red will be prohibited where u-turns are permitted.
39	why has construction not been funded?	MAG programs projects based on funding availability. Fudning for construction will be coming out of Prop 479 if it is approved this November.
40	Is it true that these proposed changes are to make this section of Baseline much safer for drivers. I understand that the I10/Baseline intersestion is one of the most dangerous in the valley? Is this true?	The current conditions at the I-10/Baseline Road traffic interchange includes a high number of crashes. With the proposed alternatives, this is anticipated to improve substantially.
41	if you can get across t	Thank you for your comment. It will be noted in the meeting summary and shared with the project team.
42	why did the funding not be included in earlier budgets? the Spine listed it as one of the most congested and one of the highest priorities.	The MAG Regional Council accepted the I-10/I-17 "Spine" Corridor Master Plan study in May 2017. Concurrent with that approval, specific priorities from that study were identified for funding through the region's Freeway Life Cycle Program, which is tied to a ½ cent dedicated transportation sales tax approved by Maricopa County voters in 2004 known as Proposition 400. That tax is set to expire in December 2025. Funding was identified based on a number of different considerations, including existing programmed improvements, assessment of system impacts, project development status, and right of way/utility limitations. While improvements to the I-10/Baseline Road interchange were identified as part of the Spine study, they along with other identified Spine improvements were not funded as part of the current program.
43	it will be pretty difficult to get to left/uturn lane across all those lanes of traffic	Thank you for your comment. It will be noted in the meeting summary and shared with the study team.

Appendix F – Summary of Comments

F0523_BaselineRd_TI_IDCR.pdf v.1/1

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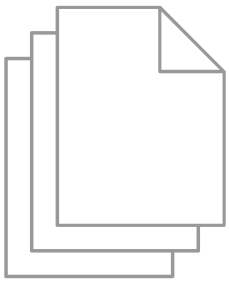

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Workflow

Stages

Stage 1

S O C D **Pending** 24 May 2024 15:15

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
aaron@gordleygroup.com	Read only	S O	0	0
Ali Zareh	Reviewer	S O C	0	0
Alyssa Morrison	Reviewer & Approver	S O C D	16	82
Brandon S Campbell	Reviewer	S O C	0	0
Breeann Draper	Read only	S O	0	0
catherine_hollow@tempe.gov	Reviewer	S O C	35	0
chase_walman@tempe.gov	Reviewer	S O C	0	0
Dan Woelzlein	Author	S O C D	0	0
dbaker@y2keng.com	Read only	S O	0	0
Dena Whitaker	Reviewer	S O C	0	0
Dennis Haley	Reviewer	S O C	0	0
Diana Dunn	Author	S O C D	0	0
dvoigt@aztec.us	Reviewer	S O C	0	0
E L Brady	Reviewer	S O C	0	0
Eric Hitchcock	Reviewer	S O C	0	0
Gael Luna	Reviewer	S O C	0	0
George Williams	Reviewer	S O C	0	0
Guled Ahmed	Reviewer	S O C	0	0
HirenKumar Shah	Reviewer	S O C	0	0
jan@gordleygroup.com	Read only	S O	0	0
Jeff Kulaga	Reviewer	S O C	0	0
Jennifer Acuna	Reviewer	S O C	0	0
John Gleason	Author	S O C D	0	0
John R Hucko	Reviewer	S O C	0	0
kkiser@azdot.gov	Reviewer	S O C	0	0
Mark Gilliland	Author	S O C D	0	0
Michael Morrison	Reviewer	S O C	0	0
Myesha Harris	Reviewer	S O C	1	0
Nancy Shelton	Read only	S O	0	0
Nicolai Oliden	Read only	S O	0	0
Nikki Green	Reviewer	S O C	0	0
Olivier Mirza	Reviewer & Approver	S O C D	2	0
Pancho Garza	Read only	S O	0	0
Priscilla Hernandez	Reviewer	S O C	1	0
Quinn Castro	Reviewer	S O C	1	0
Randy Everett	Reviewer	S O C	0	0

Raul Amavisca	Reviewer	S O C	0	0
ravi.ambadipudi@jacobs.com	Read only	S O	0	0
Ron Szwiec	Author	S O C D	0	0
Scott Weinland	Reviewer	S O C	0	0
Stephanie Stearns	Reviewer	S O C	0	0
Steve Lohide	Author	S O C D	0	0
Syed Alam	Reviewer	S O C	0	0
Tammy R Mivshek	Reviewer	S O C	0	0
Tim Mahon	Author	S O C D	0	0
tom@gordleygroup.com	Read only	S O	0	0
Tracy Eberlein	Reviewer & Approver	S O C D	0	0
ykoprowski@y2keng.com	Read only	S O	0	0

Stage 2 S O C

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
Jeff Ross	Reviewer	S O C	0	0
Anil Mudigonda	Reviewer	S O C	0	0

Decisions

Stage 1

APPROVER	DECISION	DECISION DATE
Alyssa Morrison	Pending	---
Dan Woelzlein	Pending	---
Diana Dunn	Pending	---
John Gleason	Pending	---
Mark Gilliland	Approved	18 Oct 2024 10:48
Olivier Mirza	Pending	---
Ron Szwiec	Pending	---
Steve Lohide	Pending	---
Tim Mahon	Pending	---
Tracy Eberlein	Pending	---

Stage 2

No decision makers assigned

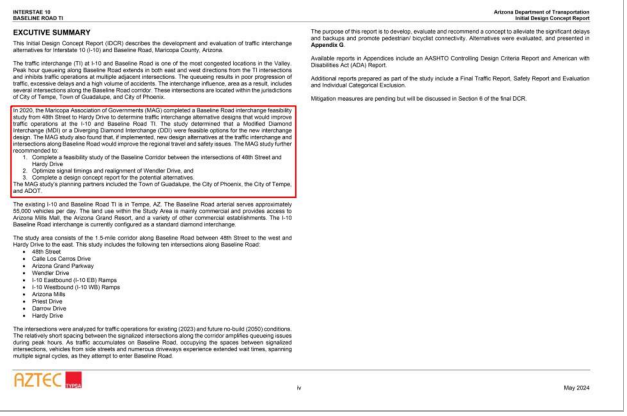
Comments

1 Olivier Mirza 17 May 2024 08:28

Too much information about the feasibility report that is irrelevant now because we have a DCR which has better information. I would either remove from the Executive Summary or reduce to 2-3 sentences. Focus on what this DCR is evaluating and the results from this DCR. Mention we had multiple meetings with the Stakeholders, went through a brainstorming activity were multiple alternatives developed and then went through an elimination process based on feedback from the public, stake holders, etc ... something to that extend and the outcome was the two alternatives DDI and MTDI to be evaluated further after soliciting further input from the public. Please mention that we had a public meeting and solicitated input, etc ...

F0523_BaselineRd_TI_IDCR.pdf

Page **6**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both east and west directions from the TI intersections and inhibits traffic operations at multiple adjacent intersections. The queueing results in poor progression of traffic, excessive delays and a high volume of accidents. The interchange influence, area as a result, includes several intersections along the Baseline Road corridor. These intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

In 2020, the Maricopa Association of Governments (MAG) completed a Baseline Road interchange feasibility study from 48th Street to Hardy Drive to determine traffic interchange alternative designs that would improve traffic operations at the I-10 and Baseline Road TI. The study determined that a Modified Diamond Interchange (MDI) or a Diverging Diamond Interchange (DDI) were feasible options for the new interchange design. The MAG study also found that, if implemented, new design alternatives at the traffic interchange and intersections along Baseline Road would improve the regional travel and safety issues. The MAG study further recommended to:

1. Complete a feasibility study of the Baseline Corridor between the intersections of 48th Street and Hardy Drive
2. Optimize signal timings and realignment of Wendler Drive, and
3. Complete a design concept report for the potential alternatives.

The MAG study's planning partners included the Town of Guadalupe, the City of Phoenix, the City of Tempe, and ADOT.

The existing I-10 and Baseline Road TI is in Tempe, AZ. The Baseline Road arterial serves approximately 55,000 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments. The I-10 Baseline Road interchange is currently configured as a standard diamond interchange.

The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 Eastbound (I-10 EB) Ramps
- I-10 Westbound (I-10 WB) Ramps
- Arizona Mills
- Priest Drive
- Darrow Drive
- Hardy Drive

The intersections were analyzed for traffic operations for existing (2023) and future no-build (2050) conditions. The relatively short spacing between the signalized intersections along the corridor amplifies queueing issues during peak hours. As traffic accumulates on Baseline Road, occupying the spaces between signalized intersections, vehicles from side streets and numerous driveways experience extended wait times, spanning multiple signal cycles, as they attempt to enter Baseline Road.

The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and backups and promote pedestrian/ bicyclist connectivity. Alternatives were evaluated, and presented in **Appendix G**.

Available reports in Appendices include an AASHTO Controlling Design Criteria Report and American with Disabilities Act (ADA) Report.

Additional reports prepared as part of the study include a Final Traffic Report, Safety Report and Evaluation and Individual Categorical Exclusion.

Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC

iv

May 2024

1.1 A - Will Comply 30 May 2024 10:00

Action was applied by Alyssa Morrison

2 Quinn Castro 17 May 2024 10:46

Expand details in executive summary to include the three alternatives.

F0523_BaselineRd_TI_IDCR.pdf

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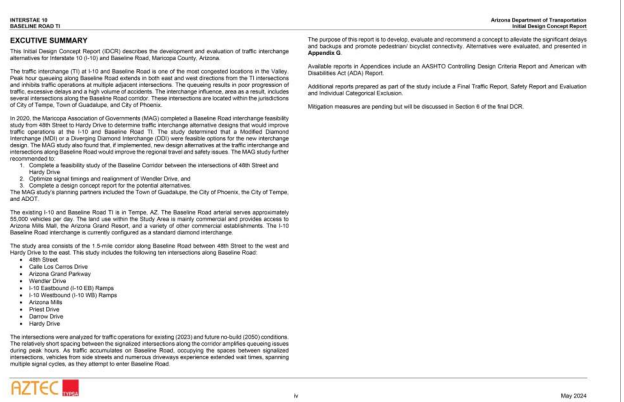

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

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Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC

iv

May 2024

2.1 A - Will Comply 30 May 2024 10:03

Action was applied by Alyssa Morrison

3 **Priscilla Hernandez** 17 May 2024 11:44

I have not comments at this time. Thank you.

3.1 **A - Will Comply** 30 May 2024 13:19

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

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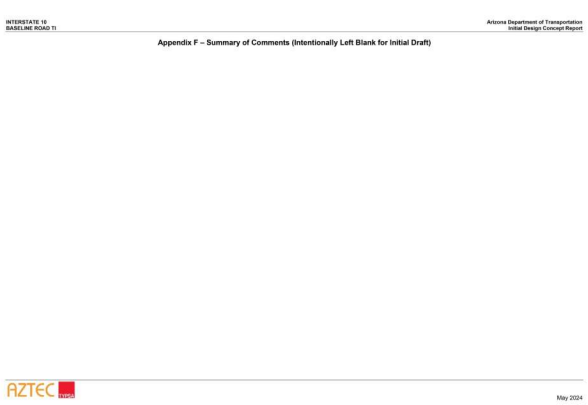

4 **Myesha Harris** 22 May 2024 17:29

The City of Phoenix is generally in agreement with proceeding with presenting the three alternatives for the I-10 Baseline Traffic Interchange (TI) Initial Design Concept Report (DCR) to the public. The Street Transportation Department has reviewed the Initial DCR and the concepts regarding the Modified Directional Interchange (MDI) and the Diverging Diamond Interchange (DDI), and we find that they generally align with the City's objectives.
While we are supportive of the proposed alternatives, we do have initial concerns regarding the anticipated increase in delay for northbound movements at 48th Street. However, the city believes that this difference in delay, as well as the Level of Service (LOS), can be effectively addressed through signal timing and phasing adjustments.
In moving forward, the city would appreciate continued collaboration and dialogue to ensure that the chosen alternative optimally addresses both traffic flow and community needs. The city remains committed to working closely with all stakeholders involved to achieve the best possible outcome for the residents and commuters of Phoenix.

4.1 **A - Will Comply** 6 Jun 2024 13:04

Action was applied by Alyssa Morrison

4.2 **Alyssa Morrison** 6 Jun 2024 13:05

We will continue to collaborate with the City.

F0523_BaselineRd_TI_IDCR.pdf

Page **1**

5 **Olivier Mirza** 23 May 2024 09:45

Can you add a section that summarizes most of the other alternatives that we brainstormed and why they were excluded from further evaluation? **@Alyssa Morrison @Mark Gilliland**

5.2 **Alyssa Morrison** 6 Jun 2024 13:18

A high-level summary of the other alternatives will be added. In particular Wendler will be addressed and exhibits will be included accordingly.

5.3 **A - Will Comply** 6 Jun 2024 13:18

Action was applied by Alyssa Morrison

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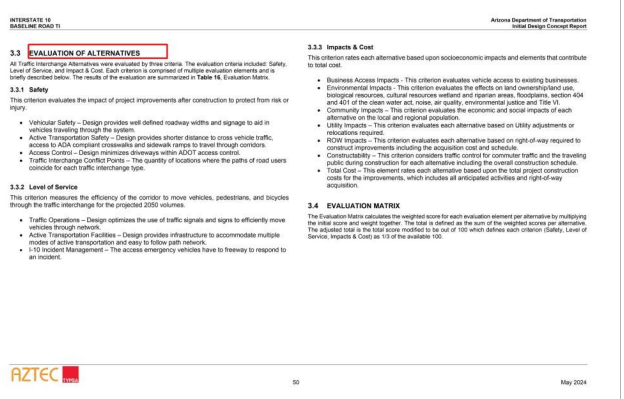
INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

3.3 EVALUATION OF ALTERNATIVES

All Traffic Interchange Alternatives were evaluated by three criteria. The evaluation criteria included: Safety, Level of Service, and Impact & Cost. Each criterion is comprised of multiple evaluation elements and is briefly described below. The results of the evaluation are summarized in Table 16, Evaluation Matrix.

3.3.1 Safety

This criterion evaluates the impact of project improvements after construction to protect from risk or injury

- Vehicular Safety – Design provides well defined roadway widths and signage to aid in vehicles traveling through the system.
- Active Transportation Safety – Design provides shorter distance to cross vehicle traffic, access to ADA compliant crosswalks and sidewalk ramps to travel through corridors.
- Access Control – Design minimizes driveways within ADOT access control.
- Traffic Interchange Conflict Points – The quantity of locations where the paths of road users coincide for each traffic interchange type.

3.3.2 Level of Service

This criterion measures the efficiency of the corridor to move vehicles, pedestrians, and bicycles through the traffic interchange for the projected 2050 volumes.

- Traffic Operations – Design optimizes the use of traffic signals and signs to efficiently move vehicles through network.
- Active Transportation Facilities – Design provides infrastructure to accommodate multiple modes of active transportation and easy to follow path network.
- I-10 Incident Management – The access emergency vehicles have to freeway to respond to an incident.

3.3.3 Impacts & Cost

This criterion rates each alternative based upon socioeconomic impacts and elements that contribute to total cost.

- Business Access Impacts - This criterion evaluates vehicle access to existing businesses.
- Environmental Impacts - This criterion evaluates the effects on land ownership/land use, biological resources, cultural resources wetland and riparian areas, floodplains, section 404 and 401 of the clean water act, noise, air quality, environmental justice and Title VI.
- Community Impacts – This criterion evaluates the economic and social impacts of each alternative on the local and regional population.
- Utility Impacts – This criterion evaluates each alternative based on Utility adjustments or relocations required.
- ROW Impacts – This criterion evaluates each alternative based on right-of-way required to construct improvements including the acquisition cost and schedule.
- Constructability – This criterion considers traffic control for commuter traffic and the traveling public during construction for each alternative including the overall construction schedule.
- Total Cost – This element rates each alternative based upon the total project construction costs for the improvements, which includes all anticipated activities and right-of-way acquisition.

3.4 EVALUATION MATRIX

The Evaluation Matrix calculates the weighted score for each evaluation element per alternative by multiplying the initial score and weight together. The total is defined as the sum of the weighted scores per alternative. The adjusted total is the total score modified to be out of 100 which defines each criterion (Safety, Level of Service, Impacts & Cost) as 1/3 of the available 100.

AZTEC
50
May 2024

6 **catherine_hollow@tempe.gov** 23 May 2024 16:41

Previous page and traffic report say 55,000. Please be consistent.

Why City of Phoenix for comparison?

Which two intersections? Do you include the data somewhere?

6.1 **A - Will Comply** 30 May 2024 10:08

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

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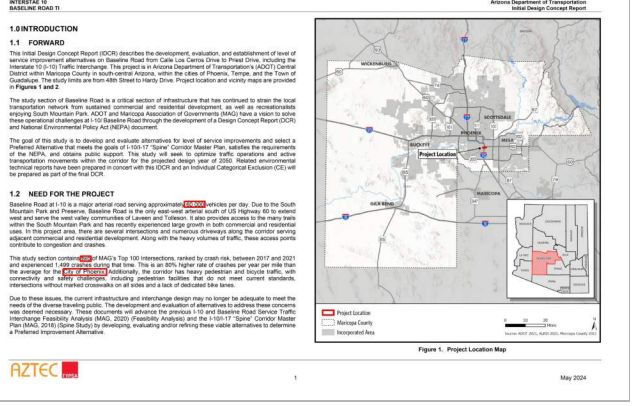
INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.0 INTRODUCTION

1.1 FORWARD

This Initial Design Concept Report (IDCR) describes the development, evaluation, and establishment of level of service improvement alternatives on Baseline Road from Calle Los Cerros Drive to Priest Drive, including the Interstate 10 (I-10) Traffic Interchange. This project is in Arizona Department of Transportation's (ADOT) Central District within Maricopa County in south-central Arizona, within the cities of Phoenix, Tempe, and the Town of Guadalupe. The study limits are from 48th Street to Hardy Drive. Project location and vicinity maps are provided in Figures 1 and 2.

The study section of Baseline Road is a critical section of infrastructure that has continued to strain the local transportation network from sustained commercial and residential development, as well as recreationists enjoying South Mountain Park. ADOT and Maricopa Association of Governments (MAG) have a vision to solve these operational challenges at I-10/ Baseline Road through the development of a Design Concept Report (DCR) and National Environmental Policy Act (NEPA) document.

The goal of this study is to develop and evaluate alternatives for level of service improvements and select a Preferred Alternative that meets the goals of I-10/I-17 "Spine" Corridor Master Plan, satisfies the requirements of the NEPA, and obtains public support. This study will seek to optimize traffic operations and active transportation movements within the corridor for the projected design year of 2050. Related environmental technical reports have been prepared in concert with this IDCR and an Individual Categorical Exclusion (CE) will be prepared as part of the final DCR.

1.2 NEED FOR THE PROJECT

Baseline Road at I-10 is a major arterial road serving approximately 69,000 vehicles per day. Due to the South Mountain Park and Preserve, Baseline Road is the only east-west arterial south of US Highway 60 to extend west and serve the west valley communities of Laveen and Tolleson. It also provides access to the many trails within the South Mountain Park and has recently experienced large growth in both commercial and residential uses. In this project area, there are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development. Along with the heavy volumes of traffic, these access points contribute to congestion and crashes.

This study section contains one of MAG's Top 100 Intersections, ranked by crash risk, between 2017 and 2021 and experienced 1,499 crashes during that time. This is an 80% higher rate of crashes per year per mile than the average for the City of Phoenix. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and a lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The development and evaluation of alternatives to address these concerns was deemed necessary. These documents will advance the previous I-10 and Baseline Road Service Traffic Interchange Feasibility Analyses (MAG, 2020) (Feasibility Analyses) and the I-10/I-17 "Spine" Corridor Master Plan (MAG, 2018) (Spine Study) by developing, evaluating and/or refining these viable alternatives to determine a Preferred Improvement Alternative.

Project Location
Maricopa County
Incorporated Area

Figure 1. Project Location Map

AZTEC
1
May 2024

7 **catherine_hollow@tempe.gov** 24 May 2024 10:58

This can be expanded to mention design constraints and opportunities that are part of the evaluation.

7.1 **A - Will Comply** 30 May 2024 10:08

Action was applied by Alyssa Morrison

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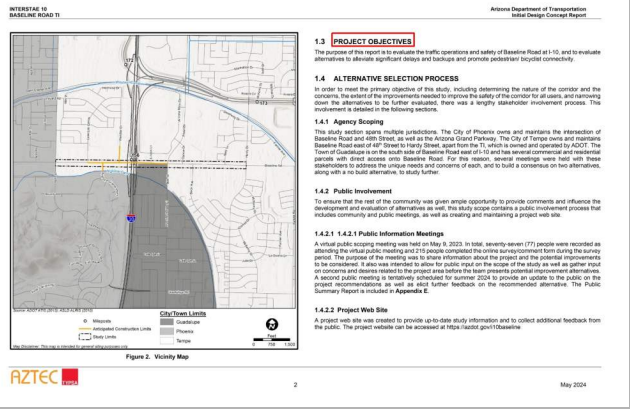
Page **8**


INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.3 PROJECT OBJECTIVES

The purpose of this report is to evaluate the traffic operations and safety of Baseline Road at I-10, and to evaluate alternatives to alleviate significant delays and backups and promote pedestrian/ bicyclist connectivity.

1.4 ALTERNATIVE SELECTION PROCESS

In order to meet the primary objective of this study, including determining the nature of the corridor and the concerns, the extent of the improvements needed to improve the safety of the corridor for all users, and narrowing down the alternatives to be further evaluated, there was a lengthy stakeholder involvement process. This involvement is detailed in the following sections.

1.4.1 Agency Scoping

This study section spans multiple jurisdictions. The City of Phoenix owns and maintains the intersection of Baseline Road and 48th Street, as well as the Arizona Grand Parkway. The City of Tempe owns and maintains Baseline Road east of 48th Street to Hardy Street, apart from the TI, which is owned and operated by ADOT. The Town of Guadalupe is on the south side of Baseline Road east of I-10 and has several commercial and residential parcels with direct access onto Baseline Road. For this reason, several meetings were held with these stakeholders to address the unique needs and concerns of each, and to build a consensus on two alternatives, along with a no build alternative, to study further.

1.4.2 Public Involvement

To ensure that the rest of the community was given ample opportunity to provide comments and influence the development and evaluation of alternatives as well, this study scope contains a public involvement process that includes community and public meetings, as well as creating and maintaining a project web site.

1.4.2.1 1.4.2.1 Public Information Meetings

A virtual public scoping meeting was held on May 9, 2023. In total, seventy-seven (77) people were recorded as attending the virtual public meeting and 215 people completed the online survey/comment form during the survey period. The purpose of the meeting was to share information about the project and the potential improvements to be considered. It also was intended to allow for public input on the scope of the study as well as gather input on concerns and desires related to the project area before the team presents potential improvement alternatives. A second public meeting is tentatively scheduled for summer 2024 to provide an update to the public on the project recommendations as well as elicit further feedback on the recommended alternative. The Public Summary Report is included in Appendix E.

1.4.2.2 Project Web Site

A project web site was created to provide up-to-date study information and to collect additional feedback from the public. The project website can be accessed at https://azdot.gov/I10baseline

City/Town Limits
Guadalupe
Phoenix
Tempe

Figure 2. Vicinity Map

AZTEC
2
May 2024

8 catherine_hollow@tempe.gov 24 May 2024 10:59

The TI is operated by the City of Tempe not ADOT.

8.1 A - Will Comply 30 May 2024 10:09

Action was applied by Alyssa Morrison

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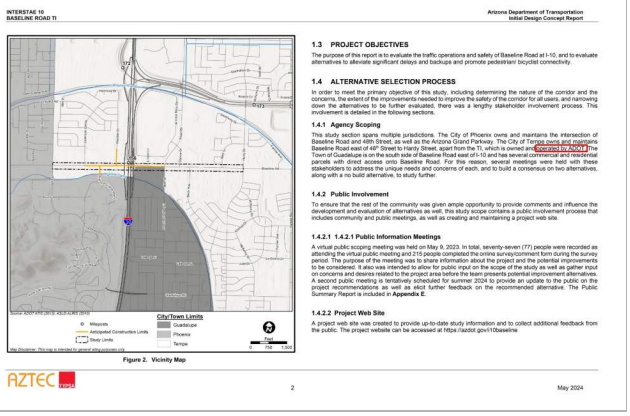
Page **8**



9 catherine_hollow@tempe.gov 24 May 2024 11:00

This is a lot of unnecessary information about I-10 as I-10 is not being touched as part of this project.

9.1 D - Design Team Recommends No Further Acti on Taken 30 May 2024 10:11

Action was applied by Alyssa Morrison

9.2 Alyssa Morrison 30 May 2024 10:12

The I-10 Ramps are being modified which will impact I-10 traffic operations.

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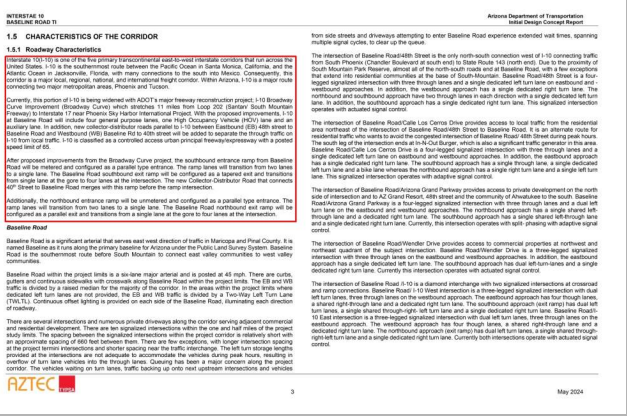

10 catherine_hollow@tempe.gov 24 May 2024 11:04

An alternate route??

10.1 A - Will Comply 30 May 2024 10:13

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **9**

11 catherine_hollow@tempe.gov 24 May 2024 11:06

delete

11.1 A - Will Comply 30 May 2024 10:14

Action was applied by Alyssa Morrison

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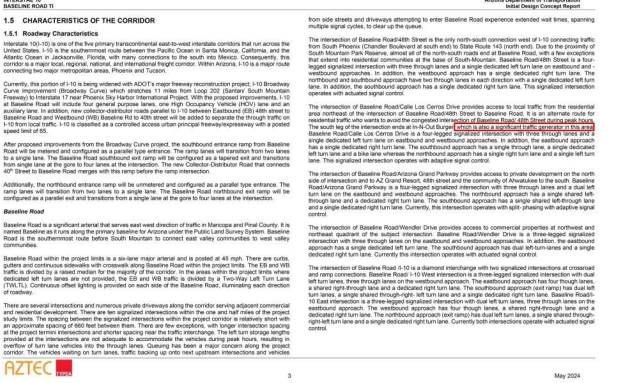
Page **9**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10(I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project; I-10 Broadway Curve improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to Interstate 17 near Phoenix Sky Harbor International Project. With the proposed improvements, I-10 at Baseline Road will include four general purpose lanes, one High Occupancy Vehicle (HOV) lane and an auxiliary lane. In addition, new collector-distributor roads parallel to I-10 between Eastbound (EB) 48th street to Baseline Road and Westbound (WB) Baseline Rd to 40th street will be added to separate the through traffic on I-10 from local traffic. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp will be configured as a tapered exit and transitions from single lane at the gore to four lanes at the intersection. The new Collector-Distributor Road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant arterial that serves east west direction of traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the southernmost route before South Mountain to connect east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road, illuminating each direction of roadway.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet between them. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicles during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. The vehicles waiting on turn lanes, traffic backing up onto next upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles, to clear up the queue.

The intersection of Baseline Road/48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of South Mountain Park Reserve, almost all of the north-south roads end at Baseline Road, with a few exceptions that extend into residential communities at the base of South-Mountain. Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane. This signalized intersection operates with actuated signal control.

The intersection of Baseline Road/Calle Los Cerros Drive provides access to local traffic from the residential area northeast of the intersection of Baseline Road/48th Street to Baseline Road. It is an alternate route for residential traffic who wants to avoid the congested intersection of Baseline Road/ 48th Street during peak hours. The south leg of the intersection ends at In-N-Out Burger, which is also a significant traffic generator in this area. Baseline Road/Calle Los Cerros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a single dedicated left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to private development on the north side of intersection and to AZ Grand Resort, 48th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to commercial properties at northwest and northeast quadrant of the subject intersection. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road /I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (exit ramp) has dual left turn lanes, a single shared through-right- left turn lane and a single dedicated right turn lane. Baseline Road/I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the eastbound approach. The westbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Currently both intersections operate with actuated signal control.

AZTEC

3

May 2024

12 catherine_hollow@tempe.gov 24 May 2024 11:15

Is there a stop in the study area for any of these I-10 express routes?

12.1 B - Consultant/Designer to Evaluate 30 May 2024 10:17

Action was applied by Alyssa Morrison

12.3 Alyssa Morrison 6 Jun 2024 13:37

Aztec to verify

F0523_BaselineRd_TI_IDCR.pdf

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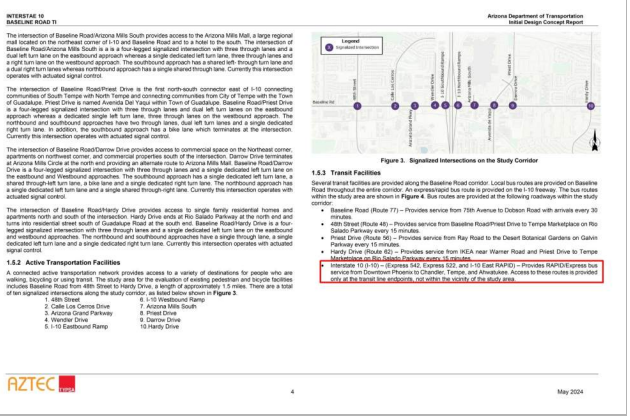

INTERSTATE 10
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The intersection of Baseline Road/Arizona Mills South provides access to the Arizona Mills Mall, a large regional mall located on the northeast corner of I-10 and Baseline Road and to a hotel to the south. The intersection of Baseline Road/Arizona Mills South is a is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound approach whereas a single dedicated left turn lane, three through lanes and a right turn lane on the westbound approach. The southbound approach has a shared left- through turn lane and a dual right turn lanes whereas northbound approach has a single shared through lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Priest Drive is the first north-south connector east of I-10 connecting communities of South Tempe with North Tempe and connecting communities from City of Tempe with the Town of Guadalupe. Priest Drive is named Avenida Del Yaqui within Town of Guadalupe. Baseline Road/Priest Drive is a four-legged signalized intersection with three through lanes and dual left turn lanes on the eastbound approach whereas a dedicated single left turn lane, three through lanes on the westbound approach. The northbound and southbound approaches have two through lanes, dual left turn lanes and a single dedicated right turn lane. In addition, the southbound approach has a bike lane which terminates at the intersection. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Darrow Drive provides access to commercial space on the Northeast corner, apartments on northwest corner, and commercial properties south of the intersection. Darrow Drive terminates at Arizona Mills Circle at the north end providing an alternate route to Arizona Mills Mall. Baseline Road/Darrow Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and Westbound approaches. The southbound approach has a single dedicated left turn lane, a shared through-left turn lane, a bike lane and a single dedicated right turn lane. The northbound approach has a single dedicated left turn lane and a single shared through-right lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Hardy Drive provides access to single family residential homes and apartments north and south of the intersection. Hardy Drive ends at Rio Salado Parkway at the north end and turns into residential street south of Guadalupe Road at the south end. Baseline Road/Priest Drive to a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and westbound approaches. The northbound and southbound approaches have a single through lane, a single dedicated left turn lane and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

1.5.2 Active Transportation Facilities

A connected active transportation network provides access to a variety of destinations for people who are walking, bicycling and using transit. The study area for the evaluation of existing pedestrian and bicycle facilities includes Baseline Road from 48th Street to Hardy Drive, a length of approximately 1.5 miles. There are a total of ten signalized intersections along the study corridor, as listed below shown in **Figure 3**.

1. 48th Street
2. Calle Los Cerros Drive
3. Arizona Grand Parkway
4. Wendler Drive
5. I-10 Eastbound Ramp
6. I-10 Westbound Ramp
7. Arizona Mills South
8. Priest Drive
9. Darrow Drive
10 Hardy Drive

Legend
Signalized Intersection

Baseline Rd
48th Street
Calle Los Cerros
Arizona Mills South
I-10 Eastbound Ramp
I-10 Westbound Ramp
Priest Drive
Darrow Drive
Hardy Drive
Avenida del Yaqui
Arizona Grand Pkwy
Wendler Drive

Figure 3. Signalized Intersections on the Study Corridor

1.5.3 Transit Facilities

Several transit facilities are provided along the Baseline Road corridor. Local bus routes are provided on Baseline Road throughout the entire corridor. An express/rapid bus route is provided on the I-10 freeway. The bus routes within the study area are shown in **Figure 4**. Bus routes are provided at the following roadways within the study corridor:

- Baseline Road (Route 77) – Provides service from 75th Avenue to Dobson Road with arrivals every 30 minutes.
- 48th Street (Route 48) – Provides service from Baseline Road/Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Priest Drive (Route 56) – Provides service from Ray Road to the Desert Botanical Gardens on Galvin Parkway every 15 minutes.
- Hardy Drive (Route 62) – Provides service from IKEA near Warner Road and Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Interstate 10 (I-10) – (Express 542, Express 522, and I-10 East RAPID) – Provides RAPID/Express bus service from Downtown Phoenix to Chandler, Tempe, and Ahwatukee. Access to these routes is provided only at the transit line endpoints, not within the vicinity of the study area.

AZTEC

4

May 2024

13 catherine_hollow@tempe.gov 24 May 2024 11:16

There is a connection now?

13.1 A - Will Comply 30 May 2024 10:21

Action was applied by Alyssa Morrison

13.2 Alyssa Morrison 30 May 2024 10:22

Aztec to verify.

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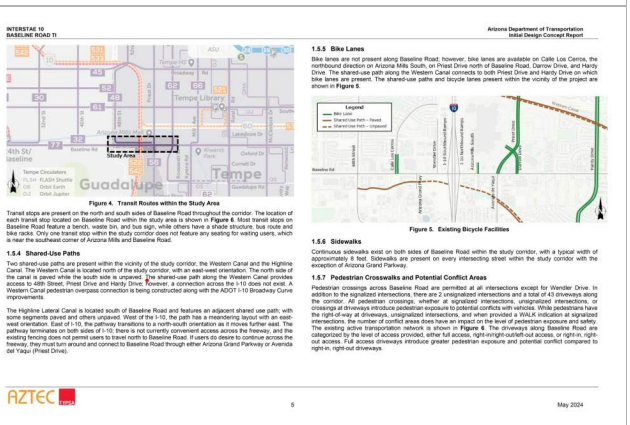

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Figure 4. Transit Routes within the Study Area

Transit stops are present on the north and south sides of Baseline Road throughout the corridor. The location of each transit stop located on Baseline Road within the study area is shown in **Figure 6**. Most transit stops on Baseline Road feature a bench, waste bin, and bus sign, while others have a shade structure, bus route and bike racks. Only one transit stop within the study corridor does not feature any seating for waiting users, which is near the southeast corner of Arizona Mills and Baseline Road.

1.5.4 Shared-Use Paths

Two shared-use paths are present within the vicinity of the study corridor; the Western Canal and the Highline Canal. The Western Canal is located north of the study corridor, with an east-west orientation. The north side of the canal is paved while the south side is unpaved. The shared-use path along the Western Canal provides access to 48th Street, Priest Drive and Hardy Drive; however, a connection across the I-10 does not exist. A Western Canal pedestrian overpass connection is being constructed along with the ADOT I-10 Broadway Curve improvements.

The Highline Lateral Canal is located south of Baseline Road and features an adjacent shared use path; with some segments paved and others unpaved. West of the I-10, the path has a meandering layout with an east-west orientation. East of I-10, the pathway transitions to a north-south orientation as it moves further east. The pathway terminates on both sides of I-10; there is not currently convenient access across the freeway, and the existing fencing does not permit users to travel north to Baseline Road. If users do desire to continue across the freeway, they must turn around and connect to Baseline Road through either Arizona Grand Parkway or Avenida del Yaqui (Priest Drive).

1.5.5 Bike Lanes

Bike lanes are not present along Baseline Road; however, bike lanes are available on Calle Los Cerros, the northbound direction on Arizona Mills South, on Priest Drive north of Baseline Road, Darrow Drive, and Hardy Drive. The shared-use path along the Western Canal connects to both Priest Drive and Hardy Drive on which bike lanes are present. The shared-use paths and bicycle lanes present within the vicinity of the project are shown in **Figure 5**.

Figure 5. Existing Bicycle Facilities

1.5.6 Sidewalks

Continuous sidewalks exist on both sides of Baseline Road within the study corridor, with a typical width of approximately 8 feet. Sidewalks are present on every intersecting street within the study corridor with the exception of Arizona Grand Parkway.

1.5.7 Pedestrian Crosswalks and Potential Conflict Areas

Pedestrian crossings across Baseline Road are permitted at all intersections except for Wendler Drive. In addition to the signalized intersections, there are 2 unsignalized intersections and a total of 43 driveways along the corridor. All pedestrian crossings, whether at signalized intersections, unsignalized intersections, or crossings at driveways introduce pedestrian exposure to potential conflicts with vehicles. While pedestrians have the right-of-way at driveways, unsignalized intersections, and when provided a WALK indication at signalized intersections, the number of conflict areas does have an impact on the level of pedestrian exposure and safety. The existing active transportation network is shown in **Figure 6**. The driveways along Baseline Road are categorized by the level of access provided, either full access, right-in/right-out/left-out access, or right-in, right-out access. Full access driveways introduce greater pedestrian exposure and potential conflict compared to right-in, right-out driveways.

AZTEC

5

May 2024

14 **catherine_hollow@tempe.gov** 24 May 2024 11:20

this path is paved

14.1 **A - Will Comply** 30 May 2024 10:23

Action was applied by Alyssa Morrison

14.2 **Alyssa Morrison** 30 May 2024 10:23

Aztec to verify

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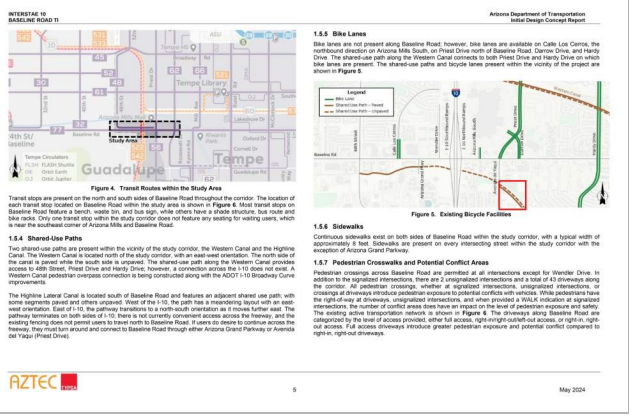
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AZTEC

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May 2024

15 **catherine_hollow@tempe.gov** 24 May 2024 11:31

City of Phoenix has a fiber line that connects them to the ADOT fiber at I-10.

15.1 **B - Consultant/Designer to Evaluate** 30 May 2024 10:24

Action was applied by Alyssa Morrison

15.2 **Alyssa Morrison** 30 May 2024 10:25

Jacobs to verify.

15.3 **Alyssa Morrison** 26 Jun 2024 10:18

Per CRM - COT to provide IGA and Jacobs to contact ADOT Utilities

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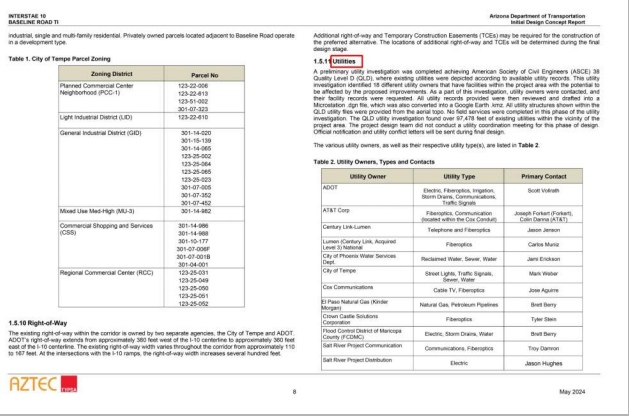
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industrial, single and multi-family residential. Privately owned parcels located adjacent to Baseline Road operate in a development type.

Table 1. City of Tempe Parcel Zoning

Zoning District	Parcel No
Planned Commercial Center Neighborhood (PCC-1)	123-22-006 123-22-613 123-51-002 301-07-323
Light Industrial District (LID)	123-22-810
General Industrial District (GID)	301-14-020 301-15-139 301-14-065 123-25-002 123-25-064 123-25-065 123-25-023 301-07-005 301-07-352 301-07-452
Mixed Use Med-High (MU-3)	301-14-982
Commercial Shopping and Services (CSS)	301-14-998 301-14-988 301-10-177 301-07-006F 301-07-001B 301-04-001
Regional Commercial Center (RCC)	123-25-031 123-25-049 123-25-050 123-25-051 123-25-052

1.5.10 Right-of-Way

The existing right-of-way within the corridor is owned by two separate agencies, the City of Tempe and ADOT. ADOT's right-of-way extends from approximately 380 feet west of the I-10 centerline to approximately 360 feet east of the I-10 centerline. The existing right-of-way width varies throughout the corridor from approximately 110 to 167 feet. At the intersections with the I-10 ramps, the right-of-way width increases several hundred feet.

Additional right-of-way and Temporary Construction Easements (TCEs) may be required for the construction of the preferred alternative. The locations of additional right-of-way and TCEs will be determined during the final design stage.

1.5.11 Utilities

A preliminary utility investigation was completed achieving American Society of Civil Engineers (ASCE) 38 Quality Level D (QLD), where existing utilities were depicted according to available utility records. This utility investigation identified 18 different utility owners that have facilities within the project area with the potential to be affected by the proposed improvements. As a part of this investigation, utility owners were contacted, and their facility records were requested. All utility records provided were then reviewed and drafted into a Microstation .dgn file, which was also converted into a Google Earth .kmz. All utility structures shown within the QLD utility files were provided from the aerial topo. No field services were completed in this phase of the utility investigation. The QLD utility investigation found over 97,478 feet of existing utilities within the vicinity of the project area. The project design team did not conduct a utility coordination meeting for this phase of design. Official notification and utility conflict letters will be sent during final design.

The various utility owners, as well as their respective utility type(s), are listed in **Table 2**.

Table 2. Utility Owners, Types and Contacts

Utility Owner	Utility Type	Primary Contact
ADOT	Electric, Fiberoptics, Irrigation, Storm Drains, Communications, Traffic Signals	Scott Vollrath
AT&T Corp	Fiberoptics, Communication (located within the Cox Conduit)	Joseph Forkert (Forkert), Colin Dainna (AT&T)
Century Link-Lumen	Telephone and Fiberoptics	Jason Jenson
Lumen (Century Link, Acquired Level 3) National	Fiberoptics	Carlos Muniz
City of Phoenix Water Services Dept.	Reclaimed Water, Sewer, Water	Jami Erickson
City of Tempe	Street Lights, Traffic Signals, Sewer, Water	Mark Weber
Cox Communications	Cable TV, Fiberoptics	Jose Aguirre
El Paso Natural Gas (Kinder Morgan)	Natural Gas, Petroleum Pipelines	Brett Berry
Crown Castle Solutions Corporation	Fiberoptics	Tyler Stein
Flood Control District of Maricopa County (FCDMC)	Electric, Storm Drains, Water	Brett Berry
Salt River Project Communication	Communications, Fiberoptics	Troy Damron
Salt River Project Distribution	Electric	Jason Hughes

AZTEC

8

May 2024

16 **catherine_hollow@tempe.gov** 24 May 2024 12:59

early 2025

16.1 **A - Will Comply** 30 May 2024 10:25

Action was applied by Alyssa Morrison

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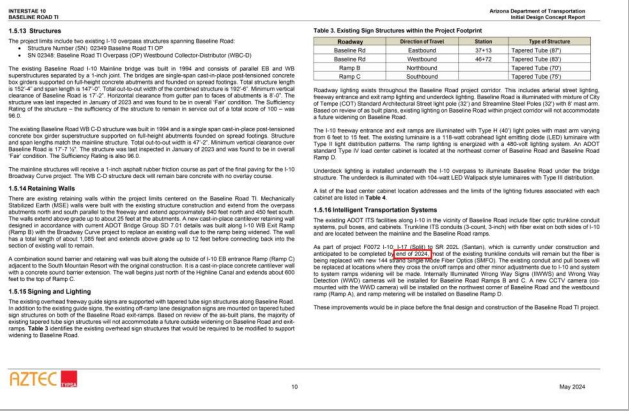
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1.5.13 Structures

The project limits include two existing I-10 overpass structures spanning Baseline Road:

- Structure Number (SN): 02349 Baseline Road TI OP
- SN 02346: Baseline Road TI Overpass (OP) Westbound Collector-Distributor (WBC-D)

The existing Baseline Road I-10 Mainline bridge was built in 1994 and consists of parallel EB and WB superstructures separated by a 1-inch joint. The bridges are single-span cast-in-place post-tensioned concrete box girders supported on full-height concrete abutments and founded on spread footings. Total structure length is 152'-4" and span length is 147'-0". Total out-to-out width of the combined structure is 192'-0". Minimum vertical clearance of Baseline Road is 17'-2". Horizontal clearance from gutter pan to faces of abutments is 8'-0". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating of the structure – the sufficiency of the structure to remain in service out of a total score of 100 – was 96.0.

The existing Baseline Road WB C-D structure was built in 1994 and is a single span cast-in-place post-tensioned concrete box girder superstructure supported on full-height abutments founded on spread footings. Structure and span length match the mainline structures. Total out-to-out width is 47'-2". Minimum vertical clearance over Baseline Road is 17'-7 ½". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating is also 96.0.

The mainline structures will receive a 1-inch asphalt rubber friction course as part of the final paving for the I-10 Broadway Curve project. The WB C-D structure deck will remain bare concrete with no overlay course.

1.5.14 Retaining Walls

There are existing retaining walls within the project limits centered on the Baseline Road TI. Mechanically Stabilized Earth (MSE) walls were built with the existing structure construction and extend from the overpass abutments to the north and south to provide roadway embankment support. Additionally, both the NE and SE quadrants of the TI have MSE walls that extend along the ramps and Baseline Road. A retaining wall in place of a bridge over the Canal was designed in accordance with current ADOT Bridge Group SD 7.01 detailed. It was built along I-10 WB Exit Ramp (Ramp B) with the Broadway Curve project to replace an existing wall due to the ramp being widened. The wall has a total length of about 1,085 feet and extends above grade up to 12 feet before connecting back into the section of existing wall to remain.

A combination sound barrier and retaining wall was built along the outside of I-10 EB entrance Ramp (Ramp C) adjacent to the South Mountain Resort with the original construction. It is a cast-in-place concrete cantilever wall with a concrete sound barrier extension. The wall begins just north of the Highline Canal and extends about 600 feet to the top of Ramp C.

1.5.15 Signing and Lighting

The existing overhead freeway guide signs are supported with tapered tube sign structures along Baseline Road. In addition to the existing guide signs, the existing off-ramp lane designation signs are mounted on tapered tubed sign structures on both of the Baseline Road exit-ramps. Based on review of the as-built plans, the majority of existing tapered tube sign structures will not accommodate a future outside widening on Baseline Road and exit-ramps. **Table 3** identifies the existing overhead sign structures that would be required to be modified to support widening to Baseline Road.

Table 3. Existing Sign Structures within the Project Footprint

Roadway	Direction of Travel	Station	Type of Structure
Baseline Rd	Eastbound	37+13	Tapered Tube (ET)
Baseline Rd	Westbound	46+72	Tapered Tube (ET)
Ramp B	Northbound		Tapered Tube (TT)
Ramp C	Southbound		Tapered Tube (TT)

Roadway lighting exists throughout the Baseline Road project corridor. This includes arterial street lighting, freeway entrance and exit ramp lighting and underdeck lighting. Baseline Road is illuminated with mixture of City of Tempe (COT) Standard Architectural Street light pole (32') and Streamline Steel Poles (32') with 8' mast arm. Based on review of as built plans, existing lighting on Baseline Road within project corridor will not accommodate a future widening on Baseline Road.

The I-10 freeway entrance and exit ramps are illuminated with Type H (40') light poles with mast arm varying from 6 feet to 15 feet. The existing luminaire is a 118-watt cobrahead light emitting diode (LED) luminaire with Type II light distribution patterns. The ramp lighting is energized with a 480-volt lighting system. An ADOT standard Type IV load center cabinet is located at the northeast corner of Baseline Road and Baseline Road Ramp D.

Underdeck lighting is installed underneath the I-10 overpass to illuminate Baseline Road under the bridge structure. The underdeck is illuminated with 104-watt LED Wallpack style luminaires with Type III distribution.

A list of the load center cabinet location addresses and the limits of the lighting fixtures associated with each cabinet are listed in **Table 4**.

1.5.16 Intelligent Transportation Systems

The existing ADOT ITS facilities along I-10 in the vicinity of Baseline Road include fiber optic trunkline conduit systems, pull boxes, and cabinets. Trunkline ITS conduits (3-count, 3-inch) with fiber exist on both sides of I-10 and are located between the mainline and the Baseline Road ramps.

As part of project F0072 1-10_L12 (Gila) to SR 202L (Santan), which is currently under construction and anticipated to be completed by end of 2024, most of the existing trunkline conduits will remain but the fiber is being replaced with new 144 count Single Mode Fiber Optics (SMFO). The existing conduit and pull boxes will be replaced at locations where they cross the on/off ramps and other minor adjustments due to I-10 and system to system ramps widening will be made. Internally Illuminated Wrong Way Signs (IIWWS) and Wrong Way Detection (WWD) cameras will be installed for Baseline Road Ramps B and C. A new CCTV camera (co-mounted with the WWD camera) will be installed on the northwest corner of Baseline Road and the westbound ramp (Ramp A), and ramp metering will be installed on Baseline Ramp D.

These improvements would be in place before the final design and construction of the Baseline Road TI project.

AZTEC

10

May 2024

17 catherine_hollow@tempe.gov 24 May 2024 13:36

Sections 1.5.13 through 1,.5.23 has a lot of superfolous information that has nothing to do with the project?

17.1 D - Design Team Recommends No Further Action Taken 30 May 2024 10:27

Action was applied by Alyssa Morrison

17.2 Alyssa Morrison 30 May 2024 10:28

Information is standard for ADOT DCRs

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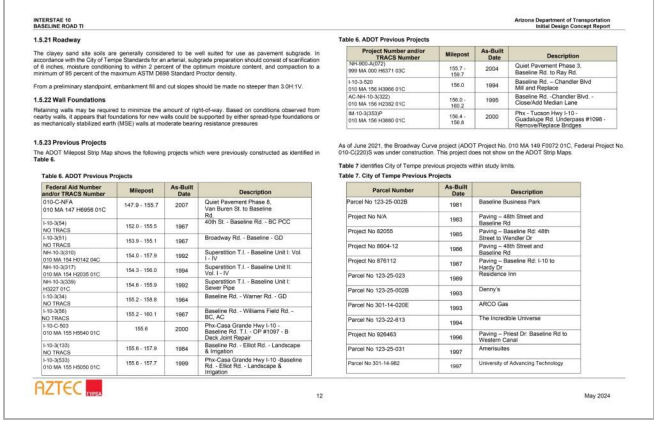

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1.5.21 Roadway

The clayey sand site soils are generally considered to be well suited for use as pavement subgrade. In accordance with the City of Tempe Standards for an arterial, subgrade preparation should consist of scarification of 6 inches, moisture conditioning to within 2 percent of the optimum moisture content, and compaction to a minimum of 95 percent of the maximum ASTM D698 Standard Proctor density.

From a preliminary standpoint, embankment fill and cut slopes should be made no steeper than 3.0H:1V.

1.5.22 Wall Foundations

Retaining walls may be required to minimize the amount of right-of-way. Based on conditions observed from nearby walls, it appears that foundations for new walls could be supported by either spread-type foundations or as mechanically stabilized earth (MSE) walls at moderate bearing resistance pressures

1.5.23 Previous Projects

The ADOT Milepost Strip Map shows the following projects which were previously constructed as identified in **Table 6.**

Table 6. ADOT Previous Projects

Federal Aid Number and/or TRACS Number	Milepost	As-Built Date	Description
010-C-047A 010 MA 147 H6956 01C	147.9 - 155.7	2007	Quiet Pavement Phase 8, Van Buren St. to Baseline Rd.
I-10-3(54) NO TRACS	152.0 - 155.5	1967	40th St. - Baseline Rd. - BC PCC
I-10-3(51) NO TRACS	153.9 - 155.1	1967	Broadway Rd. - Baseline - GD
NH-10-3(316) 010 MA 154 H5142 04C	154.0 - 157.9	1992	Superstition T.I. - Baseline Unit I: Vol. I - IV
NH-10-3(317) 010 MA 154 H5035 01C	154.3 - 156.0	1994	Superstition T.I. - Baseline Unit II: Vol. I - IV
NH-10-3(339) H5027 01C	154.6 - 155.9	1992	Superstition T.I. - Baseline Unit I: Sewer Pipe
I-10-3(34) NO TRACS	155.2 - 158.8	1964	Baseline Rd. - Warner Rd. - GD
I-10-3(56) NO TRACS	155.2 - 160.1	1967	Baseline Rd. - Williams Field Rd. - BC, AC
I-10-C-503 010 MA 155 H5540 01C	155.6	2000	Phx-Casa Grande Hwy I-10 - Baseline Rd: T.I. - OP #1097 - B Deck Joint Repair
I-10-3(133) NO TRACS	155.6 - 157.9	1984	Landscape Rd. - Elliot Rd. - Landscape & Irrigation
I-10-3(533) 010 MA 155 H5050 01C	155.6 - 157.7	1999	Phx-Casa Grande Hwy I-10 -Baseline Rd. - Elliot Rd. - Landscape & Irrigation

Table 6. ADOT Previous Projects

Project Number and/or TRACS Number	Milepost	As-Built Date	Description
NH-900-A(072) 999 MA 000 H6371 03C	155.7 - 159.7	2004	Quiet Pavement Phase 3, Baseline Rd. to Ray Rd.
I-10-3-520 010 MA 156 H3966 01C	156.0	1994	Baseline Rd. – Chandler Blvd Mill and Replace
AC-NH 10-3(322) 010 MA 156 H2382 01C	156.0 - 160.2	1995	Baseline Rd. -Chandler Blvd. - Close/Add Median Lane
IM-10-3(203)P 010 MA 156 H3660 01C	156.4 - 156.8	2000	Phx – Tucson Hwy I-10 - Guadalupe Rd. Underpass #1098 - Remove/Replace Bridges

As of June 2021, the Broadway Curve project (ADOT Project No. 010 MA 149 F0072 01C, Federal Project No. 010-C(220)S was under construction. This project does not show on the ADOT Strip Maps.

Table 7 identifies City of Tempe previous projects within study limits.

Table 7. City of Tempe Previous Projects

Parcel Number	As-Built Date	Description
Parcel No 123-25-002B	1981	Baseline Business Park
Project No N/A	1983	Paving – 48th Street and Baseline Rd
Project No 82055	1985	Paving – Baseline Rd: 48th Street to Wendler Dr
Project No 8604-12	1986	Paving – 48th Street and Baseline Rd
Project No 876112	1987	Paving – Baseline Rd: I-10 to Hardy Dr
Parcel No 123-25-023	1989	Residence Inn
Parcel No 123-25-002B	1993	Denny's
Parcel No 301-14-020E	1993	ARCO Gas
Parcel No 123-22-613	1994	The Incredible Universe
Project No 926463	1996	Paving – Priest Dr: Baseline Rd to Western Canal
Parcel No 123-25-031	1997	Americrates
Parcel No 301-14-982	1997	University of Advancing Technology

AZTEC

12

May 2024

18 catherine_hollow@tempe.gov 24 May 2024 13:41

There is no mention of the City's CCTV cameras (at Hardy, Priest, I-10 and Calle Los Cerros) , the adaptive signals, video detection, EVP, etc.

18.1 A - Will Comply 30 May 2024 10:26

Action was applied by Alyssa Morrison

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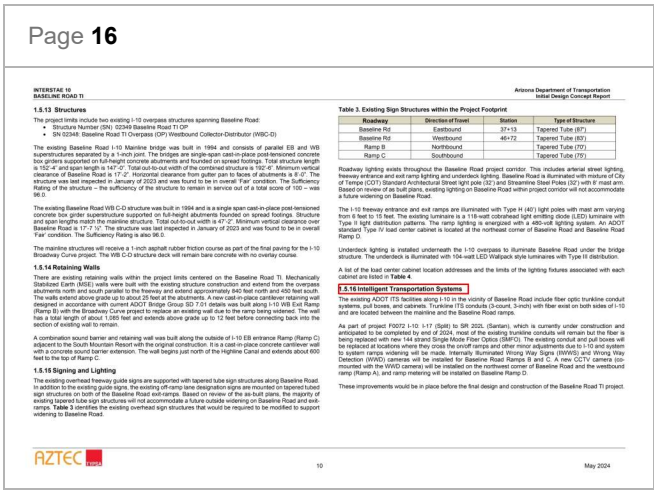

INTERSTAE 10
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1.5.13 Structures

The project limits include two existing I-10 overpass structures spanning Baseline Road:

- Structure Number (SN): 02349 Baseline Road TI OP
- SN 02348: Baseline Road TI Overpass (OP) Westbound Collector-Distributor (WBC-D)

The existing Baseline Road I-10 Mainline bridge was built in 1994 and consists of parallel EB and WB superstructures separated by a 1-inch joint. The bridges are single-span cast-in-place post-tensioned concrete box girders supported on full-height concrete abutments and founded on spread footings. Total structure length is 152'-4" and span length is 147'-0". Total out-to-out width of the combined structure is 192'-6". Minimum vertical clearance of Baseline Road is 17'-2". Horizontal clearance from gutter pan to faces of abutments is 8'-0". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating of the structure – the sufficiency of the structure to remain in service out of a total score of 100 – was 96.0.

The existing Baseline Road WB C-D structure was built in 1994 and is a single span cast-in-place post-tensioned concrete box girder superstructure supported on full-height abutments founded on spread footings. Structure and span lengths match the mainline structure. Total out-to-out width is 47'-2". Minimum vertical clearance over Baseline Road is 17'-2 ½". The structure was last inspected in January of 2023 and was found to be in overall 'Fair' condition. The Sufficiency Rating is also 96.0.

The mainline structures will receive a 1-inch asphalt rubber friction course as part of the final paving for the I-10 Broadway Curve project. The WB C-D structure deck will remain bare concrete with no overlay course.

1.5.14 Retaining Walls

There are existing retaining walls within the project limits centered on the Baseline Road TI. Mechanically Stabilized Earth (MSE) walls were built with the existing structure construction and extend from the overpass abutments north and south parallel to the freeway and extend approximately 640 feet north and 450 feet south. The walls extend above grade up to about 25 feet at the abutments. A new cast-in-place cantilever retaining wall designed in accordance with current ADOT Bridge Group SD 7.01 details was built along I-10 WB Exit Ramp (Ramp B) with the Broadway Curve project to replace an existing wall due to the ramp being widened. The wall has a total length of about 1,085 feet and extends above grade up to 12 feet before connecting back into the section of existing wall to remain.

A combination sound barrier and retaining wall was built along the outside of I-10 EB entrance Ramp (Ramp C) adjacent to the South Mountain Resort with the original construction. It is a cast-in-place concrete cantilever wall with a concrete sound barrier extension. The wall begins just north of the Highline Canal and extends about 600 feet to the top of Ramp C.

1.5.15 Signing and Lighting

The existing overhead freeway guide signs are supported with tapered tube sign structures along Baseline Road. In addition to the existing guide signs, the existing off-ramp lane designation signs are mounted on tapered tubed sign structures on both of the Baseline Road exit-ramps. Based on review of the as-built plans, the majority of existing tapered tube sign structures will not accommodate a future outside widening on Baseline Road and exit-ramps. **Table 3** identifies the existing overhead sign structures that would be required to be modified to support widening to Baseline Road.

Table 3. Existing Sign Structures within the Project Footprint

Roadway	Direction of Travel	Station	Type of Structure
Baseline Rd	Eastbound	37+13	Tapered Tube (87')
Baseline Rd	Westbound	46+72	Tapered Tube (83')
Ramp B	Northbound	-	Tapered Tube (75')
Ramp C	Southbound		Tapered Tube (75')

Roadway lighting exists throughout the Baseline Road project corridor. This includes arterial street lighting, freeway entrance and exit ramp lighting and underdeck lighting. Baseline Road is illuminated with mixture of City of Tempe (COT) Standard Architectural Street light pole (32') and Streamline Steel Poles (32') with 8' mast arm. Based on review of as built plans, existing lighting on Baseline Road within project corridor will not accommodate a future widening on Baseline Road.

The I-10 freeway entrance and exit ramps are illuminated with Type H (40') light poles with mast arm varying from 6 feet to 15 feet. The existing luminaire is a 118-watt cobra-head light emitting diode (LED) luminaire with Type II light distribution patterns. The ramp lighting is energized with a 480-volt lighting system. An ADOT standard Type IV load center cabinet is located at the northeast corner of Baseline Road and Baseline Road Ramp D.

Underdeck lighting is installed underneath the I-10 overpass to illuminate Baseline Road under the bridge structure. The underdeck is illuminated with 104-watt LED Wallpack style luminaires with Type III distribution.

A list of the load center cabinet location addresses and the limits of the lighting fixtures associated with each cabinet are listed in **Table 4**.

1.5.16 Intelligent Transportation Systems

The existing ADOT ITS facilities along I-10 in the vicinity of Baseline Road include fiber optic trunkline conduit systems, pull boxes, and cabinets. Trunkline ITS conduits (3-count, 3-inch) with fiber exist on both sides of I-10 and are located between the mainline and the Baseline Road ramps.

As part of project F0072 1-10 1-17 (Split) to SR 202L (Santan), which is currently under construction and anticipated to be completed by end of 2024, most of the existing trunkline conduits will remain but the fiber is being replaced with new 144 strand Single Mode Fiber Optics (SMFO). The existing conduit and pull boxes will be replaced at locations where they cross the on/off ramps and other minor adjustments due to I-10 and system to system ramps widening will be made. Internally Illuminated Wrong Way Signs (IWWS) and Wrong Way Detection (WWD) cameras will be installed for Baseline Road Ramps B and C. A new CCTV camera (co-mounted with the WWD camera) will be installed on the northwest corner of Baseline Road and the westbound ramp (Ramp A), and ramp metering will be installed on Baseline Ramp D.

These improvements would be in place before the final design and construction of the Baseline Road TI project.

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10

May 2024

19 catherine_hollow@tempe.gov 24 May 2024 13:45

A discussion of crash rates might be appropriate here given the high volumes on Baseline Rd.

19.1 A - Will Comply 30 May 2024 10:29

Action was applied by Alyssa Morrison

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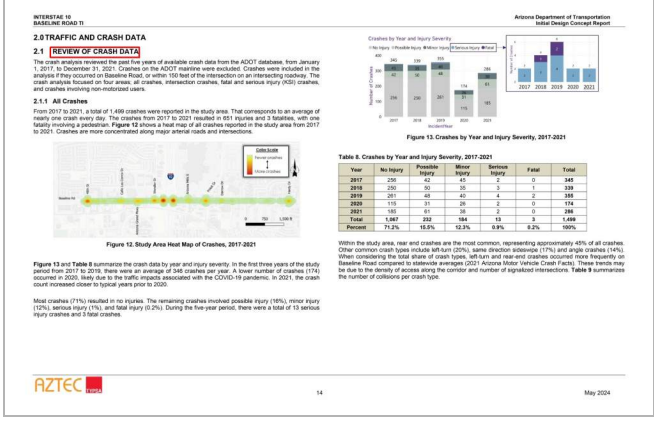

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2.0 TRAFFIC AND CRASH DATA

2.1 REVIEW OF CRASH DATA

The crash analysis reviewed the past five years of available crash data from the ADOT database, from January 1, 2017, to December 31, 2021. Crashes on the ADOT mainline were excluded. Crashes were included in the analysis if they occurred on Baseline Road, or within 150 feet of the intersection on an intersecting roadway. The crash analysis focused on four areas: all crashes, intersection crashes, fatal and serious injury (K/SI) crashes, and crashes involving non-motorized users.

2.1.1 All Crashes

From 2017 to 2021, a total of 1,499 crashes were reported in the study area. That corresponds to an average of nearly one crash every day. The crashes from 2017 to 2021 resulted in 651 injuries and 3 fatalities, with one fatality involving a pedestrian. **Figure 12** shows a heat map of all crashes reported in the study area from 2017 to 2021. Crashes are more concentrated along major arterial roads and intersections.

Figure 12. Study Area Heat Map of Crashes, 2017-2021

Figure 13 and **Table 8** summarize the crash data by year and injury severity. In the first three years of the study period from 2017 to 2019, there were an average of 346 crashes per year. A lower number of crashes (174) occurred in 2020, likely due to the traffic impacts associated with the COVID-19 pandemic. In 2021, the crash count increased closer to typical years prior to 2020.

Most crashes (71%) resulted in no injuries. The remaining crashes involved possible injury (16%), minor injury (12%), serious injury (1%), and fatal injury (0.2%). During the five-year period, there were a total of 13 serious injury crashes and 3 fatal crashes.

Figure 13. Crashes by Year and Injury Severity, 2017-2021

Table 8. Crashes by Year and Injury Severity, 2017-2021

Year	No Injury	Possible Injury	Minor Injury	Serious Injury	Fatal	Total
2017	256	42	45	2	0	345
2018	250	50	35	3	1	339
2019	261	48	40	4	2	355
2020	115	31	28	2	0	174
2021	185	61	56	2	0	286
Total	1,067	232	184	13	3	1,499
Percent	71.2%	15.5%	12.3%	0.9%	0.2%	100%

Within the study area, rear end crashes are the most common, representing approximately 45% of all crashes. Other common crash types include left-turn (20%), same direction sideswipe (17%) and angle crashes (14%). When considering the total share of crash types, left-turn and rear-end crashes occurred more frequently on Baseline Road compared to statewide averages (2021 Arizona Motor Vehicle Crash Facts). These trends may be due to the density of access along the corridor and number of signalized intersections. **Table 9** summarizes the number of collisions per crash type.

AZTEC

14

May 2024

20 catherine_hollow@tempe.gov 24 May 2024 13:46

What is included in the alternatives to specifically address these key points?

20.1 D - Design Team Recommends No Further Action Taken 30 May 2024 10:36

Action was applied by Alyssa Morrison

20.2 Alyssa Morrison 30 May 2024 10:39

Evaluation matrix includes vehicular safety, active transportation safety, access control, and traffic interchange conflict points with Safety as a primary evaluation criteria.

20.3 Alyssa Morrison 26 Jun 2024 10:25

Will expand the alternative section to correlate improved safety to key takeaways.

20.4 A - Will Comply 26 Jun 2024 10:25

Action was applied by Alyssa Morrison

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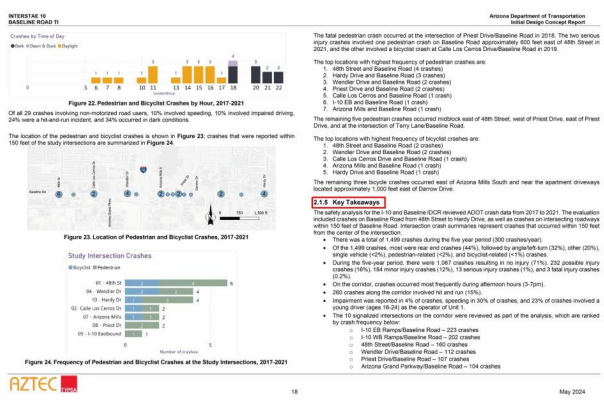

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21 catherine_hollow@tempe.gov 24 May 2024 13:47

55,000 or 60,000 - please be consistent

21.1 A - Will Comply 30 May 2024 10:39

Action was applied by Alyssa Morrison

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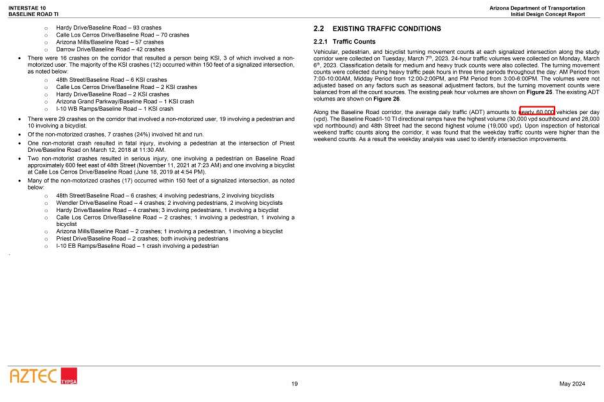

22 catherine_hollow@tempe.gov 24 May 2024 13:55

Not sure this information is very useful - it's not about speed

22.1 D - Design Team Recommends No Further Action Taken 30 May 2024 10:39

Action was applied by Alyssa Morrison

22.2 Alyssa Morrison 30 May 2024 10:41

Agreed, Average Speed is just one of the considerations.

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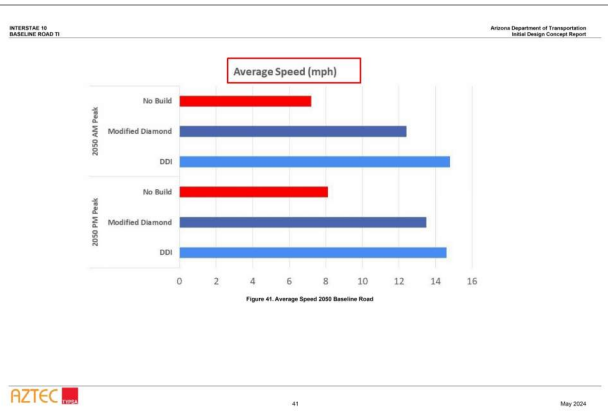

23 catherine_hollow@tempe.gov 24 May 2024 13:57

I think the impacts to bikes and peds is not adequately explained.

23.1 A - Will Comply 30 May 2024 10:46

Action was applied by Alyssa Morrison

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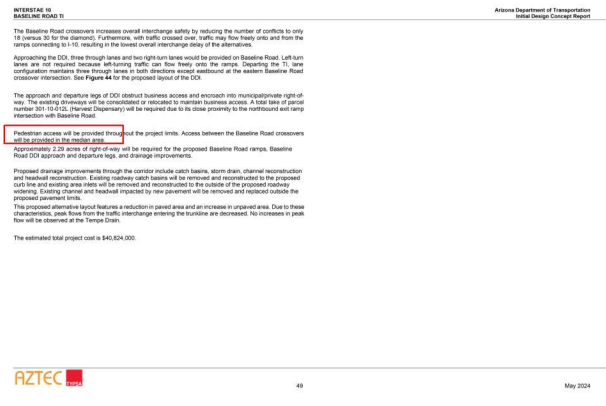

24 catherine_hollow@tempe.gov 24 May 2024 13:58

Well-defined roadway widths? Is this different with the project? I don't think I aaw any signage mentioned.

24.1 A - Will Comply 30 May 2024 10:49

Action was applied by Alyssa Morrison

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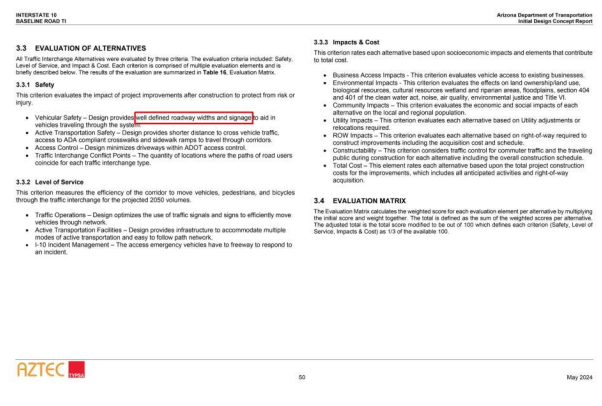

25 catherine_hollow@tempe.gov 24 May 2024 13:59

Bikes?

25.1 A - Will Comply 30 May 2024 10:50

Action was applied by Alyssa Morrison

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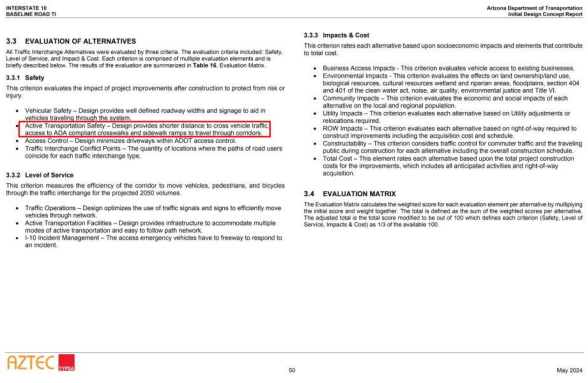
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3.3 EVALUATION OF ALTERNATIVES

All Traffic Interchange Alternatives were evaluated by three criteria. The evaluation criteria included: Safety, Level of Service, and Impact & Cost. Each criterion is comprised of multiple evaluation elements and is briefly described below. The results of the evaluation are summarized in **Table 16.** Evaluation Matrix.

3.3.1 Safety

This criterion evaluates the impact of project improvements after construction to protect from risk or injury.

- Vehicular Safety – Design provides well defined roadway widths and signage to aid in vehicles traveling through the system.
- Active Transportation Safety – Design provides shorter distance to cross vehicle traffic, access to ADA compliant crosswalks and sidewalk ramps to travel through corridors.
- Access Control – Design minimizes driveways within ADOT access control.
- Traffic Interchange Conflict Points – The quantity of locations where the paths of road users coincide for each traffic interchange type.

3.3.2 Level of Service

This criterion measures the efficiency of the corridor to move vehicles, pedestrians, and bicycles through the traffic interchange for the projected 2050 volumes.

- Traffic Operations – Design optimizes the use of traffic signals and signs to efficiently move vehicles through network.
- Active Transportation Facilities – Design provides infrastructure to accommodate multiple modes of active transportation and easy to follow path network.
- I-10 Incident Management – The access emergency vehicles have to freeway to respond to an incident.

3.3.3 Impacts & Cost

This criterion rates each alternative based upon socioeconomic impacts and elements that contribute to total cost.

- Business Access Impacts - This criterion evaluates vehicle access to existing businesses.
- Environmental Impacts - This criterion evaluates the effects on land ownership/land use, biological resources, cultural resources wetland and riparian areas, floodplains, section 404 and 401 of the clean water act, noise, air quality, environmental justice and Title VI.
- Community Impacts – This criterion evaluates the economic and social impacts of each alternative on the local and regional population.
- Utility Impacts – This criterion evaluates each alternative based on Utility adjustments or relocations required.
- ROW Impacts – This criterion evaluates each alternative based on right-of-way required to construct improvements including the acquisition cost and schedule.
- Constructability – This criterion considers traffic control for commuter traffic and the traveling public during construction for each alternative including the overall construction schedule.
- Total Cost – This element rates each alternative based upon the total project construction costs for the improvements, which includes all anticipated activities and right-of-way acquisition.

3.4 EVALUATION MATRIX

The Evaluation Matrix calculates the weighted score for each evaluation element per alternative by multiplying the initial score and weight together. The total is defined as the sum of the weighted scores per alternative. The adjusted total is the total score modified to be out of 100 which defines each criterion (Safety, Level of Service, Impacts & Cost) as 1/3 of the available 100.

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50

May 2024

26 catherine_hollow@tempe.gov 24 May 2024 14:00

Should evaluate access to business for ALL transportation system users.

26.1 A - Will Comply 30 May 2024 10:51

Action was applied by Alyssa Morrison

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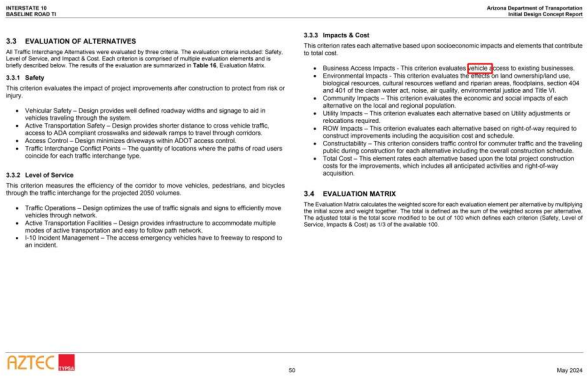
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3.3 EVALUATION OF ALTERNATIVES

All Traffic Interchange Alternatives were evaluated by three criteria. The evaluation criteria included: Safety, Level of Service, and Impact & Cost. Each criterion is comprised of multiple evaluation elements and is briefly described below. The results of the evaluation are summarized in **Table 16.** Evaluation Matrix.

3.3.1 Safety

This criterion evaluates the impact of project improvements after construction to protect from risk or injury.

- Vehicular Safety – Design provides well defined roadway widths and signage to aid in vehicles traveling through the system.
- Active Transportation Safety – Design provides shorter distance to cross vehicle traffic, access to ADA compliant crosswalks and sidewalk ramps to travel through corridors.
- Access Control – Design minimizes driveways within ADOT access control.
- Traffic Interchange Conflict Points – The quantity of locations where the paths of road users coincide for each traffic interchange type.

3.3.2 Level of Service

This criterion measures the efficiency of the corridor to move vehicles, pedestrians, and bicycles through the traffic interchange for the projected 2050 volumes.

- Traffic Operations – Design optimizes the use of traffic signals and signs to efficiently move vehicles through network.
- Active Transportation Facilities – Design provides infrastructure to accommodate multiple modes of active transportation and easy to follow path network.
- I-10 Incident Management – The access emergency vehicles have to freeway to respond to an incident.

3.3.3 Impacts & Cost

This criterion rates each alternative based upon socioeconomic impacts and elements that contribute to total cost.

- Business Access Impacts - This criterion evaluates vehicle access to existing businesses.
- Environmental Impacts - This criterion evaluates the effects on land ownership/land use, biological resources, cultural resources wetland and riparian areas, floodplains, section 404 and 401 of the clean water act, noise, air quality, environmental justice and Title VI.
- Community Impacts – This criterion evaluates the economic and social impacts of each alternative on the local and regional population.
- Utility Impacts – This criterion evaluates each alternative based on Utility adjustments or relocations required.
- ROW Impacts – This criterion evaluates each alternative based on right-of-way required to construct improvements including the acquisition cost and schedule.
- Constructability – This criterion considers traffic control for commuter traffic and the traveling public during construction for each alternative including the overall construction schedule.
- Total Cost – This element rates each alternative based upon the total project construction costs for the improvements, which includes all anticipated activities and right-of-way acquisition.

3.4 EVALUATION MATRIX

The Evaluation Matrix calculates the weighted score for each evaluation element per alternative by multiplying the initial score and weight together. The total is defined as the sum of the weighted scores per alternative. The adjusted total is the total score modified to be out of 100 which defines each criterion (Safety, Level of Service, Impacts & Cost) as 1/3 of the available 100.

AZTEC

50

May 2024

27 catherine_hollow@tempe.gov 24 May 2024 14:02

Why is this done?

27.1 D - Design Team Recommends No Further Action Taken 30 May 2024 10:51

Action was applied by Alyssa Morrison

27.2 Alyssa Morrison 30 May 2024 10:52

The adjusted total score is used to balance the three major criteria classification evenly.

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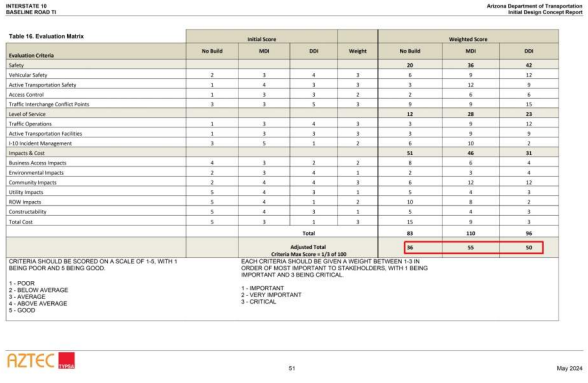
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Table 16. Evaluation Matrix

Evaluation Criteria	Initial Score			Weight	Weighted Score		
	No Build	MDI	DDI		No Build	MDI	DDI
Safety					20	36	42
Vehicular Safety	2	3	4	3	6	9	12
Active Transportation Safety	1	4	3	3	3	12	9
Access Control	1	3	3	2	2	6	6
Traffic Interchange Conflict Points	3	3	5	3	9	9	15
Level of Service					12	28	23
Traffic Operations	1	3	4	3	3	9	12
Active Transportation Facilities	1	3	3	3	3	9	9
I-10 Incident Management	3	5	1	2	6	10	2
Impacts & Cost					51	46	31
Business Access Impacts	4	3	2	2	8	6	4
Environmental Impacts	2	3	4	1	2	3	4
Community Impacts	2	4	4	3	6	12	12
Utility Impacts	5	4	3	1	5	4	3
ROW Impacts	5	4	1	2	10	8	2
Constructability	5	4	3	1	5	4	3
Total Cost	5	3	1	3	15	9	3
		Total			83	110	96
		Adjusted Total Criteria Max Score = 1/3 of 100			96	55	50

CRITERIA SHOULD BE SCORED ON A SCALE OF 1-5, WITH 1 BEING POOR AND 5 BEING GOOD.

1 - POOR
2 - BELOW AVERAGE
3 - AVERAGE
4 - ABOVE AVERAGE
5 - GOOD

EACH CRITERIA SHOULD BE GIVEN A WEIGHT BETWEEN 1-3 IN ORDER OF MOST IMPORTANT TO STAKEHOLDERS, WITH 1 BEING IMPORTANT AND 3 BEING CRITICAL.

1 - IMPORTANT
2 - VERY IMPORTANT
3 - CRITICAL

AZTEC

51

May 2024

28 catherine_hollow@tempe.gov 24 May 2024 14:04

11th edition, December 2023

28.1 A - Will Comply 30 May 2024 10:52

Action was applied by Alyssa Morrison

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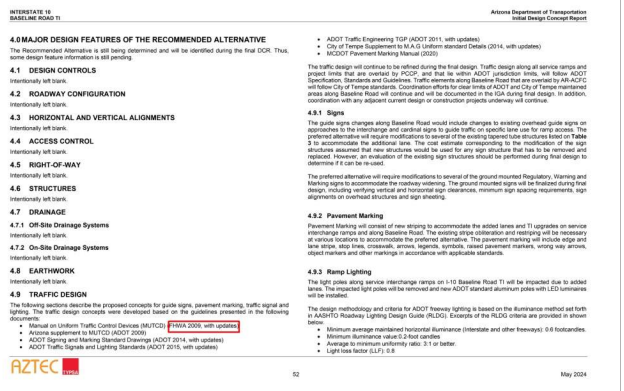

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4.0 MAJOR DESIGN FEATURES OF THE RECOMMENDED ALTERNATIVE

The Recommended Alternative is still being determined and will be identified during the final DCR. Thus, some design feature information is still pending.

4.1 DESIGN CONTROLS

Intentionally left blank.

4.2 ROADWAY CONFIGURATION

Intentionally left blank.

4.3 HORIZONTAL AND VERTICAL ALIGNMENTS

Intentionally left blank.

4.4 ACCESS CONTROL

Intentionally left blank.

4.5 RIGHT-OF-WAY

Intentionally left blank.

4.6 STRUCTURES

Intentionally left blank.

4.7 DRAINAGE

4.7.1 Off-Site Drainage Systems

Intentionally left blank.

4.7.2 On-Site Drainage Systems

Intentionally left blank.

4.8 EARTHWORK

Intentionally left blank.

4.9 TRAFFIC DESIGN

The following sections describe the proposed concepts for guide signs, pavement marking, traffic signal and lighting. The traffic design concepts were developed based on the guidelines presented in the following documents:

- Manual on Uniform Traffic Control Devices (MUTCD) (FHWA 2009, with updates)
- Arizona supplement to MUTCD (ADOT 2009)
- ADOT Signing and Marking Standard Drawings (ADOT 2014, with updates)
- ADOT Traffic Signals and Lighting Standards (ADOT 2015, with updates)
- ADOT Traffic Engineering TGP (ADOT 2011, with updates)
- City of Tempe Supplement to M.A.G Uniform standard Details (2014, with updates)
- MCDOT Pavement Marking Manual (2020)

The traffic design will continue to be refined during the final design. Traffic design along all service ramps and project limits that are overlaid by PCCP, and that lie within ADOT jurisdiction limits, will follow ADOT Specification, Standards and Guidelines. Traffic elements along Baseline Road that are overlaid by AR-ACFC will follow City of Tempe standards. Coordination efforts for clear limits of ADOT and City of Tempe maintained areas along Baseline Road will continue and will be documented in the IGA during final design. In addition, coordination with any adjacent current design or construction projects underway will continue.

4.9.1 Signs

The guide signs changes along Baseline Road would include changes to existing overhead guide signs on approaches to the interchange and cardinal signs to guide traffic on specific lane use for ramp access. The preferred alternative will require modifications to several of the existing tapered tube structures listed on **Table 3** to accommodate the additional lane. The cost estimate corresponding to the modification of the sign structures assumed that new structures would be used for any sign structure that has to be removed and replaced. However, an evaluation of the existing sign structures should be performed during final design to determine if it can be re-used.

The preferred alternative will require modifications to several of the ground mounted Regulatory, Warning and Marking signs to accommodate the roadway widening. The ground mounted signs will be finalized during final design, including verifying vertical and horizontal sign clearances, minimum sign spacing requirements, sign alignments on overhead structures and sign sheeting.

4.9.2 Pavement Marking

Pavement Marking will consist of new striping to accommodate the added lanes and TI upgrades on service interchange ramps and along Baseline Road. The existing stripe obliteration and restriping will be necessary at various locations to accommodate the preferred alternative. The pavement marking will include edge and lane stripe, stop lines, crosswalk, arrows, legends, symbols, raised pavement markers, wrong way arrows, object markers and other markings in accordance with applicable standards.

4.9.3 Ramp Lighting

The light poles along service interchange ramps on I-10 Baseline Road TI will be impacted due to added lanes. The impacted light poles will be removed and new ADOT standard aluminum poles with LED luminaries will be installed.

The design methodology and criteria for ADOT freeway lighting is based on the illuminance method set forth in AASHTO Roadway Lighting Design Guide (RLDG). Excerpts of the RLDG criteria are provided in shown below:

- Minimum average maintained horizontal Illuminance (Interstate and other freeways): 0.6 footcandles.
- Minimum illuminance value:0.2-foot candles
- Average to minimum uniformity ratio: 3:1 or better.
- Light loss factor (LLF): 0.8

AZTEC

52

May 2024

29 catherine_hollow@tempe.gov 24 May 2024 14:05

Will existing IGAs be modified?

29.1 Alyssa Morrison 6 Jun 2024 13:19

Agree to modify/add IGA as need in final design

29.2 A - Will Comply 6 Jun 2024 13:19

Action was applied by Alyssa Morrison

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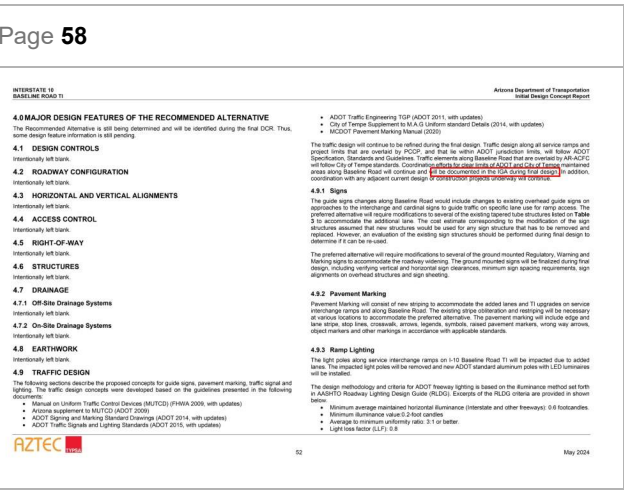

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4.0 MAJOR DESIGN FEATURES OF THE RECOMMENDED ALTERNATIVE

The Recommended Alternative is still being determined and will be identified during the final DCR. Thus, some design feature information is still pending.

4.1 DESIGN CONTROLS

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4.2 ROADWAY CONFIGURATION

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4.3 HORIZONTAL AND VERTICAL ALIGNMENTS

Intentionally left blank.

4.4 ACCESS CONTROL

Intentionally left blank.

4.5 RIGHT-OF-WAY

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4.6 STRUCTURES

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4.7 DRAINAGE

4.7.1 Off-Site Drainage Systems

Intentionally left blank.

4.7.2 On-Site Drainage Systems

Intentionally left blank.

4.8 EARTHWORK

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4.9 TRAFFIC DESIGN

The following sections describe the proposed concepts for guide signs, pavement marking, traffic signal and lighting. The traffic design concepts were developed based on the guidelines presented in the following documents:

- Manual on Uniform Traffic Control Devices (MUTCD) (FHWA 2009, with updates)
- Arizona supplement to MUTCD (ADOT 2009)
- ADOT Signing and Marking Standard Drawings (ADOT 2014, with updates)
- ADOT Traffic Signals and Lighting Standards (ADOT 2015, with updates)
- ADOT Traffic Engineering TGP (ADOT 2011, with updates)
- City of Tempe Supplement to M.A.G Uniform standard Details (2014, with updates)
- MCDOT Pavement Marking Manual (2020)

The traffic design will continue to be refined during the final design. Traffic design along all service ramps and project limits that are overlaid by PCCP, and that lie within ADOT jurisdiction limits, will follow ADOT Specification, Standards and Guidelines. Traffic elements along Baseline Road that are overlaid by AR-ACFC will follow City of Tempe standards. Coordination efforts for clear limits of ADOT and City of Tempe maintained areas along Baseline Road will continue and will be documented in the IGA during final design. In addition, coordination with any adjacent current design or construction projects underway will continue.

4.9.1 Signs

The guide signs changes along Baseline Road would include changes to existing overhead guide signs on approaches to the interchange and cardinal signs to guide traffic on specific lane use for ramp access. The preferred alternative will require modifications to several of the existing tapered tube structures listed on **Table 3** to accommodate the additional lane. The cost estimate corresponding to the modification of the sign structures assumed that new structures would be used for any sign structure that has to be removed and replaced. However, an evaluation of the existing sign structures should be performed during final design to determine if it can be re-used.

The preferred alternative will require modifications to several of the ground mounted Regulatory, Warning and Marking signs to accommodate the roadway widening. The ground mounted signs will be finalized during final design, including verifying vertical and horizontal sign clearances, minimum sign spacing requirements, sign alignments on overhead structures and sign sheeting.

4.9.2 Pavement Marking

Pavement Marking will consist of new striping to accommodate the added lanes and TI upgrades on service interchange ramps and along Baseline Road. The existing stripe obliteration and restriping will be necessary at various locations to accommodate the preferred alternative. The pavement marking will include edge and lane stripe, stop lines, crosswalk, arrows, legends, symbols, raised pavement markers, wrong way arrows, object markers and other markings in accordance with applicable standards.

4.9.3 Ramp Lighting

The light poles along service interchange ramps on I-10 Baseline Road TI will be impacted due to added lanes. The impacted light poles will be removed and new ADOT standard aluminum poles with LED luminaries will be installed.

The design methodology and criteria for ADOT freeway lighting is based on the illuminance method set forth in AASHTO Roadway Lighting Design Guide (RLDG). Excerpts of the RLDG criteria are provided in shown below:

- Minimum average maintained horizontal Illuminance (Interstate and other freeways): 0.6 footcandles.
- Minimum illuminance value:0.2-foot candles
- Average to minimum uniformity ratio: 3:1 or better.
- Light loss factor (LLF): 0.8

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30 catherine_hollow@tempe.gov 24 May 2024 14:28

Both intersections operate as one with a single controller using adaptive signal control.

30.1 A - Will Comply 30 May 2024 10:15

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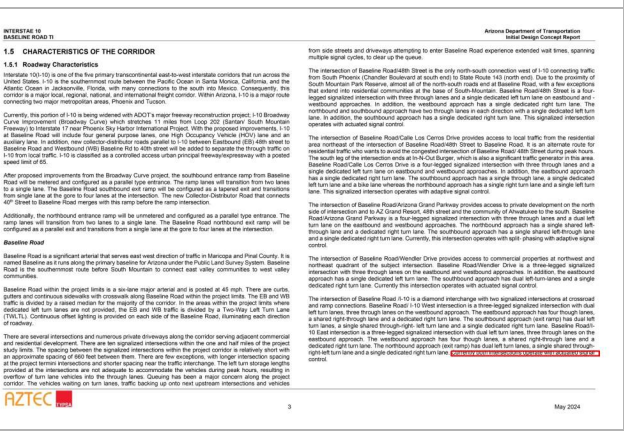

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1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10(I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project: I-10 Broadway Curve Improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to Interstate 17 near Phoenix Sky Harbor International Project. With the proposed improvements, I-10 at Baseline Road will include four general purpose lanes, one High Occupancy Vehicle (HOV) lane and an auxiliary lane. In addition, new collector-distributor roads parallel to I-10 between Eastbound (EB) 48th street to Baseline Road and Westbound (WB) Baseline Rd to 40th street will be added to separate the through traffic on I-10 from local traffic. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp will be configured as a tapered exit and transitions from single lane at the gore to four lanes at the intersection. The new Collector-Distributor Road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant arterial that serves east west direction of traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the southernmost route before South Mountain to connect east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road, illuminating each direction of roadway.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet between them. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicles during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. The vehicles waiting on turn lanes, traffic backing up onto next upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles, to clear up the queue.

The intersection of Baseline Road/48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of South Mountain Park Reserve, almost all of the north-south roads and at Baseline Road, with a few exceptions that extend into residential communities at the base of South Mountain. Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and - westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane. This signalized intersection operates with actuated signal control.

The intersection of Baseline Road/Calle Los Carros Drive provides access to local traffic from the residential area northeast of the intersection of Baseline Road/48th Street to Baseline Road. It is an alternate route for residential traffic who wants to avoid the congested intersection of Baseline Road/ 48th Street during peak hours. Calle Los Carros Drive connects to 48th Street to the west. Baseline Road/Calle Los Carros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a single dedicated left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to private development on the north side of intersection and to AZ Grand Resort, 48th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single through lane, a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to commercial properties at northwest and northeast quadrant of the subject intersection. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road /I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four through lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Baseline Road/ I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the eastbound approach. The westbound approach has four through lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Protected/permitted phasing is used at all intersections control.

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31 **catherine_hollow@tempe.gov** 24 May 2024 14:29

adaptive signal control

31.1 **A - Will Comply** 30 May 2024 10:18

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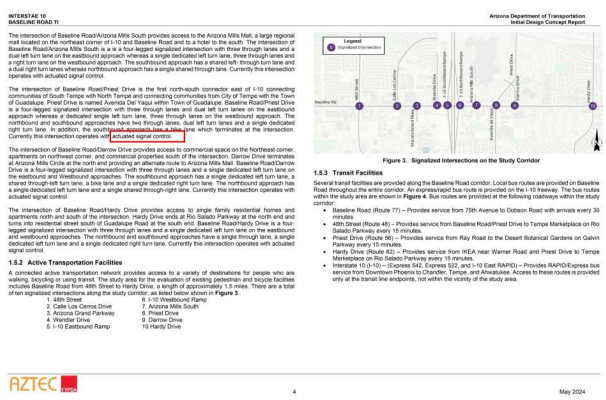
INTERSTATE 10
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The intersection of Baseline Road/Arizona Mills South provides access to the Arizona Mills Mall, a large regional mall located on the northeast corner of I-10 and Baseline Road and to a hotel to the south. The intersection of Baseline Road/Arizona Mills South is a a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound approach whereas a single dedicated left turn lane, three through lanes and a right turn lane on the westbound approach. The southbound approach has a shared left- through turn lane and a dual right turn lanes whereas northbound approach has a single shared through lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Priest Drive is the first north-south connector east of I-10 connecting communities of South Tempe with North Tempe and connecting communities from City of Tempe with the Town of Guadalupe. Priest Drive is named Avenida Del Yaqui within Town of Guadalupe. Baseline Road/Priest Drive is a four-legged signalized intersection with three through lanes and dual left turn lanes on the eastbound approach whereas a dedicated single left turn lane, three through lanes on the westbound approach. The northbound and southbound approaches have two through lanes, dual left turn lanes and a single dedicated right turn lane. In addition, the southbound approach has a bike lane which terminates at the intersection. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Darrow Drive provides access to commercial space on the Northeast corner, apartments on northwest corner, and commercial properties south of the intersection. Darrow Drive terminates at Arizona Mills Circle at the north end providing an alternate route to Arizona Mills Mall. Baseline Road/Darrow Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and Westbound approaches. The southbound approach has a single dedicated left turn lane, a shared through-left turn lane, a bike lane and a single dedicated right turn lane. The northbound approach has a single dedicated left turn lane and a single shared through-right lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Hardy Drive provides access to single family residential homes and apartments north and south of the intersection. Hardy Drive ends at Rio Salado Parkway at the north end and turns into residential street south of Guadalupe Road at the south end. Baseline Road/Hardy Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and westbound approaches. The northbound and southbound approaches have a single through lane, a single dedicated left turn lane and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

1.5.2 Active Transportation Facilities

A connected active transportation network provides access to a variety of destinations for people who are walking, bicycling or using transit. The study area for the evaluation of existing pedestrian and bicycle facilities includes Baseline Road from 48th Street to Hardy Drive, a length of approximately 1.5 miles. There are a total of ten signalized intersections along the study corridor, as listed below shown in **Figure 3**.

1. 48th Street
2. Calle Los Cerros Drive
3. Arizona Grand Parkway
4. Wendler Drive
5. I-10 Eastbound Ramp
6. I-10 Westbound Ramp
7. Arizona Mills South
8. Priest Drive
9. Darrow Drive
10. Hardy Drive

Figure 3. Signalized Intersections on the Study Corridor

1.5.3 Transit Facilities

Several transit facilities are provided along the Baseline Road corridor. Local bus routes are provided on Baseline Road throughout the entire corridor. An express/rapid bus route is provided on the I-10 freeway. The bus routes within the study area are shown in **Figure 4**. Bus routes are provided at the following roadways within the study corridor:

- Baseline Road (Route 77) – Provides service from 75th Avenue to Dobson Road with arrivals every 30 minutes.
- 48th Street (Route 48) – Provides service from Baseline Road/Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Priest Drive (Route 56) – Provides service from Ray Road to the Desert Botanical Gardens on Galvin Parkway every 15 minutes.
- Hardy Drive (Route 62) – Provides service from IKEA near Warner Road and Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Interstate 10 (I-10) – (Express 542, Express 522, and I-10 East RAPID) – Provides RAPID/Express bus service from Downtown Phoenix to Chandler, Tempe, and Ahwatukee. Access to these routes is provided only at the transit line endpoints, not within the vicinity of the study area.

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32 **catherine_hollow@tempe.gov** 24 May 2024 14:33

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32.1 **A - Will Comply** 30 May 2024 10:18

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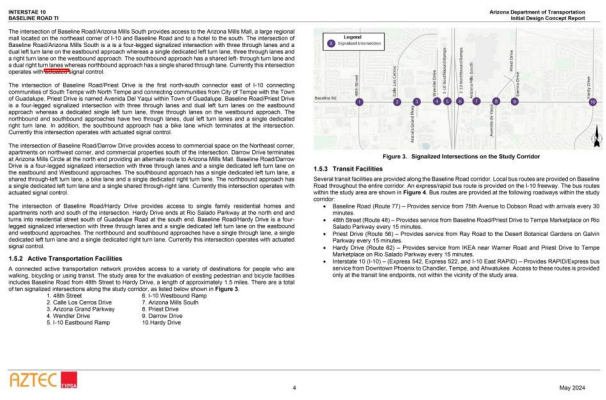
INTERSTATE 10
BASELINE ROAD TI

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The intersection of Baseline Road/Arizona Mills South provides access to the Arizona Mills Mall, a large regional mall located on the northeast corner of I-10 and Baseline Road and to a hotel to the south. The intersection of Baseline Road/Arizona Mills South is a a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound approach whereas a single dedicated left turn lane, three through lanes and a right turn lane on the westbound approach. The southbound approach has a shared left- through turn lane and a dual right turn lanes whereas northbound approach has a single shared through lane. Currently this intersection operates with [redacted] signal control.

The intersection of Baseline Road/Priest Drive is the first north-south connector east of I-10 connecting communities of South Tempe with North Tempe and connecting communities from City of Tempe with the Town of Guadalupe. Priest Drive is named Avenida Del Yaqui within Town of Guadalupe. Baseline Road/Priest Drive is a four-legged signalized intersection with three through lanes and dual left turn lanes on the eastbound approach whereas a dedicated single left turn lane, three through lanes on the westbound approach. The northbound and southbound approaches have two through lanes, dual left turn lanes and a single dedicated right turn lane. In addition, the southbound approach has a bike lane which terminates at the intersection. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Darrow Drive provides access to commercial space on the Northeast corner, apartments on northwest corner, and commercial properties south of the intersection. Darrow Drive terminates at Arizona Mills Circle at the north end providing an alternate route to Arizona Mills Mall. Baseline Road/Darrow Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and Westbound approaches. The southbound approach has a single dedicated left turn lane, a shared through-left turn lane, a bike lane and a single dedicated right turn lane. The northbound approach has a single dedicated left turn lane and a single shared through-right lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road/Hardy Drive provides access to single family residential homes and apartments north and south of the intersection. Hardy Drive ends at Rio Salado Parkway at the north end and turns into residential street south of Guadalupe Road at the south end. Baseline Road/Hardy Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on the eastbound and westbound approaches. The northbound and southbound approaches have a single through lane, a single dedicated left turn lane and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

1.5.2 Active Transportation Facilities

A connected active transportation network provides access to a variety of destinations for people who are walking, bicycling or using transit. The study area for the evaluation of existing pedestrian and bicycle facilities includes Baseline Road from 48th Street to Hardy Drive, a length of approximately 1.5 miles. There are a total of ten signalized intersections along the study corridor, as listed below shown in **Figure 3**.

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2. Calle Los Cerros Drive
3. Arizona Grand Parkway
4. Wendler Drive
5. I-10 Eastbound Ramp
6. I-10 Westbound Ramp
7. Arizona Mills South
8. Priest Drive
9. Darrow Drive
10. Hardy Drive

Figure 3. Signalized Intersections on the Study Corridor

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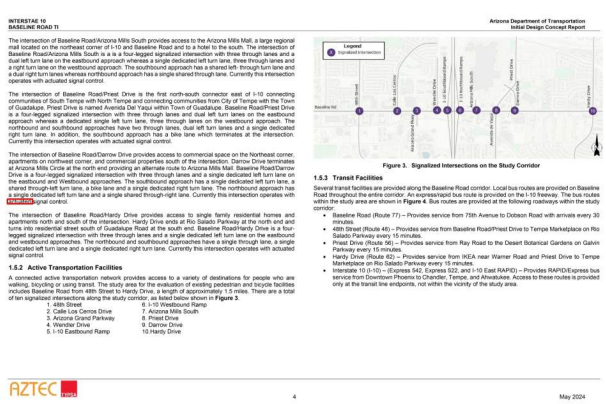
INTERSTATE 10
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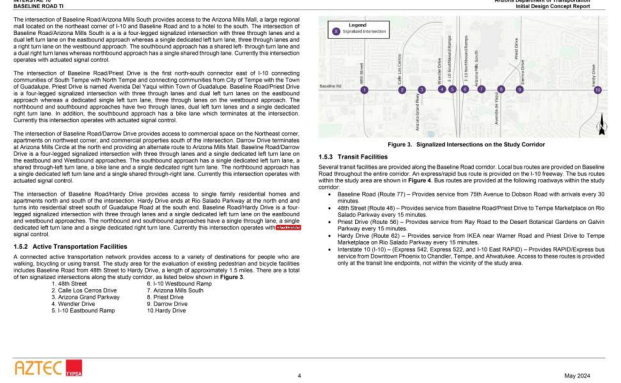

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Several transit facilities are provided along the Baseline Road corridor. Local bus routes are provided on Baseline Road throughout the entire corridor. An express/rapid bus route is provided on the I-10 freeway. The bus routes within the study area are shown in **Figure 4**. Bus routes are provided at the following roadways within the study corridor:

- Baseline Road (Route 77) – Provides service from 75th Avenue to Dobson Road with arrivals every 30 minutes.
- 48th Street (Route 48) – Provides service from Baseline Road/Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Priest Drive (Route 56) – Provides service from Ray Road to the Desert Botanical Gardens on Galvin Parkway every 15 minutes.
- Hardy Drive (Route 62) – Provides service from IKEA near Warner Road and Priest Drive to Tempe Marketplace on Rio Salado Parkway every 15 minutes.
- Interstate 10 (I-10) – (Express 542, Express 522, and I-10 East RAPID) – Provides RAPID/Express bus service from Downtown Phoenix to Chandler, Tempe, and Ahwatukee. Access to these routes is provided only at the transit line endpoints, not within the vicinity of the study area.

AZTEC ENGR

4

May 2024

35 **catherine_hollow@tempe.gov** 24 May 2024 14:33

adaptive

35.1 **A - Will Comply** 30 May 2024 10:15

Action was applied by Alyssa Morrison

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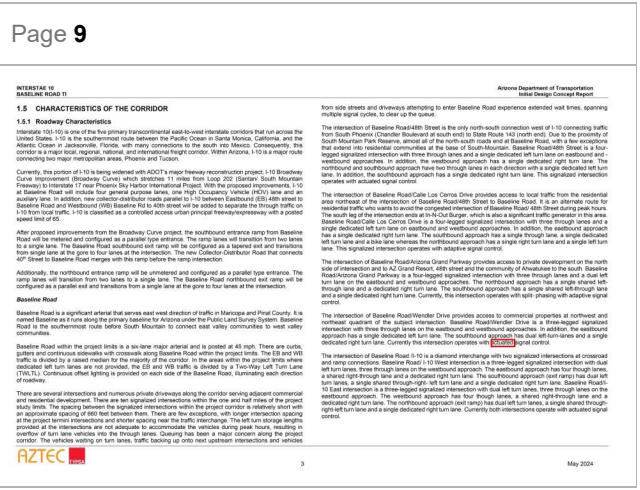

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10(I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project; I-10 Broadway Curve Improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to Interstate 17 near Phoenix Sky Harbor International Project. With the proposed improvements, I-10 at Baseline Road will include four general purpose lanes, one High Occupancy Vehicle (HOV) lane and an auxiliary lane. In addition, new collector-distributor roads parallel to I-10 between Eastbound (EB) 48th street to Baseline Road and Westbound (WB) Baseline Rd to 40th street will be added to separate the through traffic on I-10 from local traffic. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp will be configured as a tapered exit and transitions from single lane at the gore to four lanes at the intersection. The new Collector-Distributor Road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant arterial that serves east west direction of traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the southernmost route before South Mountain to connect east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road, illuminating each direction of roadway.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet between them. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicles during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. The vehicles waiting on turn lanes, traffic backing up onto next upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles, to clear up the queue.

The intersection of Baseline Road/48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of South Mountain Park Reserve, almost all of the north-south roads and at Baseline Road, with a few exceptions that extend into residential communities at the base of South-Mountain. Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and - westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane. This signalized intersection operates with actuated signal control.

The intersection of Baseline Road/Calle Los Cerros Drive provides access to local traffic from the residential area northead of the intersection of Baseline Road/48th Street to Baseline Road. It is an alternate route for residential traffic who wants to avoid the congested intersection of Baseline Road/ 48th Street during peak hours. The south leg of the intersection ends at In-N-Out Burger, which is also a significant traffic generator in this area. Baseline Road/Calle Los Cerros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a single dedicated left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to private development on the north side of intersection and to AZ Grand Resort, 48th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to commercial properties at northwest and northeast quadrant of the subject intersection. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four through lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (exit ramp) has dual left turn lanes, a single shared through-right- left turn lane and a single dedicated right turn lane. Baseline Road/I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The westbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Currently both intersections operate with actuated signal control.

AZTEC ENGR

3

May 2024

36 **catherine_hollow@tempe.gov** 24 May 2024 14:38

a new IGA?

36.1 **Alyssa Morrison** 6 Jun 2024 13:19

Agree to modify/add IGA as need in final design

36.2 **A - Will Comply** 6 Jun 2024 13:19

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

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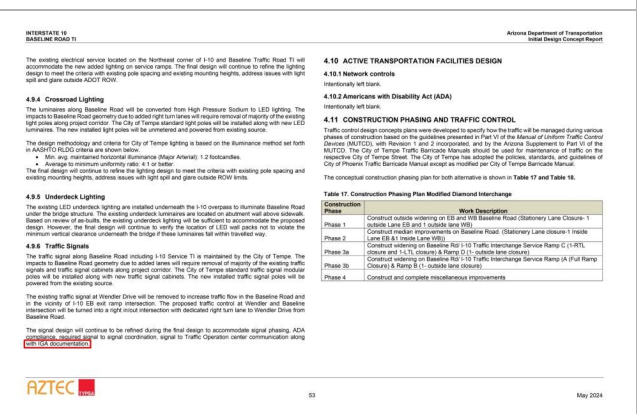

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

The existing electrical service located on the Northeast corner of I-10 and Baseline Traffic Road TI will accommodate the new added lighting on service ramps. The final design will continue to refine the lighting design to meet the criteria with existing pole spacing and existing mounting heights, address issues with light spill and glare outside ADOT ROW.

4.9.4 Crossroad Lighting

The luminaires along Baseline Road will be converted from High Pressure Sodium to LED lighting. The impacts to Baseline Road geometry due to added right turn lanes will require removal of majority of the existing light poles along project corridor. The City of Tempe standard light poles will be installed along with new LED luminaires. The new installed light poles will be unmetered and powered from existing source.

The design methodology and criteria for City of Tempe lighting is based on the illuminance method set forth in AASHTO RLDG criteria are shown below.

- Min. avg. maintained horizontal illuminance (Major Arterial): 1.2 footcandles.
- Average to minimum uniformity ratio: 4:1 or better.

The final design will continue to refine the lighting design to meet the criteria with existing pole spacing and existing mounting heights, address issues with light spill and glare outside ROW limits.

4.9.5 Underdeck Lighting

The existing LED underdeck lighting are installed underneath the I-10 overpass to illuminate Baseline Road under the bridge structure. The existing underdeck luminaires are located on abutment wall above sidewalk. Based on review of as-builts, the existing underdeck lighting will be sufficient to accommodate the proposed design. However, the final design will continue to verify the location of LED wall packs not to violate the minimum vertical clearance underneath the bridge if these luminaires fall within travelled way.

4.9.6 Traffic Signals

The traffic signal along Baseline Road including I-10 Service TI is maintained by the City of Tempe. The impacts to Baseline Road geometry due to added lanes will require removal of majority of the existing traffic signals and traffic signal cabinets along project corridor. The City of Tempe standard traffic signal modular poles will be installed along with new traffic signal cabinets. The new installed traffic signal poles will be powered from the existing source.

The existing traffic signal at Wendler Drive will be removed to increase traffic flow in the Baseline Road and in the vicinity of I-10 EB exit ramp intersection. The proposed traffic control at Wendler and Baseline intersection will be turned into a right in/out intersection with dedicated right turn lane to Wendler Drive from Baseline Road.

The signal design will continue to be refined during the final design to accommodate signal phasing, ADA compliance, required signal to signal coordination, signal to Traffic Operation center communication along with ITOA documentation.

4.10 ACTIVE TRANSPORTATION FACILITIES DESIGN

4.10.1 Network controls

Intentionally left blank.

4.10.2 Americans with Disability Act (ADA)

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4.11 CONSTRUCTION PHASING AND TRAFFIC CONTROL

Traffic control design concepts plans were developed to specify how the traffic will be managed during various phases of construction based on the guidelines presented in Part VI of the *Manual of Uniform Traffic Control Devices* (MUTCD), with Revision 1 and 2 incorporated, and by the Arizona Supplement to Part VI of the MUTCD. The City of Tempe Traffic Barricade Manuals should be used for maintenance of traffic on the respective City of Tempe Street. The City of Tempe has adopted the policies, standards, and guidelines of City of Phoenix' Traffic Barricade Manual except as modified per City of Tempe Barricade Manual.

The conceptual construction phasing plan for both alternative is shown in **Table 17 and Table 18.**

Table 17. Construction Phasing Plan Modified Diamond Interchange

Construction Phase	Work Description
Phase 1	Construct outside widening on EB and WB Baseline Road (Stationery Lane Closure- 1 outside Lane EB and 1 outside lane WB)
Phase 2	Construct median improvements on Baseline Road. (Stationery Lane closure-1 Inside Lane EB &1 Inside Lane WB))
Phase 3a	Construct widening on Baseline Rd/ I-10 Traffic Interchange Service Ramp C (1-RTL closure and 1-LTL closure) & Ramp D (1- outside lane closure)
Phase 3b	Construct widening on Baseline Rd/ I-10 Traffic Interchange Service Ramp (A (Full Ramp Closure) & Ramp B (1- outside lane closure)
Phase 4	Construct and complete miscellaneous improvements

AZTEC ENGR

53

May 2024

37 catherine_hollow@tempe.gov 24 May 2024 14:41

Pedestrian access, transit service and bicycle access will need to be specifically addressed during design of the temporary traffic control plan.

37.1 A - Will Comply 30 May 2024 10:55

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

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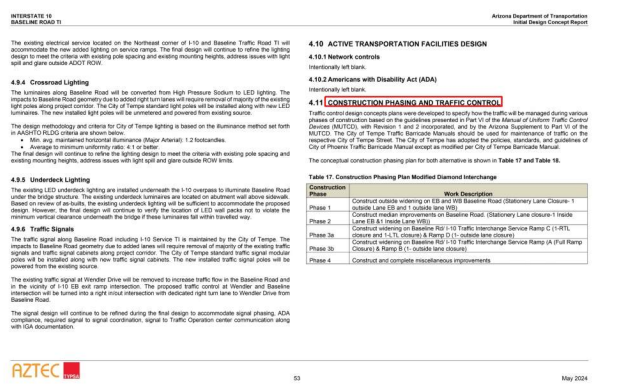

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

The existing electrical service located on the Northeast corner of I-10 and Baseline Traffic Road TI will accommodate the new added lighting on service ramps. The final design will continue to refine the lighting design to meet the criteria with existing pole spacing and existing mounting heights, address issues with light spill and glare outside ADOT ROW.

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The existing traffic signal at Wendler Drive will be removed to increase traffic flow in the Baseline Road and in the vicinity of I-10 EB exit ramp intersection. The proposed traffic control at Wendler and Baseline intersection will be turned into a right in/out intersection with dedicated right turn lane to Wendler Drive from Baseline Road.

The signal design will continue to be refined during the final design to accommodate signal phasing, ADA compliance, required signal to signal coordination, signal to Traffic Operation center communication along with IGA documentation.

4.10 ACTIVE TRANSPORTATION FACILITIES DESIGN

4.10.1 Network controls

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4.10.2 Americans with Disability Act (ADA)

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Phase 4	Construct and complete miscellaneous improvements

AZTEC

53

May 2024

38 catherine_hollow@tempe.gov 24 May 2024 14:43

Green infrastructure and water harvesting features need to be applied to the concepts.

38.1 A - Will Comply 30 May 2024 13:08

Action was applied by Alyssa Morrison

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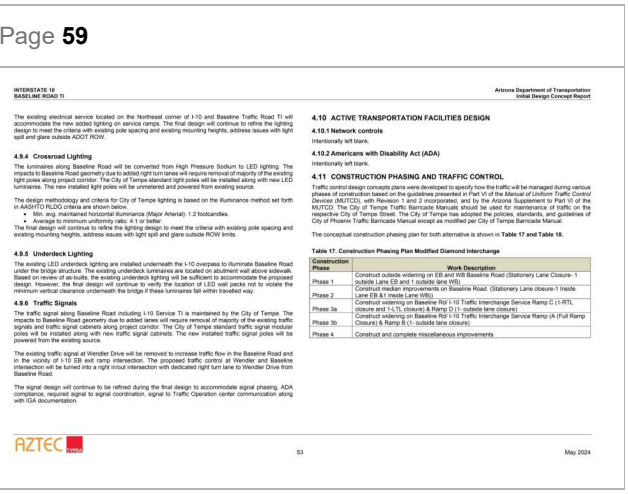

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
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4.10 ACTIVE TRANSPORTATION FACILITIES DESIGN

4.10.1 Network controls

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4.10.2 Americans with Disability Act (ADA)

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4.11 CONSTRUCTION PHASING AND TRAFFIC CONTROL

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Phase 4	Construct and complete miscellaneous improvements

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May 2024

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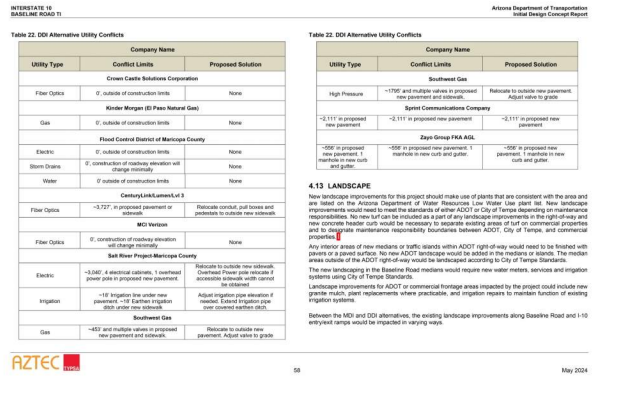

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

Table 22. DDI Alternative Utility Conflicts

Utility Type	Conflict Limits	Proposed Solution
Company Name		
Crown Castle Solutions Corporation		
Fiber Optics	0', outside of construction limits	None
Kinder Morgan (El Paso Natural Gas)		
Gas	0', outside of construction limits	None
Flood Control District of Maricopa County		
Electric	0', outside of construction limits	None
Storm Drains	0', construction of roadway elevation will change minimally	None
Water	0' outside of construction limits	None
CenturyLink/LumenLvl 3		
Fiber Optics	~3,727', in proposed pavement or sidewalk	Relocate conduit, pull boxes and pedestals to outside new sidewalk
MCI Verizon		
Fiber Optics	0', construction of roadway elevation will change minimally	None
Salt River Project-Maricopa County		
Electric	~3,040', 4 electrical cabinets, 1 overhead power pole in proposed new pavement.	Relocate to outside new sidewalk. Overhead Power pole relocate if accessible sidewalk width cannot be obtained
Irrigation	~10' Irrigation line under new pavement. ~10' Earthen irrigation ditch under new sidewalk	Adjust irrigation pipe elevation if needed. Extend Irrigation pipe over covered earthen ditch.
Southwest Gas		
Gas	~453' and multiple valves in proposed new pavement and sidewalk.	Relocate to outside new pavement. Adjust valve to grade

Table 22. DDI Alternative Utility Conflicts

Utility Type	Conflict Limits	Proposed Solution
Company Name		
Southwest Gas		
High Pressure	~1795' and multiple valves in proposed new pavement and sidewalk.	Relocate to outside new pavement. Adjust valve to grade
Sprint Communications Company		
~2,111' in proposed new pavement	~2,111' in proposed new pavement	~2,111' in proposed new pavement
Zayo Group FKA AGL		
~656' in proposed new pavement. 1 manhole in new curb and gutter.	~656' in proposed new pavement. 1 manhole in new curb and gutter.	~656' in proposed new pavement. 1 manhole in new curb and gutter.

4.13 LANDSCAPE

New landscape improvements for this project should make use of plants that are consistent with the area and are listed on the Arizona Department of Water Resources Low Water Use plant list. New landscape improvements would need to meet the standard Water Wise ADOT plant lists depending on maintenance responsibilities. No new turf can be included as a part of any landscape improvements in the right-of-way and new concrete header curb would be necessary to separate existing areas of turf on commercial properties and to designate maintenance responsibility boundaries between ADOT, City of Tempe, and commercial properties.

Any interior areas of new medians or traffic islands within ADOT right-of-way would need to be finished with pavers or a paved surface. No new ADOT landscape would be added in the medians or islands. The median areas outside of the ADOT right-of-way would be landscaped according to City of Tempe Standards.

The new landscaping in the Baseline Road medians would require new water meters, services and irrigation systems using City of Tempe Standards.

Landscape improvements for ADOT or commercial frontage areas impacted by the project could include new granite mulch, plant replacements where practicable, and irrigation repairs to maintain function of existing irrigation systems.

Between the MDI and DDI alternatives, the existing landscape improvements along Baseline Road and I-10 entry/exit ramps would be impacted in varying ways.

AZTEC

58

May 2024

39 **catherine_hollow@tempe.gov** 24 May 2024 14:46

No mention of City's ITS - existing and future. Also, Phx fiber line is not mentioned.

39.1 **B - Consultant/Designer to Evaluate** 30 May 2024 13:10

Action was applied by Alyssa Morrison

39.2 **Alyssa Morrison** 30 May 2024 13:10

Jacobs to verify

F0523_BaselineRd_TI_IDCR.pdf

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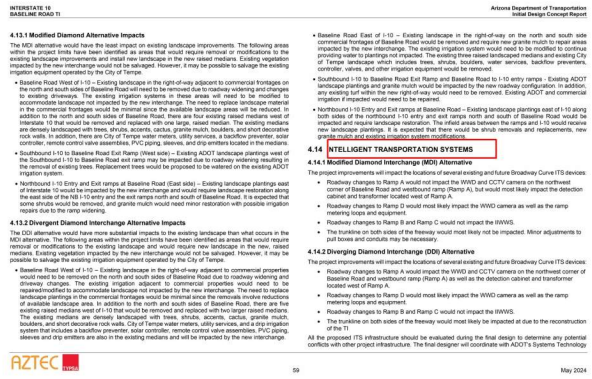

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

4.13.1 Modified Diamond Alternative Impacts

The MDI alternative would have the least impact on existing landscape improvements. The following areas within the project limits have been identified as areas that would require removal or modifications to the existing landscape improvements and install new landscape in the new raised medians. Existing vegetation impacted by the new interchange would not be salvaged. However, it may be possible to salvage the existing irrigation equipment operated by the City of Tempe.

- Baseline Road West of I-10 – Existing landscape in the right-of-way adjacent to commercial frontages on the north and south sides of Baseline Road will need to be removed due to roadway widening and changes to existing driveways. The existing irrigation systems in these areas will need to be modified to accommodate landscape not impacted by the new interchange. The need to replace landscape material in the commercial frontages would be minimal since the available landscape areas will be reduced. In addition to the north and south sides of Baseline Road, there are four existing raised medians west of I-10 that would be removed and replaced with two larger raised medians. The existing medians are densely landscaped with trees, shrubs, accents, cactus, granite mulch, boulders, and short decorative rock walls. In addition, there are City of Tempe water meters, utility services, a backflow preventer, solar controller, remote control valve assemblies, PVC piping, sleeves, and drip emitters located in the medians.
- Southbound I-10 to Baseline Road Exit Ramp (West side) – Existing ADOT landscape plantings west of the Southbound I-10 to Baseline Road exit ramp may be impacted due to roadway widening resulting in the removal of existing trees. Replacement trees would be proposed to be watered on the existing ADOT irrigation system.
- Northbound I-10 Entry and Exit ramps at Baseline Road (East side) – Existing landscape plantings east of Interstate 10 would be impacted by the new interchange and would require landscape restoration along the east side of the NB I-10 entry and the exit ramps north and south of Baseline Road. It is expected that some shrubs would be removed, and granite mulch would need minor restoration with possible irrigation repairs due to the ramp widening.

4.13.2 Divergent Diamond Interchange Alternative Impacts

The DDI alternative would have more substantial impacts to the existing landscape than what occurs in the MDI alternative. The following areas within the project limits have been identified as areas that would require removal or modifications to the existing landscape and would require new landscape in the new, raised medians. Existing vegetation impacted by the new interchange would not be salvaged. However, it may be possible to salvage the existing irrigation equipment operated by the City of Tempe.

- Baseline Road West of I-10 – Existing landscape in the right-of-way adjacent to commercial properties would need to be removed on the north and south sides of Baseline Road due to roadway widening and driveway changes. The existing irrigation adjacent to commercial properties would need to be repaired/modified to accommodate landscape not impacted by the new interchange. The need to replace landscape plantings in the commercial frontages would be minimal since the removals involve reductions of available landscape area. In addition to the north and south sides of Baseline Road, there are five existing raised medians west of I-10 that would be removed and replaced with two larger raised medians. The existing medians are densely landscaped with trees, shrubs, accents, cactus, granite mulch, boulders, and short decorative rock walls. City of Tempe water meters, utility services, and a drip irrigation system that includes a backflow preventer, solar controller, remote control valve assemblies, PVC piping, sleeves and drip emitters are also in the existing medians and will be impacted by the new interchange.
- Baseline Road East of I-10 – Existing landscape in the right-of-way on the north and south side commercial frontages of Baseline Road would be removed and require new granite mulch to repair areas impacted by the new interchange. The existing irrigation system would need to be modified to continue providing water to plantings not impacted. The existing three raised landscaped medians and existing City of Tempe landscape which includes trees, shrubs, boulders, water services, backflow preventers, controller, valves, and other irrigation equipment would be removed.
- Southbound I-10 to Baseline Road Exit Ramp and Baseline Road to I-10 entry ramps – Existing ADOT landscape plantings and granite mulch would be impacted by the new roadway configuration. In addition, any existing turf within the new right-of-way would need to be removed. Existing ADOT and commercial irrigation if impacted would need to be repaired.
- Northbound I-10 Entry and Exit ramps at Baseline Road – Existing landscape plantings east of I-10 along both sides of the northbound I-10 entry and exit ramps north and south of Baseline Road would be impacted and require landscape restoration. The infield areas between the ramps and I-10 would receive new landscape plantings. It is expected that there would be shrub removals and replacements, new granite mulch and existing irrigation system modifications.

4.14 INTELLIGENT TRANSPORTATION SYSTEMS

4.14.1 Modified Diamond Interchange (MDI) Alternative

The project improvements will impact the locations of several existing and future Broadway Curve ITS devices:

- Roadway changes to Ramp A would not impact the WWD and CCTV camera on the northwest corner of Baseline Road and westbound ramp (Ramp A), but would most likely impact the detection cabinet and transformer located west of Ramp A.
- Roadway changes to Ramp D would most likely impact the WWD camera as well as the ramp metering loops and equipment.
- Roadway changes to Ramp B and Ramp C would not impact the IWWS.
- The trunkline on both sides of the freeway would most likely not be impacted. Minor adjustments to pull boxes and conduits may be necessary.

4.14.2 Diverging Diamond Interchange (DDI) Alternative

The project improvements will impact the locations of several existing and future Broadway Curve ITS devices:

- Roadway changes to Ramp A would impact the WWD and CCTV camera on the northwest corner of Baseline Road and westbound ramp (Ramp A) as well as the detection cabinet and transformer located west of Ramp A.
- Roadway changes to Ramp D would most likely impact the WWD camera as well as the ramp metering loops and equipment.
- Roadway changes to Ramp B and Ramp C would not impact the IWWS.
- The trunkline on both sides of the freeway would most likely be impacted at due to the reconstruction of the TI

All the proposed ITS infrastructure should be evaluated during the final design to determine any potential conflicts with other project infrastructure. The final designer will coordinate with ADOT's Systems Technology

AZTEC

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May 2024

40 **catherine_hollow@tempe.gov** 24 May 2024 14:48

Need to included discussion of economic impacts.

40.1 **B - Consultant/Designer to Evaluate** 30 May 2024 13:17

Action was applied by Alyssa Morrison

40.2 **Alyssa Morrison** 26 Jun 2024 10:37

Aztec to check on status of report.

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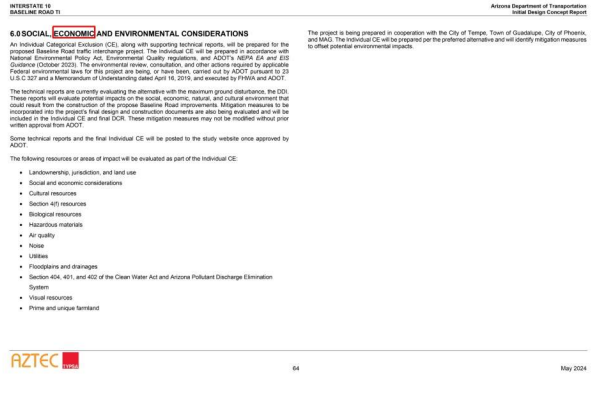

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6.0 SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

An Individual Categorical Exclusion (CE), along with supporting technical reports, will be prepared for the proposed Baseline Road traffic interchange project. The Individual CE will be prepared in accordance with National Environmental Policy Act, Environmental Quality regulations, and ADOT's *NEPA EA and EIS Guidance* (October 2023). The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C.327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT.

The technical reports are currently evaluating the alternative with the maximum ground disturbance, the DDI. These reports will evaluate potential impacts on the social, economic, natural, and cultural environment that could result from the construction of the propose Baseline Road improvements. Mitigation measures to be incorporated into the project's final design and construction documents are also being evaluated and will be included in the Individual CE and final DCR. These mitigation measures may not be modified without prior written approval from ADOT.

Some technical reports and the final Individual CE will be posted to the study website once approved by ADOT.

The following resources or areas of impact will be evaluated as part of the Individual CE:

- Landownership, jurisdiction, and land use
- Social and economic considerations
- Cultural resources
- Section 4(f) resources
- Biological resources
- Hazardous materials
- Air quality
- Noise
- Utilities
- Floodplains and drainages
- Section 404, 401, and 402 of the Clean Water Act and Arizona Pollutant Discharge Elimination System
- Visual resources
- Prime and unique farmland

The project is being prepared in cooperation with the City of Tempe, Town of Guadalupe, City of Phoenix, and MAG. The Individual CE will be prepared per the preferred alternative and will identify mitigation measures to offset potential environmental impacts.

AZTEC

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May 2024

41 Alyssa Morrison 28 May 2024 14:50

Hiren Shah - Verify if its 55,000 or 60,000

41.1 A - Will Comply 30 May 2024 10:04

Action was applied by Alyssa Morrison

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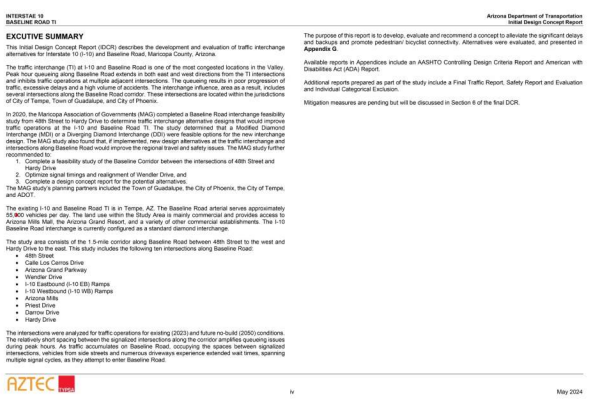
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EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both east and west directions from the TI interchanges and inhibits traffic operations at multiple adjacent intersections. The queueing results in poor progression of traffic, excessive delays and a high volume of accidents. The interchange influence, area as a result, includes several intersections along the Baseline Road corridor. These intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

In 2020, the Maricopa Association of Governments (MAG) completed a Baseline Road interchange feasibility study from 48th Street to Hardy Drive to determine traffic interchange alternative designs that would improve traffic operations at the I-10 and Baseline Road TI. The study determined that a Modified Diamond Interchange (MDI) or a Diverging Diamond Interchange (DDI) were feasible options for the new interchange design. The MAG study also found that, if implemented, new design alternatives at the traffic interchange and intersections along Baseline Road would improve the regional travel and safety issues. The MAG study further recommended to:

1. Complete a feasibility study of the Baseline Corridor between the intersections of 48th Street and Hardy Drive.
2. Optimize signal timings and realignment of Wendler Drive, and
3. Complete a design concept report for the potential alternatives.

The MAG study's planning partners included the Town of Guadalupe, the City of Phoenix, the City of Tempe, and ADOT.

The existing I-10 and Baseline Road TI is in Tempe, AZ. The Baseline Road arterial serves approximately 55,900 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments. The I-10 Baseline Road interchange is currently configured as a standard diamond interchange.

The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 Eastbound (I-10 EB) Ramps
- I-10 Westbound (I-10 WB) Ramps
- Arizona Mills
- Priest Drive
- Darrow Drive
- Hardy Drive

The intersections were analyzed for traffic operations for existing (2023) and future no-build (2050) conditions. The relatively short spacing between the signalized intersections along the corridor amplifies queueing issues during peak hours. As traffic accumulates on Baseline Road, occupying the spaces between signalized intersections, vehicles from side streets and numerous driveways experience extended wait times, spanning multiple signal cycles, as they attempt to enter Baseline Road.

The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and backups and promote pedestrian/ bicyclist connectivity. Alternatives were evaluated, and presented in **Appendix G**.

Available reports in Appendices include an AASHTO Controlling Design Criteria Report and American with Disabilities Act (ADA) Report.

Additional reports prepared as part of the study include a Final Traffic Report, Safety Report and Evaluation and Individual Categorical Exclusion.

Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

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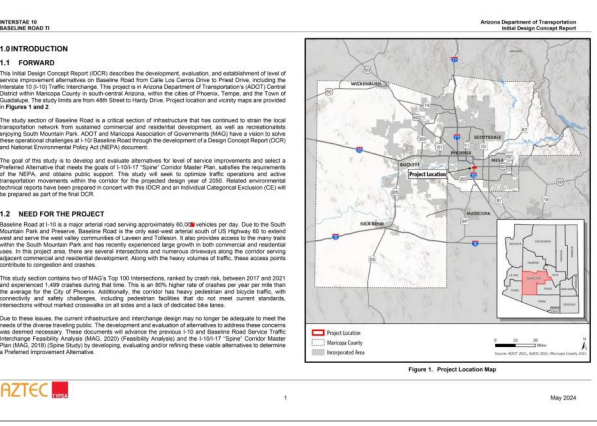
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1.0 INTRODUCTION

1.1 FORWARD

This Initial Design Concept Report (IDCR) describes the development, evaluation, and establishment of level of service improvement alternatives on Baseline Road from Calle Los Cerros Drive to Priest Drive, including the Interstate 10 (I-10) Traffic Interchange. This project is in Arizona Department of Transportation's (ADOT) Central District within Maricopa County in south-central Arizona, within the cities of Phoenix, Tempe, and the Town of Guadalupe. The study limits are from 48th Street to Hardy Drive. Project location and vicinity maps are provided in **Figures 1 and 2**.

The study section of Baseline Road is a critical section of infrastructure that has continued to strain the local transportation network from sustained commercial and residential development, as well as recreationalists enjoying South Mountain Park. ADOT and Maricopa Association of Governments (MAG) have a vision to solve these operational challenges at I-10/ Baseline Road through the development of a Design Concept Report (DCR) and National Environmental Policy Act (NEPA) document.

The goal of this study is to develop and evaluate alternatives for level of service improvements and select a Preferred Alternative that meets the goals of I-10/I-17 "Spine" Corridor Master Plan, satisfies the requirements of the NEPA, and obtains public support. This study will seek to optimize traffic operations and active transportation movements within the corridor for the projected design year of 2050. Related environmental technical reports have been prepared in concert with this IDCR and an Individual Categorical Exclusion (CE) will be prepared as part of the final DCR.

1.2 NEED FOR THE PROJECT

Baseline Road at I-10 is a major arterial road serving approximately 60,000 vehicles per day. Due to the South Mountain Park and Preserve, Baseline Road is the only east-west arterial south of US Highway 60 to extend west and serve the west valley communities of Laveen and Tolleson. It also provides access to the many trails within the South Mountain Park and has recently experienced large growth in both commercial and residential uses. In this project area, there are several intersections and numerous driveways along the corridor serving adjacent commercial and residential development. Along with the heavy volumes of traffic, these access points contribute to congestion and crashes.

This study section contains two of MAG's Top 100 Intersections, ranked by crash risk, between 2017 and 2021 and experienced 1,499 crashes during that time. This is an 80% higher rate of crashes per year per mile than the average for the City of Phoenix. Additionally, the corridor has heavy pedestrian and bicycle traffic, with connectivity and safety challenges, including pedestrian facilities that do not meet current standards, intersections without marked crosswalks on all sides and a lack of dedicated bike lanes.

Due to these issues, the current infrastructure and interchange design may no longer be adequate to meet the needs of the diverse traveling public. The development and evaluation of alternatives to address these concerns was deemed necessary. These documents will advance the previous I-10 and Baseline Road Service Traffic Interchange Feasibility Analysis (MAG, 2020) (Feasibility Analysis) and the I-10/I-17 "Spine" Corridor Master Plan (MAG, 2018) (Spine Study) by developing, evaluating and/or refining these viable alternatives to determine a Preferred Improvement Alternative.

Figure 1. Project Location Map

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May 2024

42 Alyssa Morrison 28 May 2024 14:53

Hiren Shah - Can we have more recent crash data from 2019 to 2023?

42.1 C - ADOT Team to Evaluate 6 Jun 2024 13:10

Action was applied by Alyssa Morrison

42.2 D - Design Team Recommends No Further Action Taken 14 Jun 2024 09:16

Action was applied by Alyssa Morrison

42.3 Alyssa Morrison 14 Jun 2024 09:16

Per CRM discussion

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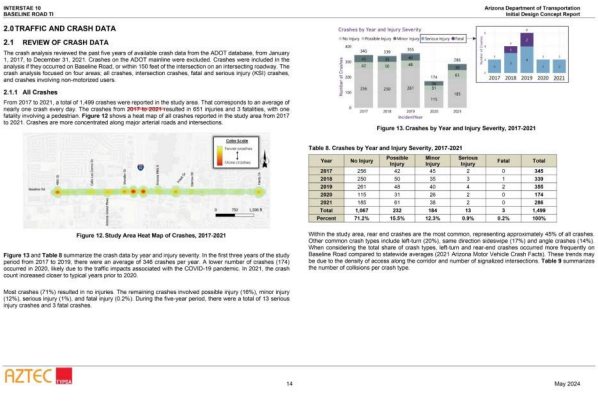
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2.0 TRAFFIC AND CRASH DATA

2.1 REVIEW OF CRASH DATA

The crash analysis reviewed the past five years of available crash data from the ADOT database, from January 1, 2017, to December 31, 2021. Crashes on the ADOT mainline were excluded. Crashes were included in the analysis if they occurred on Baseline Road, or within 150 feet of the intersection on an intersecting roadway. The crash analysis focused on four areas; all crashes, intersection crashes, fatal and serious injury (KSI) crashes, and crashes involving non-motorized users.

2.1.1 All Crashes

From 2017 to 2021, a total of 1,499 crashes were reported in the study area. That corresponds to an average of nearly one crash every day. The crashes from 2017 to 2021 resulted in 851 injuries and 3 fatalities, with one fatality involving a pedestrian. **Figure 12** shows a heat map of all crashes reported in the study area from 2017 to 2021. Crashes are more concentrated along major arterial roads and intersections.

Figure 12. Study Area Heat Map of Crashes, 2017-2021

Figure 13. Crashes by Year and Injury Severity, 2017-2021

Table 8. Crashes by Year and Injury Severity, 2017-2021

Year	No Injury	Possible Injury	Minor Injury	Serious Injury	Fatal	Total
2017	256	42	45	2	0	345
2018	250	50	35	3	1	339
2019	261	48	40	4	2	355
2020	115	31	26	2	0	174
2021	185	61	38	2	0	286
Total	1,067	232	184	13	3	1,499
Percent	71.2%	15.5%	12.3%	0.9%	0.2%	100%

Figure 13 and **Table 8** summarize the crash data by year and injury severity. In the first three years of the study period from 2017 to 2019, there were an average of 346 crashes per year. A lower number of crashes (174) occurred in 2020, likely due to the traffic impacts associated with the COVID-19 pandemic. In 2021, the crash count increased closer to typical years prior to 2020.

Most crashes (71%) resulted in no injuries. The remaining crashes involved possible injury (16%), minor injury (12%), serious injury (1%), and fatal injury (0.2%). During the five-year period, there were a total of 13 serious injury crashes and 3 fatal crashes.

Within the study area, rear end crashes are the most common, representing approximately 45% of all crashes. Other common crash types include left-turn (20%), same direction sideswipe (17%) and angle crashes (14%). When considering the total share of crash types, left-turn and rear-end crashes occurred more frequently on Baseline Road compared to statewide averages (2021 Arizona Motor Vehicle Crash Facts). These trends may be due to the density of access along the corridor and number of signalized intersections. **Table 9** summarizes the number of collisions per crash type.

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14

May 2024

43 Alyssa Morrison 28 May 2024 14:54

Hiren Shah - It appears greatest frequency of crashes occurs between 1PM to 6PM

43.1 A - Will Comply 30 May 2024 10:34

Action was applied by Alyssa Morrison

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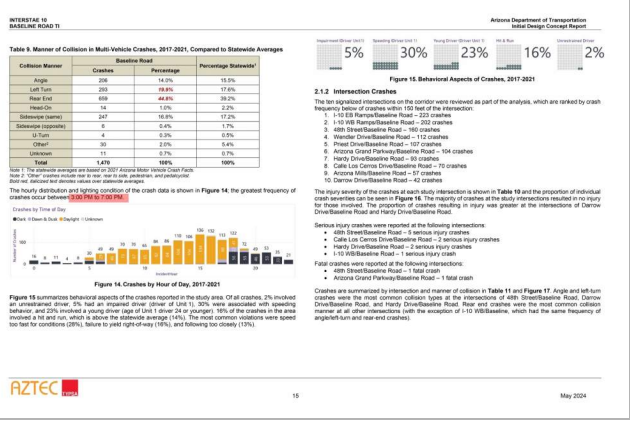

44 Alyssa Morrison 28 May 2024 14:56

Hiren Shah - Page 14 shows 3 fatal but table 10 shows only 2.

44.1 A - Will Comply 30 May 2024 10:34

Action was applied by Alyssa Morrison

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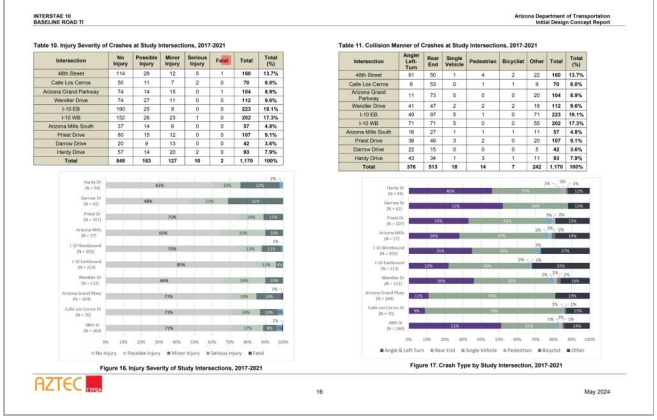

45 Alyssa Morrison 28 May 2024 14:57

Hiren Shah - no queue length

45.1 D - Design Team Recommends No Further Action Taken 30 May 2024 10:43

Action was applied by Alyssa Morrison

45.2 Alyssa Morrison 30 May 2024 10:45

Agreed, The queue lengths shown are to access I-10.

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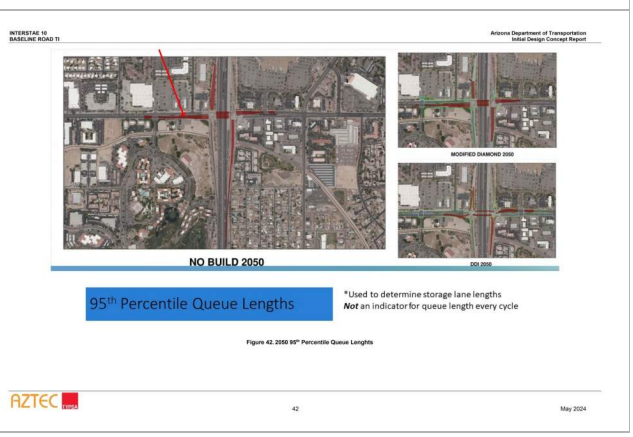

46 Alyssa Morrison 28 May 2024 14:58

Hiren Shah - For ease of construction, can we have 12"PCCP instead of 11" to match ramps section

46.1 B - Consultant/Designer to Evaluate 30 May 2024 13:11

Action was applied by Alyssa Morrison

46.2 Alyssa Morrison 30 May 2024 13:11

Ethos to evaluate.

46.3 A - Will Comply 14 Jun 2024 09:25

Action was applied by Alyssa Morrison

46.4 Alyssa Morrison 17 Jun 2024 09:09

Per CRM discussion

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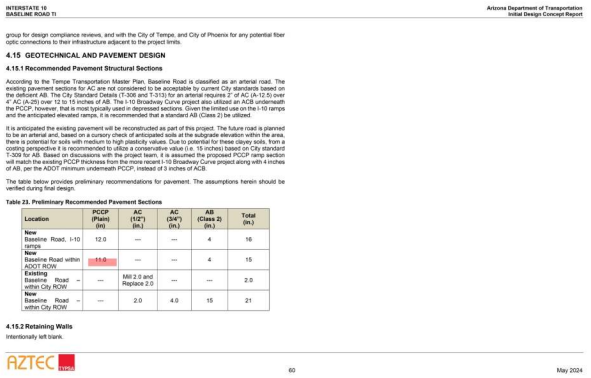

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group for design compliance reviews, and with the City of Tempe, and City of Phoenix for any potential fiber optic connections to their infrastructure adjacent to the project limits.

4.15 GEOTECHNICAL AND PAVEMENT DESIGN

4.15.1 Recommended Pavement Structural Sections

According to the Tempe Transportation Master Plan, Baseline Road is classified as an arterial road. The existing pavement sections for AC are not considered to be acceptable by current City standards based on the deficient AB. The City Standard Details (T-310 and T-313) for an arterial requires 2" of AC (A-12.5) over 4" AC (A-25) over 12 to 15 inches of AB. The I-10 Broadway Curve project also utilized an ACB underneath the PCCP; however, that is most typically used in depressed sections. Given the limited use on the I-10 ramps and the anticipated elevated ramps, it is recommended that a standard AB (Class 2) be utilized.

It is anticipated the existing pavement will be reconstructed as part of this project. The future road is planned to be an arterial and, based on a cursory check of anticipated soils at the subgrade elevation within the area, there is potential for soils with medium to high plasticity values. Due to potential for these clayey soils, from a costing perspective it is recommended to utilize a conservative value (i.e. 15 inches) based on City standard T-309 for AB. Based on discussions with the project team, it is assumed the proposed PCCP ramp section will match the existing PCCP thickness from the more recent I-10 Broadway Curve project along with 4 inches of AB, per the ADOT minimum underneath PCCP, instead of 3 inches of ACB.

The table below provides preliminary recommendations for pavement. The assumptions herein should be verified during final design.

Table 23. Preliminary Recommended Pavement Sections

Location	PCCP (Plain) (in)	AC (1/2") (in.)	AC (3/4") (in.)	AB (Class 2) (in.)	Total (in.)
New Baseline Road, I-10 ramps	12.0	---	---	4	16
New Baseline Road within ADOT ROW	11.0	---	---	4	15
Existing Baseline Road within City ROW	---	Mill 2.0 and Replace 2.0	---	---	2.0
New Baseline Road within City ROW	---	2.0	4.0	15	21

4.15.2 Retaining Walls

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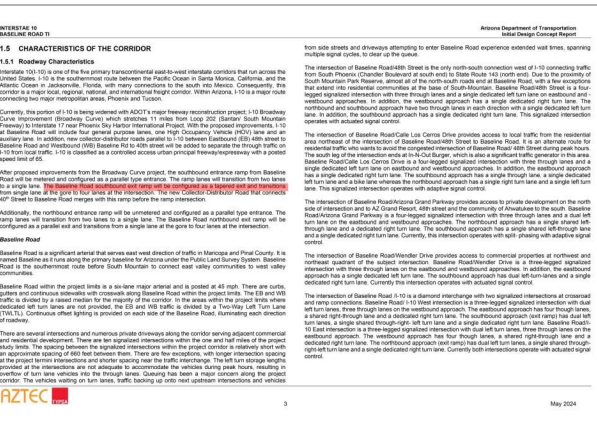

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1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10(I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project: I-10 Broadway Curve Improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to Interstate 17 near Phoenix Sky Harbor International Project. With the proposed improvements, I-10 at Baseline Road will include four general purpose lanes, one High Occupancy Vehicle (HOV) lane and an auxiliary lane. In addition, new collector-distributor roads parallel to I-10 between Eastbound (EB) 48th street to Baseline Road and Westbound (WB) Baseline Rd to 40th street will be added to separate the through traffic on I-10 from local traffic. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp will be configured as a tapered exit and transitions from single lane at the gore to four lanes at the intersection. The new collector-distributor road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant arterial that serves east west direction of traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the southernmost route before South Mountain to connect east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road, illuminating each direction of roadway.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet between them. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicles during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. The vehicles waiting on turn lanes, traffic backing up onto next upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles, to clear up the queue.

The intersection of Baseline Road/48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of the I-10/Broadway Curve/South Mountain Freeway Traffic Interchange to Baseline Road, a few of the intersections that extend into residential communities at the north-of-South-Mountain, Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane. This signalized intersection operates with actuated signal control.

The intersection of Baseline Road/Calle Los Cerros Drive provides access to local traffic from the residential area northeast of the intersection of Baseline Road/48th Street to Baseline Road. It is an alternate route for residential traffic who wants to avoid the congested intersection of Baseline Road/ 48th Street during peak hours. The south leg of the intersection ends at In-N-Out Burger, which is also a significant traffic generator in this area. Baseline Road/Calle Los Cerros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a single dedicated left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to private development on the north side of intersection and to AZ Grand Resort, 46th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to commercial properties at northwest and northeast quadrant of the subject intersection. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road /I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four through lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (exit ramp) has dual left turn lanes, a single shared through-right- left turn lane and a single dedicated right turn lane. Baseline Road/I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the eastbound approach. The westbound approach has four through lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Currently both intersections operate with actuated signal control.

AZTEC

3

May 2024

48 Alyssa Morrison 28 May 2024 15:01

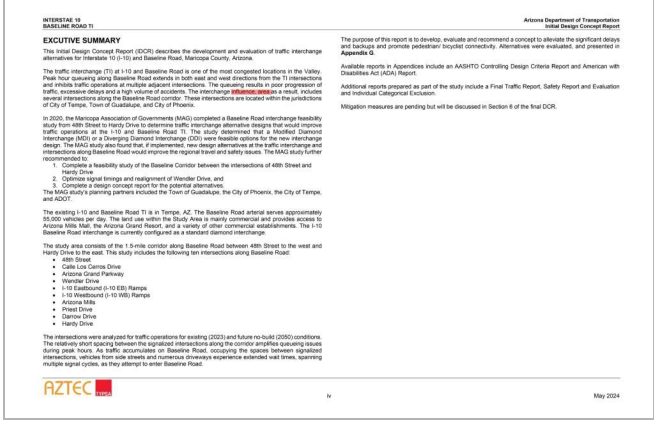
TBaca - Update to "influence area," (comma after area)

48.1 A - Will Comply 30 May 2024 10:04

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **6**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both east and west directions from the TI intersections and inhibits traffic operations at multiple adjacent intersections. The queueing results in poor progression of traffic, excessive delays and a high volume of accidents. The interchange influence, area as a result, includes several intersections along the Baseline Road corridor. These intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

In 2020, the Maricopa Association of Governments (MAG) completed a Baseline Road interchange feasibility study from 48th Street to Hardy Drive to determine traffic interchange alternative designs that would improve traffic operations at the I-10 and Baseline Road TI. The study determined that a Modified Diamond Interchange (MDI) or a Diverging Diamond Interchange (DDI) were feasible options for the new interchange design. The MAG study also found that, if implemented, new design alternatives at the traffic interchange and intersections along Baseline Road would improve the regional travel and safety issues. The MAG study further recommended to:

1. Complete a feasibility study of the Baseline Corridor between the intersections of 48th Street and Hardy Drive
2. Optimize signal timings and realignment of Wendler Drive, and
3. Complete a design concept report for the potential alternatives.

The MAG study's planning partners included the Town of Guadalupe, the City of Phoenix, the City of Tempe, and ADOT.

The existing I-10 and Baseline Road TI is in Tempe, AZ. The Baseline Road arterial serves approximately 55,000 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments. The I-10 Baseline Road interchange is currently configured as a standard diamond interchange.

The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 Eastbound (I-10 EB) Ramps
- I-10 Westbound (I-10 WB) Ramps
- Arizona Mills
- Priest Drive
- Darrow Drive
- Hardy Drive

The intersections were analyzed for traffic operations for existing (2023) and future no-build (2050) conditions. The relatively short spacing between the signalized intersections along the corridor amplifies queueing issues during peak hours. As traffic accumulates on Baseline Road, occupying the spaces between signalized intersections, vehicles from side streets and numerous driveways experience extended wait times, spanning multiple signal cycles, as they attempt to enter Baseline Road.

The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and backups and promote pedestrian/ bicyclist connectivity. Alternatives were evaluated, and presented in **Appendix G**.

Available reports in Appendices include an AASHTO Controlling Design Criteria Report and American with Disabilities Act (ADA) Report.

Additional reports prepared as part of the study include a Final Traffic Report, Safety Report and Evaluation and Individual Categorical Exclusion.

Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC ENGINEERING

iv

May 2024

49 Alyssa Morrison 28 May 2024 15:02

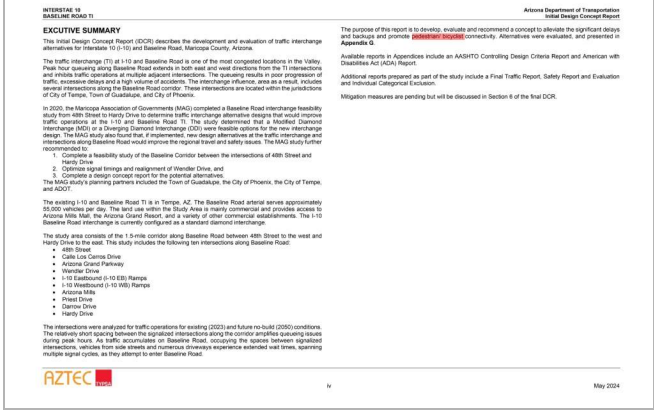
TBaca - Remove space after "/"

49.1 A - Will Comply 30 May 2024 10:04

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **6**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

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The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

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Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC ENGINEERING

iv

May 2024

50 Alyssa Morrison 28 May 2024 15:03

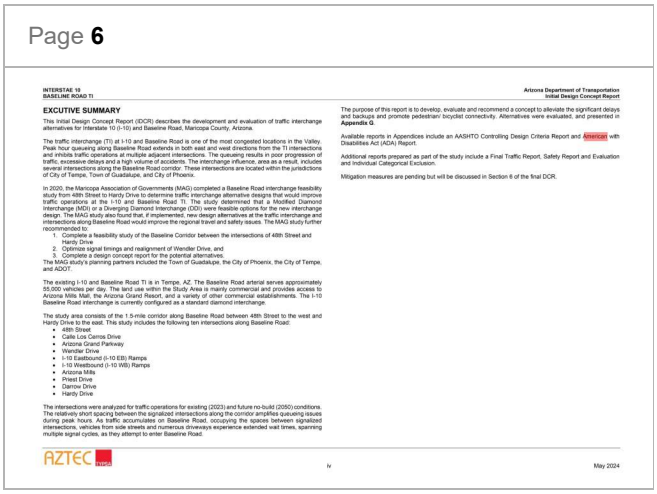
TBaca - Revise to "Americans"

50.1 A - Will Comply 30 May 2024 10:04

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **6**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both east and west directions from the TI intersections and inhibits traffic operations at multiple adjacent intersections. The queueing results in poor progression of traffic, excessive delays and a high volume of accidents. The interchange influence, area as a result, includes several intersections along the Baseline Road corridor. These intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

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1. Complete a feasibility study of the Baseline Corridor between the intersections of 48th Street and Hardy Drive
2. Optimize signal timings and realignment of Wendler Drive, and
3. Complete a design concept report for the potential alternatives.

The MAG study's planning partners included the Town of Guadalupe, the City of Phoenix, the City of Tempe, and ADOT.

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The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

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The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and backups and promote pedestrian/ bicyclist connectivity. Alternatives were evaluated, and presented in **Appendix G**.

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Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC ENGINEERING

iv

May 2024

51 Alyssa Morrison 28 May 2024 15:04

TBaca - Add Period to sentence

51.1 A - Will Comply 30 May 2024 10:09

Action was applied by Alyssa Morrison

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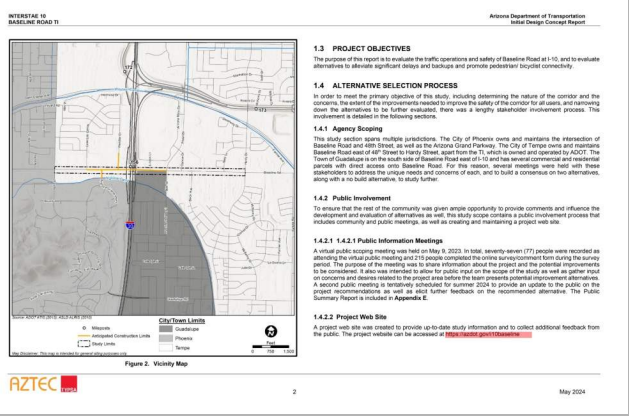
Page **8**


INTERSTAE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.3 PROJECT OBJECTIVES

The purpose of this report is to evaluate the traffic operations and safety of Baseline Road at I-10, and to evaluate alternatives to alleviate significant delays and backups and promote pedestrian/ bicyclist connectivity.

1.4 ALTERNATIVE SELECTION PROCESS

In order to meet the primary objective of this study, including determining the nature of the corridor and the concerns, the extent of the improvements needed to improve the safety of the corridor for all users, and narrowing down the alternatives to be further evaluated, there was a lengthy stakeholder involvement process. This involvement is detailed in the following sections.

1.4.1 Agency Scoping

This study section spans multiple jurisdictions. The City of Phoenix owns and maintains the intersection of Baseline Road and 48th Street, as well as the Arizona Grand Parkway. The City of Tempe owns and maintains Baseline Road east of 48th Street to Hardy Street, apart from the TI, which is owned and operated by ADOT. The Town of Guadalupe is on the south side of Baseline Road east of I-10 and has several commercial and residential parcels with direct access onto Baseline Road. For this reason, several meetings were held with these stakeholders to address the unique needs and concerns of each, and to build a consensus on two alternatives, along with a no build alternative, to study further.

1.4.2 Public Involvement

To ensure that the rest of the community was given ample opportunity to provide comments and influence the development and evaluation of alternatives as well, this study scope contains a public involvement process that includes community and public meetings, as well as creating and maintaining a project web site.

1.4.2.1 1.4.2.1 Public Information Meetings

A virtual public scoping meeting was held on May 9, 2023. In total, seventy-seven (77) people were recorded as attending the virtual public meeting and 210 people completed the online survey/comment form during the survey period. The purpose of the meeting was to share information about the project and the potential improvements to be considered. It also was intended to allow for public input on the scope of the study as well as gather input on concerns and desires related to the project area before the team presents potential improvement alternatives. A second public meeting is tentatively scheduled for summer 2024 to provide an update to the public on the project recommendations as well as elicit further feedback on the recommended alternative. The Public Summary Report is included in **Appendix E**.

1.4.2.2 Project Web Site

A project web site was created to provide up-to-date study information and to collect additional feedback from the public. The project website can be accessed at https://azdot.gov/I10baseline

City/Town Limits
Guadalupe
Phoenix
Tempe

Figure 2. Vicinity Map

AZTEC

2

May 2024

52 Alyssa Morrison 28 May 2024 15:05

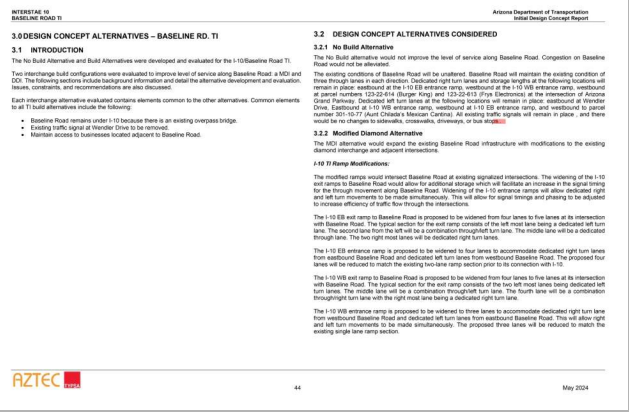
TBaca - Remove extra period.

52.1 A - Will Comply 30 May 2024 10:46

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **50**


INTERSTAE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

3.0 DESIGN CONCEPT ALTERNATIVES – BASELINE RD. TI

3.1 INTRODUCTION

The No Build Alternative and Build Alternatives were developed and evaluated for the I-10/Baseline Road TI.

Two interchange build configurations were evaluated to improve level of service along Baseline Road: a MDI and DDI. The following sections include background information and detail the alternative development and evaluation. Issues, constraints, and recommendations are also discussed.

Each interchange alternative evaluated contains elements common to the other alternatives. Common elements to all TI build alternatives include the following:

- Baseline Road remains under I-10 because there is an existing overpass bridge.
- Existing traffic signal at Wendler Drive to be removed.
- Maintain access to businesses located adjacent to Baseline Road.

3.2 DESIGN CONCEPT ALTERNATIVES CONSIDERED

3.2.1 No Build Alternative

The No Build alternative would not improve the level of service along Baseline Road. Congestion on Baseline Road would not be alleviated.

The existing conditions of Baseline Road will be unaltered. Baseline Road will maintain the existing condition of three through lanes in each direction. Dedicated right turn lanes and storage lengths at the following locations will remain in place: eastbound at the I-10 EB entrance ramp, westbound at the I-10 WB entrance ramp, westbound at parcel numbers 123-22-614 (Burger King) and 123-22-613 (Frys Electronics) at the intersection of Arizona Grand Parkway. Dedicated left turn lanes at the following locations will remain in place: eastbound at Wendler Drive, Eastbound at I-10 WB entrance ramp, westbound at I-10 EB entrance ramp, and westbound to parcel number 301-10-77 (Aunt Chilada's Mexican Cantina). All existing traffic signals will remain in place , and there would be no changes to sidewalks, crosswalks, driveways, or bus stops.

3.2.2 Modified Diamond Alternative

The MDI alternative would expand the existing Baseline Road infrastructure with modifications to the existing diamond interchange and adjacent intersections.

I-10 TI Ramp Modifications:

The modified ramps would intersect Baseline Road at existing signalized intersections. The widening of the I-10 exit ramps to Baseline Road would allow for additional storage which will facilitate an increase in the signal timing for the through movement along Baseline Road. Widening of the I-10 entrance ramps will allow dedicated right and left turn movements to be made simultaneously. This will allow for signal timings and phasing to be adjusted to increase efficiency of traffic flow through the intersections.

The I-10 EB exit ramp to Baseline Road is proposed to be widened from four lanes to five lanes at its intersection with Baseline Road. The typical section for the exit ramp consists of the left most lane being a dedicated left turn lane. The second lane from the left will be a combination through/left turn lane. The middle lane will be a dedicated through lane. The two right most lanes will be dedicated right turn lanes.

The I-10 EB entrance ramp is proposed to be widened to four lanes to accommodate dedicated right turn lanes from eastbound Baseline Road and dedicated left turn lanes from westbound Baseline Road. The proposed four lanes will be reduced to match the existing two-lane ramp section prior to its connection with I-10.

The I-10 WB exit ramp to Baseline Road is proposed to be widened from four lanes to five lanes at its intersection with Baseline Road. The typical section for the exit ramp consists of the two left most lanes being dedicated left turn lanes. The middle lane will be a combination through/left turn lane. The fourth lane will be a combination through/right turn lane with the right most lane being a dedicated right turn lane.

The I-10 WB entrance ramp is proposed to be widened to three lanes to accommodate dedicated right turn lane from westbound Baseline Road and dedicated left turn lanes from eastbound Baseline Road. This will allow right and left turn movements to be made simultaneously. The proposed three lanes will be reduced to match the existing single lane ramp section.

AZTEC

44

May 2024

53 Alyssa Morrison 28 May 2024 15:11

GAhmed -
1. Some of the retaining walls would be constructed in front of existing MSE walls, which is quite challenging. It would be nice if the final DCR provided a discussion on geo-constructability issues that could be encountered and possible mitigation options.

2. Some of the walls that would be constructed on the project would require utilizing shorings, which need to be discussed in the final DCR.

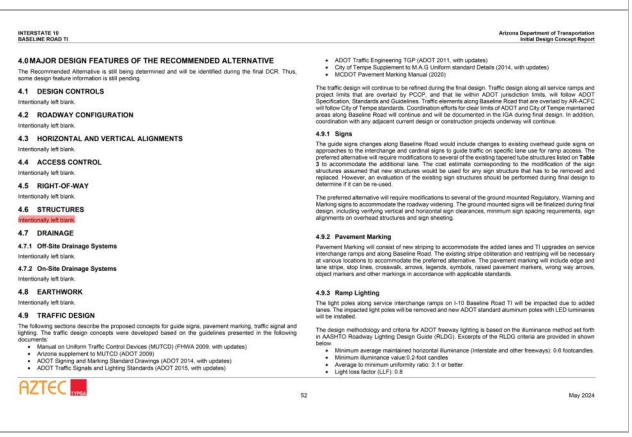
3. I have noticed that the cost of shoring anticipated in this project needs to be incorporated into the project cost during the final DCR development.

53.1 A - Will Comply 30 May 2024 10:55

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_IDCR.pdf

Page **58**


INTERSTAE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

4.0 MAJOR DESIGN FEATURES OF THE RECOMMENDED ALTERNATIVE

The Recommended Alternative is still being determined and will be identified during the final DCR. Thus, some design feature information is still pending.

4.1 DESIGN CONTROLS

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4.2 ROADWAY CONFIGURATION

Intentionally left blank.

4.3 HORIZONTAL AND VERTICAL ALIGNMENTS

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4.4 ACCESS CONTROL

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4.5 RIGHT-OF-WAY

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4.6 STRUCTURES

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4.7 DRAINAGE

4.7.1 Off-Site Drainage Systems

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4.7.2 On-Site Drainage Systems

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4.8 EARTHWORK

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4.9 TRAFFIC DESIGN

The following sections describe the proposed concepts for guide signs, pavement marking, traffic signal and lighting. The traffic design concepts were developed based on the guidelines presented in the following documents:

- Manual on Uniform Traffic Control Devices (MUTCD) (FHWA 2009, with updates)
- Arizona supplement to MUTCD (ADOT 2009)
- ADOT Signing and Marking Standard Drawings (ADOT 2014, with updates)
- ADOT Traffic Signals and Lighting Standards (ADOT 2015, with updates)
- ADOT Traffic Engineering TGP (ADOT 2011, with updates)
- City of Tempe Supplement to MA-S Uniform standard Details (2014, with updates)
- MCDOT Pavement Marking Manual (2020)

The traffic design will continue to be refined during the final design. Traffic design along all service ramps and project limits that are overlaid by PCCP, and that lie within ADOT jurisdiction limits, will follow ADOT Specification, Standards and Guidelines. Traffic elements along Baseline Road that are overlaid by AR-ACFC will follow City of Tempe standards. Coordination efforts for clear limits of ADOT and City of Tempe maintained areas along Baseline Road will continue and will be documented in the IGA during final design. In addition, coordination with any adjacent current design or construction projects underway will continue.

4.9.1 Signs

The guide signs changes along Baseline Road would include changes to existing overhead guide signs on approaches to the interchange and cardinal signs to guide traffic on specific lane use for ramp access. The preferred alternative will require modifications to several of the existing tapered tube structures listed on **Table 3** to accommodate the additional lane. The cost estimate corresponding to the modification of the sign structures assumed that new structures would be used for any sign structure that has to be removed and replaced. However, an evaluation of the existing sign structures should be performed during final design to determine if it can be re-used.

The preferred alternative will require modifications to several of the ground mounted Regulatory, Warning and Marking signs to accommodate the roadway widening. The ground mounted signs will be finalized during final design, including verifying vertical and horizontal sign clearances, minimum sign spacing requirements, sign alignments on overhead structures and sign sheeting.

4.9.2 Pavement Marking

Pavement Marking will consist of new striping to accommodate the added lanes and TI upgrades on service interchange ramps and along Baseline Road. The existing stripe obliteration and restriping will be necessary at various locations to accommodate the preferred alternative. The pavement marking will include edge and lane stripe, stop lines, crosswalk, arrows, legends, symbols, raised pavement markers, wrong way arrows, object markers and other markings in accordance with applicable standards.

4.9.3 Ramp Lighting

The light poles along service interchange ramps on I-10 Baseline Road TI will be impacted due to added lanes. The impacted light poles will be removed and new ADOT standard aluminum poles with LED luminaires will be installed.

The design methodology and criteria for ADOT freeway lighting is based on the illuminance method set forth in AASHTO Roadway Lighting Design Guide (RLDG). Excerpts of the RLDG criteria are provided in shown below.

- Minimum average maintained horizontal illuminance (Interstate and other freeways): 0.6 footcandles.
- Minimum illuminance value:0.2-foot candles
- Average to minimum uniformity ratio: 3:1 or better.
- Light loss factor (LLF): 0.8

AZTEC

52

May 2024

54 Alyssa Morrison 28 May 2024 15:15

JKulaga - finally, costs. Costs appear to be buried in the report.

54.1 D - Design Team Recommends No Further Action Taken 30 May 2024 13:12

Action was applied by Alyssa Morrison

54.2 D - Design Team Recommends No Further Action Taken 30 May 2024 13:12

Action was applied by Alyssa Morrison

54.3 Alyssa Morrison 30 May 2024 13:13

Cost are located per typical ADOT DCR. Will also be added to executive summary.

F0523_BaselineRd_TI_IDCR.pdf

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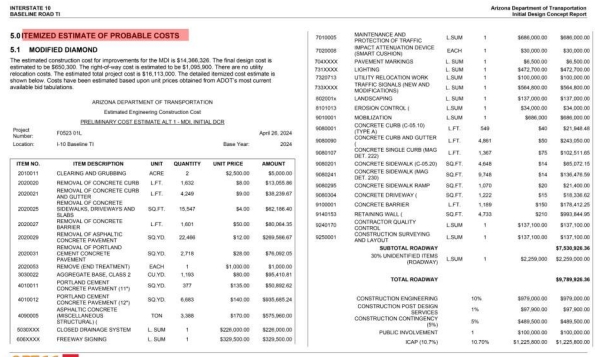

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

5.0 ITEMIZED ESTIMATE OF PROBABLE COSTS

5.1 MODIFIED DIAMOND

The estimated construction cost for improvements for the MDI is $14,366,326. The final design cost is estimated to be $850,300. The right-of-way cost is estimated to be $1,095,900. There are no utility relocation costs. The estimated total project cost is $16,113,000. The detailed itemized cost estimate is shown below. Costs have been estimated based upon unit prices obtained from ADOT's most current available bid tabulations.

ARIZONA DEPARTMENT OF TRANSPORTATION
Estimated Engineering Construction Cost
PRELIMINARY COST ESTIMATE ALT 1 - MDI, INITIAL DCR

Project Number: F0523 01L
Location: I-10 Baseline TI
April 26, 2024
Base Year: 2024

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2010011	CLEARING AND GRUBBING	ACRE	2	$2,500.00	$5,000.00
2020020	REMOVAL OF CONCRETE CURB	L.F.T.	1,632	$8.00	$13,055.86
2020021	REMOVAL OF CONCRETE CURB AND GUTTER	L.F.T.	4,249	$9.00	$38,239.67
2020025	REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS	SQ.FT.	15,547	$4.00	$62,186.40
2020027	REMOVAL OF CONCRETE BARRIER	L.F.T.	1,601	$50.00	$80,064.35
2020029	REMOVAL OF ASPHALTIC CONCRETE PAVEMENT	SQ.YD.	22,466	$12.00	$269,568.67
2020031	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SQ.YD.	2,718	$28.00	$76,092.05
2020053	REMOVE (END TREATMENT)	EACH	1	$1,000.00	$1,000.00
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	1,193	$80.00	$95,410.81
4010011	PORTLAND CEMENT CONCRETE PAVEMENT (11")	SQ.YD.	377	$135.00	$50,892.62
4010012	PORTLAND CEMENT CONCRETE PAVEMENT (12")	SQ.YD.	6,683	$140.00	$935,685.24
4090005	ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL)	TON	3,388	$170.00	$575,960.00
5030XXX	CLOSED DRAINAGE SYSTEM	L. SUM	1	$226,000.00	$226,000.00
606XXXX	FREEWAY SIGNING	L. SUM	1	$329,000.00	$329,000.00
7010005	MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM	1	$686,000.00	$686,000.00
7020008	IMPACT ATTENUATION DEVICE (SMART CUSHION)	EACH	1	$30,000.00	$30,000.00
704XXXX	PAVEMENT MARKINGS	L. SUM	1	$6,500.00	$6,500.00
731XXXX	LIGHTING	L. SUM	1	$472,700.00	$472,700.00
7320713	UTILITY RELOCATION WORK	L.SUM	1	$100,000.00	$100,000.00
733XXXX	TRAFFIC SIGNALS (NEW AND MODIFICATIONS)	L. SUM	1	$564,800.00	$564,800.00
802001x	LANDSCAPING	L. SUM	1	$137,000.00	$137,000.00
8101013	EROSION CONTROL (	L.SUM	1	$34,000.00	$34,000.00
9010001	MOBILIZATION	L.SUM	1	$686,000	$686,000.00
9060001	CONCRETE CURB (C-05.10) (TYPE A)	L.F.T.	548	$40	$21,948.48
9060090	CONCRETE CURB AND GUTTER	L.F.T.	4,861	$50	$243,050.00
9060107	CONCRETE SINGLE CURB (MAG DET. 222)	L.F.T.	1,367	$75	$102,511.65
9060201	CONCRETE SIDEWALK (C-05.20)	SQ.FT.	4,648	$14	$65,072.15
9060241	CONCRETE SIDEWALK (MAG DET. 230)	SQ.FT.	9,748	$14	$136,476.56
9060295	CONCRETE SIDEWALK RAMP	SQ.FT.	1,070	$20	$21,400.00
9060304	CONCRETE DRIVEWAY (	SQ.FT.	1,222	$15	$18,336.62
9100001	CONCRETE BARRIER	L.F.T.	1,189	$150	$178,412.25
9140153	RETAINING WALL (	SQ.FT.	4,733	$210	$993,844.95
9940170	CONTRACTOR QUALITY CONTROL	L.SUM	1	$137,100.00	$137,100.00
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1	$137,100.00	$137,100.00
	SUBTOTAL ROADWAY				**$7,530,926.36**
	30% UNIDENTIFIED ITEMS (ROADWAY)	L.SUM	1	$2,259,000	$2,259,000.00
	TOTAL ROADWAY				**$9,789,926.36**
	CONSTRUCTION ENGINEERING	10%			$979,000.00
	CONSTRUCTION POST DESIGN SERVICES	1%			$97,900.00
	CONSTRUCTION CONTINGENCY (5%)	5%			$489,500.00
	PUBLIC INVOLVEMENT	1			$100,000.00
	ICAP (10.7%)	10.70%			$1,225,800.00

AZTEC

61

May 2024

55 Alyssa Morrison 28 May 2024 15:17

JKulaga - The Executive Summary does finish the story. While it provides a good recap of the process, it includes nothing about the findings. Please add the three alternatives, and a quick matrix of the evaluation. This provides a quick reference for policy makers, the public, etc. to understand the choices and the difference in cost, ROW, business impact, schedule and of course traffic mitigation benefit. This allow the documents to be more user friendly. Perhaps even cite the page number of report or appendix in the Executive Summary.

55.1 A - Will Comply 30 May 2024 10:06

Action was applied by Alyssa Morrison

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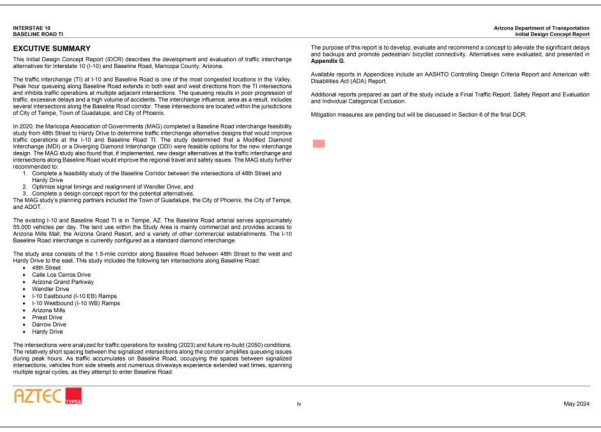
Page **6**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

EXCUTIVE SUMMARY

This Initial Design Concept Report (IDCR) describes the development and evaluation of traffic interchange alternatives for Interstate 10 (I-10) and Baseline Road, Maricopa County, Arizona.

The traffic interchange (TI) at I-10 and Baseline Road is one of the most congested locations in the Valley. Peak hour queueing along Baseline Road extends in both east and west directions from the TI intersections and inhibits traffic operations at multiple adjacent intersections. The queueing results in poor progression of traffic, excessive delays and a high volume of accidents. The interchange influence, area as a result, includes several intersections along the Baseline Road corridor. These intersections are located within the jurisdictions of City of Tempe, Town of Guadalupe, and City of Phoenix.

In 2020, the Maricopa Association of Governments (MAG) completed a Baseline Road interchange feasibility study from 48th Street to Hardy Drive to determine traffic interchange alternative designs that would improve traffic operations at the I-10 and Baseline Road TI. The study determined that a Modified Diamond interchange (MDI) or a Diverging Diamond Interchange (DDI) were feasible options for the new interchange design. The MAG study also found that, if implemented, new design alternatives at the traffic interchange and intersections along Baseline Road would improve the regional travel and safety issues. The MAG study further recommended:

1. Complete a feasibility study of the Baseline Corridor between the intersections of 48th Street and Hardy Drive
2. Optimize signal timings and realignment of Wendler Drive, and
3. Complete a design concept report for the potential alternatives.

The MAG study's planning partners included the Town of Guadalupe, the City of Phoenix, the City of Tempe, and ADOT.

The existing I-10 and Baseline Road TI is in Tempe, AZ. The Baseline Road arterial serves approximately 55,000 vehicles per day. The land use within the Study Area is mainly commercial and provides access to Arizona Mills Mall, the Arizona Grand Resort, and a variety of other commercial establishments. The I-10 Baseline Road interchange is currently configured as a standard diamond interchange.

The study area consists of the 1.5-mile corridor along Baseline Road between 48th Street to the west and Hardy Drive to the east. This study includes the following ten intersections along Baseline Road:

- 48th Street
- Calle Los Cerros Drive
- Arizona Grand Parkway
- Wendler Drive
- I-10 Eastbound (I-10 EB) Ramps
- I-10 Westbound (I-10 WB) Ramps
- Arizona Mills
- Priest Drive
- Darrow Drive
- Hardy Drive

The intersections were analyzed for traffic operations for existing (2023) and future no-build (2050) conditions. The relatively short spacing between the signalized intersections along the corridor amplifies queueing issues during peak hours. As traffic accumulates on Baseline Road, occupying the spaces between signalized intersections, vehicles from side streets and numerous driveways experience extended wait times, spanning multiple signal cycles, as they attempt to enter Baseline Road.

The purpose of this report is to develop, evaluate and recommend a concept to alleviate the significant delays and backups and promote pedestrian/ bicyclist connectivity. Alternatives were evaluated, and presented in **Appendix G.**

Available reports in Appendices include an AASHTO Controlling Design Criteria Report and American with Disabilities Act (ADA) Report.

Additional reports prepared as part of the study include a Final Traffic Report, Safety Report and Evaluation and Individual Categorical Exclusion.

Mitigation measures are pending but will be discussed in Section 6 of the final DCR.

AZTEC

iv

May 2024

56 **Alyssa Morrison** 30 May 2024 10:10

Add I-10 Heading

56.1 **A - Will Comply** 30 May 2024 10:16

Action was applied by Alyssa Morrison

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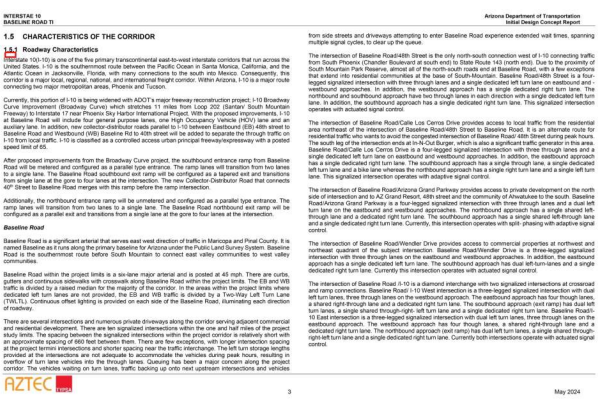
Page **9**



INTERSTAE 10
BASELINE ROAD TI

Arizona Department of Transportation
Initial Design Concept Report

1.5 CHARACTERISTICS OF THE CORRIDOR

1.5.1 Roadway Characteristics

Interstate 10(I-10) is one of the five primary transcontinental east-to-west interstate corridors that run across the United States. I-10 is the southernmost route between the Pacific Ocean in Santa Monica, California, and the Atlantic Ocean in Jacksonville, Florida, with many connections to the south into Mexico. Consequently, this corridor is a major local, regional, national, and international freight corridor. Within Arizona, I-10 is a major route connecting two major metropolitan areas, Phoenix and Tucson.

Currently, this portion of I-10 is being widened with ADOT's major freeway reconstruction project; I-10 Broadway Curve Improvement (Broadway Curve) which stretches 11 miles from Loop 202 (Santan/ South Mountain Freeway) to Interstate 17 near Phoenix Sky Harbor International Project. With the proposed improvements, I-10 at Baseline Road will include four general purpose lanes, one High Occupancy Vehicle (HOV) lane and an auxiliary lane. In addition, new collector-distributor roads parallel to I-10 between Eastbound (EB) 48th street to Baseline Road and Westbound (WB) Baseline Rd to 40th street will be added to separate the through traffic on I-10 from local traffic. I-10 is classified as a controlled access urban principal freeway/expressway with a posted speed limit of 65.

After proposed improvements from the Broadway Curve project, the southbound entrance ramp from Baseline Road will be metered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road southbound exit ramp will be configured as a tapered exit and transitions from single lane at the gore to four lanes at the intersection. The new Collector-Distributor Road that connects 40th Street to Baseline Road merges with this ramp before the ramp intersection.

Additionally, the northbound entrance ramp will be unmetered and configured as a parallel type entrance. The ramp lanes will transition from two lanes to a single lane. The Baseline Road northbound exit ramp will be configured as a parallel exit and transitions from a single lane at the gore to four lanes at the intersection.

Baseline Road

Baseline Road is a significant arterial that serves east west direction of traffic in Maricopa and Pinal County. It is named Baseline as it runs along the primary baseline for Arizona under the Public Land Survey System. Baseline Road is the southernmost route before South Mountain to connect east valley communities to west valley communities.

Baseline Road within the project limits is a six-lane major arterial and is posted at 45 mph. There are curbs, gutters and continuous sidewalks with crosswalk along Baseline Road within the project limits. The EB and WB traffic is divided by a raised median for the majority of the corridor. In the areas within the project limits where dedicated left turn lanes are not provided, the EB and WB traffic is divided by a Two-Way Left Turn Lane (TWLTL). Continuous offset lighting is provided on each side of the Baseline Road, illuminating each direction of roadway.

There are several intersections and numerous private driveways along the corridor serving adjacent commercial and residential development. There are ten signalized intersections within the one and half miles of the project study limits. The spacing between the signalized intersections within the project corridor is relatively short with an approximate spacing of 660 feet between them. There are few exceptions, with longer intersection spacing at the project termini intersections and shorter spacing near the traffic interchange. The left turn storage lengths provided at the intersections are not adequate to accommodate the vehicles during peak hours, resulting in overflow of turn lane vehicles into the through lanes. Queuing has been a major concern along the project corridor. The vehicles waiting on turn lanes, traffic backing up onto next upstream intersections and vehicles from side streets and driveways attempting to enter Baseline Road experience extended wait times, spanning multiple signal cycles, to clear up the queue.

The intersection of Baseline Road/48th Street is the only north-south connection west of I-10 connecting traffic from South Phoenix (Chandler Boulevard at south end) to State Route 143 (north end). Due to the proximity of South Mountain Park Reserve, almost all of the north-south roads and at Baseline Road, with a few exceptions that extend into residential communities at the base of South-Mountain. Baseline Road/48th Street is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the westbound approach has a single dedicated right turn lane. The northbound and southbound approach have two through lanes in each direction with a single dedicated left turn lane. In addition, the southbound approach has a single dedicated right turn lane. This signalized intersection operates with actuated signal control.

The intersection of Baseline Road/Calle Los Cerros Drive provides access to local traffic from the residential area northeast of the intersection of Baseline Road/48th Street to Baseline Road. It is an alternate route for residential traffic who wants to avoid the congested intersection of Baseline Road/ 48th Street during peak hours. The south leg of the intersection ends at In-N-Out Burger, which is also a significant traffic generator in this area. Baseline Road/Calle Los Cerros Drive is a four-legged signalized intersection with three through lanes and a single dedicated left turn lane on eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated right turn lane. The southbound approach has a single through lane, a single dedicated left turn lane and a bike lane whereas the northbound approach has a single right turn lane and a single left turn lane. This signalized intersection operates with adaptive signal control.

The intersection of Baseline Road/Arizona Grand Parkway provides access to private development on the north side of intersection and to AZ Grand Resort, 48th street and the community of Ahwatukee to the south. Baseline Road/Arizona Grand Parkway is a four-legged signalized intersection with three through lanes and a dual left turn lane on the eastbound and westbound approaches. The northbound approach has a single shared left-through lane and a dedicated right turn lane. The southbound approach has a single shared left-through lane and a single dedicated right turn lane. Currently, this intersection operates with split- phasing with adaptive signal control.

The intersection of Baseline Road/Wendler Drive provides access to commercial properties at northwest and northeast quadrant of the subject intersection. Baseline Road/Wendler Drive is a three-legged signalized intersection with three through lanes on the eastbound and westbound approaches. In addition, the eastbound approach has a single dedicated left turn lane. The southbound approach has dual left-turn-lanes and a single dedicated right turn lane. Currently this intersection operates with actuated signal control.

The intersection of Baseline Road /I-10 is a diamond interchange with two signalized intersections at crossroad and ramp connections. Baseline Road/ I-10 West intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the westbound approach. The eastbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The southbound approach (exit ramp) has dual left turn lanes, a single shared through-right- left turn lane and a single dedicated right turn lane. Baseline Road/I-10 East intersection is a three-legged signalized intersection with dual left turn lanes, three through lanes on the eastbound approach. The westbound approach has four though lanes, a shared right-through lane and a dedicated right turn lane. The northbound approach (exit ramp) has dual left turn lanes, a single shared through-right-left turn lane and a single dedicated right turn lane. Currently both intersections operate with actuated signal control.

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May 2024

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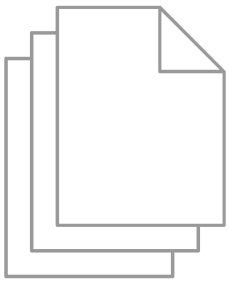

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Alyssa Morrison

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2 May 2024 15:38 by Alyssa Morrison

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Comments
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Pages
147

Files

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Workflow

Stages

Stage 1 S O C D **Pending** 24 May 2024 15:15

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
aaron@gordleygroup.com	Read only	S O	0	0
Ali Zareh	Reviewer	S O C	0	0
Alyssa Morrison	Reviewer & Approver	S O C D	0	10
Brandon S Campbell	Reviewer	S O C	0	0
Breeann Draper	Read only	S O	0	0
catherine_hollow@tempe.gov	Reviewer	S O C	3	0
chase_walman@tempe.gov	Reviewer	S O C	0	0
Dan Woelzlein	Author	S O C D	0	0
dbaker@y2keng.com	Read only	S O	0	0
Dena Whitaker	Reviewer	S O C	0	0
Dennis Haley	Reviewer	S O C	0	0
Diana Dunn	Author	S O C D	0	0
dvoigt@aztec.us	Reviewer	S O C	0	0
E L Brady	Reviewer	S O C	0	0
Eric Hitchcock	Reviewer	S O C	0	0
Gael Luna	Reviewer	S O C	0	0
George Williams	Reviewer	S O C	0	0
Guled Ahmed	Reviewer	S O C	0	0
HirenKumar Shah	Reviewer	S O C	0	0
jan@gordleygroup.com	Read only	S O	0	0
Jeff Kulaga	Reviewer	S O C	0	0
Jennifer Acuna	Reviewer	S O C	0	0
John Gleason	Author	S O C D	0	0
John R Hucko	Reviewer	S O C	0	0
kkiser@azdot.gov	Reviewer	S O C	0	0
Mark Gilliland	Author	S O C D	0	0
Michael Morrison	Reviewer	S O C	0	0
Myesha Harris	Reviewer	S O C	1	0
Nancy Shelton	Read only	S O	0	0
Nicolai Oliden	Read only	S O	0	0
Nikki Green	Reviewer	S O C	0	0
Olivier Mirza	Reviewer & Approver	S O C D	0	0
Pancho Garza	Read only	S O	0	0
Priscilla Hernandez	Reviewer	S O C	0	0
Quinn Castro	Reviewer	S O C	0	0
Randy Everett	Reviewer	S O C	0	0

Raul Amavisca	Reviewer	S O C	0	0
ravi.ambadipudi@jacobs.com	Read only	S O	0	0
Ron Szwiec	Author	S O C D	0	0
Scott Weinland	Reviewer	S O C	0	0
Stephanie Stearns	Reviewer	S O C	0	0
Steve Lohide	Author	S O C D	0	0
Syed Alam	Reviewer	S O C	0	0
Tammy R Mivshek	Reviewer	S O C	0	0
Tim Mahon	Author	S O C D	0	0
tom@gordleygroup.com	Read only	S O	0	0
Tracy Eberlein	Reviewer & Approver	S O C D	0	0
ykoprowski@y2keng.com	Read only	S O	0	0

Stage 2 S O C

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
Anil Mudigonda	Reviewer	S O C	0	0
Jeff Ross	Reviewer	S O C	0	0
Katie Rodriguez	Reviewer	S O C	0	0

Decisions

Stage 1

APPROVER	DECISION	DECISION DATE
Alyssa Morrison	Pending	---
Dan Woelzlein	Pending	---
Diana Dunn	Pending	---
John Gleason	Pending	---
Mark Gilliland	Approved	18 Oct 2024 10:52
Olivier Mirza	Pending	---
Ron Szwiec	Pending	---
Steve Lohide	Pending	---
Tim Mahon	Pending	---
Tracy Eberlein	Pending	---

Stage 2

No decision makers assigned

Comments

1 Myesha Harris 22 May 2024 17:30

The City of Phoenix is generally in agreement with proceeding with presenting the three alternatives for the I-10 Baseline Traffic Interchange (TI) Initial Design Concept Report (DCR) to the public. The Street Transportation Department has reviewed the Initial DCR and the concepts regarding the Modified Directional Interchange (MDI) and the Diverging Diamond Interchange (DDI), and we find that they generally align with the City's objectives.
While we are supportive of the proposed alternatives, we do have initial concerns regarding the anticipated increase in delay for northbound movements at 48th Street. However, the city believes that this difference in delay, as well as the Level of Service (LOS), can be effectively addressed through signal timing and phasing adjustments.
In moving forward, the city would appreciate continued collaboration and dialogue to ensure that the chosen alternative optimally addresses both traffic flow and community needs. The city remains committed to working closely with all stakeholders involved to achieve the best possible outcome for the residents and commuters of Phoenix.

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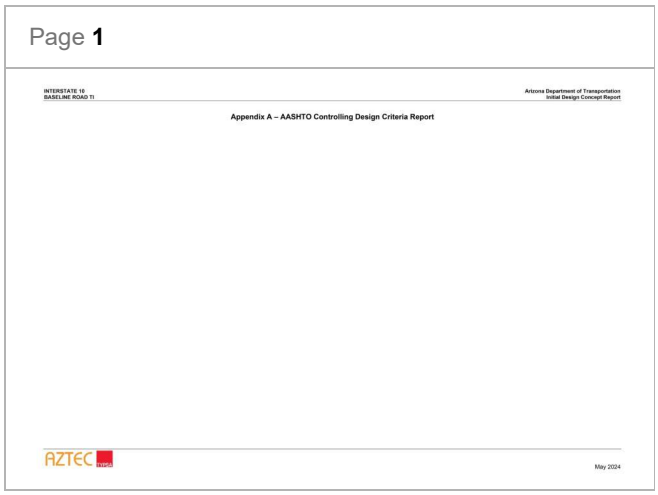

1.1 Alyssa Morrison 6 Jun 2024 13:20

We will continue to collaborate with the City.

1.2 A - Will Comply 6 Jun 2024 13:20

Action was applied by Alyssa Morrison

2 **catherine_hollow@tempe.gov** 24 May 2024 14:57

Most recent PROWAG should be referenced.

Also, Tempe requires two ramps per corner (unless a movement is prohibited for all users)

2.2 D - Design Team Recommends No Further Acti on Taken 30 May 2024 16:41

Action was applied by Alyssa Morrison

2.3 Alyssa Morrison 30 May 2024 16:41

Field Audit completed prior to final rule PROWAG and explained on page 3. ADA Compliance report is measured against ADOT RDG 107.3 requirements. Design criteria of improvements will be per jurisdiction and provided in final DCR in Section 4 under design controls.

2.4 Alyssa Morrison 26 Jun 2024 10:42

and latest PROWAG

F0523_BaselineRd_TI_IDCR_Appendix.pdf

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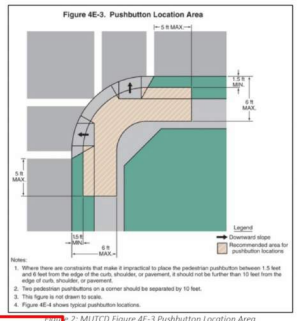

Figure 2: MUTCD Figure 4E-3 Pushbutton Location Area

2013 PROWAG

Final rule PROWAG citations are noted in parenthesis following each 2013 PROWAG citation.

- R207.1 (R203.6.1.1) * – A curb ramp, blended transition, or a combination of curb ramps and blended transitions shall connect the pedestrian access routes at each pedestrian street crossing.
- R209.1 (R206.1) – accessible pedestrian signals/pedestrian pushbutton features per MUTCD 4E.09-13
- R302.3 (R302.2) – 48" continuous clear width of pedestrian access routes
- R302.5 (302.4.1) – 5% maximum grade (or ≤ road grade) for pedestrian access routes
- R302.6 (302.5.1) – 2.0%* maximum cross slope for pedestrian access routes
- R302.7 (R302.6.2) – maximum vertical surface change of ¼"
- R304.2.1 (R304.2.5) – 48" turning space at the top of the ramp (with max 2.0%** slope***)
- R304.2.2 (R304.2.1) – 8.3% maximum grade running slope of the ramp
- R305.1.4 (R305.1.4) – detectable warning surface present across the ramp with 2' depth
- R305.2.4 (R305.2.4) – pedestrian refuge minimum dimensions of 6' length, 5' width, 2' between detectable warnings
- R404.3 (R404.3) – 2.5'x4' clear space at pushbuttons

**In alterations where existing physical constraints prevent compliance with this standard, a single diagonal curb ramp is permitted. The justification behind a non-compliant determination should be documented.*
***Final rule PROWAG changed this to 2.1%. This change had no impact on the findings of this report.*
****Both versions of PROWAG state conditions which allow for an exception to this standard. None of those conditions were applicable within the study area.*

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Intersection	Deficiencies
	• SEC – Maximum running slope of ramps – 8.65%/9.25% (ADA 405.2 & 2013 PROWAG R304.2.2) • SEC – Maximum cross slope of the ramp – 2.40% (ADA 405.3) • SEC – Maximum slope of ramp side flares at both ramps – 11.00%/10.05% (ADA 406.3) • SEC – Maximum grade within turning space at NS/EW ramp – 2.40%/2.25%/2.70% (ADA 406.4 & 2013 PROWAG R304.2.1) • SEC – Distance between the push button and the edge of the curb – greater than 10' (MUTCD 4E.08.04-D) • SEC – Push button not parallel to NS crosswalk (MUTCD 4E.08.04-E) • SEC – Continuous clear width – 43" ramps (2013 PROWAG R302.3) • SEC – Turning space at the top of both ramps – 48"x43" (2013 PROWAG R304.2.1) • SEC – Insufficient clear space at push buttons (2013 PROWAG R404.3) • East and West Crosswalks – Pedestrian clearance time (MUTCD 4E.06) • All corners – Accessible pedestrian signals/pedestrian push button features are not provided per MUTCD 4E.09 (2013 PROWAG R209)

IMPROVEMENTS NEEDED

Intersections

The deficiencies shown in **Table 1** were used to determine if improvements were needed at the study intersections to meet ADA requirements. These improvements were separated into categories described below.

Curb Ramp Reconstruction

The reconstruction of a curb ramp at an intersection would require the removal of the existing curb ramp that does not meet ADA and 2013 PROWAG requirements and guidelines. The reconstructed curb ramp will feature slopes and lengths that meet the minimum ADA and PROWAG requirements. These measurements include the cross slope, running slope, side flare slopes, and turning space of the curb ramp. Additionally, the curb ramps must feature detectable warning surfaces. An example of a curb ramp that does not meet the current criteria is shown in **Figure 3**.

Figure 3: Curb Ramp without Detectable Warning Surface – NWC of I-10 South & Baseline Road

3 catherine_hollow@tempe.gov 24 May 2024 14:58

Tempe is following the latest requirements for the buttons to be fully accessible.

3.1 D - Design Team Recommends No Further Acti on Taken 30 May 2024 16:42

Action was applied by Alyssa Morrison

3.2 Alyssa Morrison 30 May 2024 16:42

Agreed, Design criteria of improvements will be per jurisdiction and provided in final DCR in Section 4 under design controls.

3.3 Alyssa Morrison 26 Jun 2024 10:42

And latest PROWAG

F0523_BaselineRd_TI_IDCR_Appendix.pdf

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Sidewalk Approach Reconstruction

Figure 4: Sidewalk Approach with Steep Slope – NWC of Arizona Grand Parkway & Baseline Road

The reconstruction of a sidewalk approach to one of the corners of an intersection would require the complete removal of the existing sidewalk pavement and replacement sidewalk pavement to be installed. The slabs that do not meet the necessary slope and vertical clearance requirements would need to be removed separately, but neighboring slabs that meet the criteria would not need to be affected. **Figure 4** shows a sidewalk approach to the corner of an intersection that does not meet 2013 PROWAG requirements because its slope is too steep.

Push Button Assembly Upgrade

The push button assembly refers to the push button, the hardware surrounding the button, and the accompanying pedestrian crossing sign. Pedestrian push button upgrades are recommended where ADA standards, MUTCD standards, or 2013 PROWAG elements are not currently satisfied. Upgrades are recommended to involve replacing the push button assembly entirely with a new assembly that meets the audio and tactile needs of the PROWAG push buttons. An example of a push button assembly that does not meet ADA standards can be seen in **Figure 5**.

Figure 5: Push Button Assembly that does not meet 2013 PROWAG guidance– SWC of Priest Drive & Baseline Road

Figure 6: Push Button Pole/Foundation Too Far from Edge of Curb – NEC of Priest Drive & Baseline Road

New Push Button/Foundation

The installation of a new push button pole and foundation would be required where the existing pole/foundation does not meet the minimum distances from the edge of the curb and crosswalk line per MUTCD requirements, or if insufficient space exists between two pushbuttons. A new push button pole and foundation would require a clear space on the sidewalk that meets MUTCD requirements. Additionally, a new pole would require the accompanied new control units where necessary, and any required wiring changes included with that. **Figure 6** shows a push button pole/foundation that would require replacement due to its proximity to the edge of the curb.

4 catherine_hollow@tempe.gov 24 May 2024 14:58

It appears as though this is only for I-10??

4.1 D - Design Team Recommends No Further Acti on Taken 30 May 2024 13:25

Action was applied by Alyssa Morrison

4.2 Alyssa Morrison 30 May 2024 13:27

Pertinent crossroad data included on pages 4-6

F0523_BaselineRd_TI_IDCR_Appendix.pdf

Page **2**

PHOENIX – CASA GRANDE HIGHWAY
I-10

I-10; BASELINE RD TRAFFIC INTERCHANGE
TRACS NO. 010-C(229)T F0253 01L

AASHTO CONTROLLING DESIGN CRITERIA REPORT

May 2024

PREPARED FOR:

ARIZONA DEPARTMENT OF TRANSPORTATION

PREPARED BY:

AZTEC TYPSA

501 N. 44TH ST, SUITE 300
PHOENIX, AZ 85008

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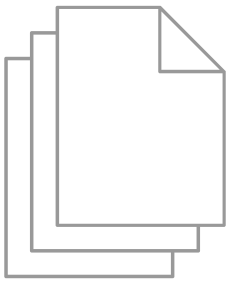

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Owner
Alyssa Morrison

Created
2 May 2024 15:38 by Alyssa Morrison

State
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Status
S O C D Pending

Version ID
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Comments
6

Pages
70

Files

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

Workflow

Stages

Stage 1 S O C D **Pending** 24 May 2024 15:15

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
aaron@gordleygroup.com	Read only	S O	0	0
Ali Zareh	Reviewer	S O C	0	0
Alyssa Morrison	Reviewer & Approver	S O C D	0	14
Brandon S Campbell	Reviewer	S O C	0	0
Breeann Draper	Read only	S O	0	0
catherine_hollow@tempe.gov	Reviewer	S O C	4	0
chase_walman@tempe.gov	Reviewer	S O C	0	0
Dan Woelzlein	Author	S O C D	0	0
dbaker@y2keng.com	Read only	S O	0	0
Dena Whitaker	Reviewer	S O C	0	0
Dennis Haley	Reviewer	S O C	0	0
Diana Dunn	Author	S O C D	0	0
dvoigt@aztec.us	Reviewer	S O C	0	0
E L Brady	Reviewer	S O C	0	0
Eric Hitchcock	Reviewer	S O C	0	0
Gael Luna	Reviewer	S O C	0	0
George Williams	Reviewer	S O C	0	0
Guled Ahmed	Reviewer	S O C	0	0
HirenKumar Shah	Reviewer	S O C	0	0
jan@gordleygroup.com	Read only	S O	0	0
Jeff Kulaga	Reviewer	S O C	0	0
Jennifer Acuna	Reviewer	S O C	0	0
John Gleason	Author	S O C D	0	0
John R Hucko	Reviewer	S O C	0	0
kkiser@azdot.gov	Reviewer	S O C	1	0
Mark Gilliland	Author	S O C D	0	0
Michael Morrison	Reviewer	S O C	0	0
Myesha Harris	Reviewer	S O C	1	0
Nancy Shelton	Read only	S O	0	0
Nicolai Oliden	Read only	S O	0	0
Nikki Green	Reviewer	S O C	0	0
Olivier Mirza	Reviewer & Approver	S O C D	0	0
Pancho Garza	Read only	S O	0	0
Priscilla Hernandez	Reviewer	S O C	0	1
Quinn Castro	Reviewer	S O C	0	0
Randy Everett	Reviewer	S O C	0	0

Raul Amavisca	Reviewer	S O C	0	0
ravi.ambadipudi@jacobs.com	Read only	S O	0	0
Ron Szwiec	Author	S O C D	0	0
Scott Weinland	Reviewer	S O C	0	0
Stephanie Stearns	Reviewer	S O C	0	0
Steve Lohide	Author	S O C D	0	0
Syed Alam	Reviewer	S O C	0	0
Tammy R Mivshek	Reviewer	S O C	0	0
Tim Mahon	Author	S O C D	0	0
tom@gordleygroup.com	Read only	S O	0	0
Tracy Eberlein	Reviewer & Approver	S O C D	0	0
ykoprowski@y2keng.com	Read only	S O	0	0

Stage 2 S O C

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
Anil Mudigonda	Reviewer	S O C	0	0
Jeff Ross	Reviewer	S O C	0	0

Decisions

Stage 1

APPROVER	DECISION	DECISION DATE
Alyssa Morrison	Pending	---
Dan Woelzlein	Pending	---
Diana Dunn	Pending	---
John Gleason	Pending	---
Mark Gilliland	Approved	18 Oct 2024 10:51
Olivier Mirza	Pending	---
Ron Szwiec	Pending	---
Steve Lohide	Pending	---
Tim Mahon	Pending	---
Tracy Eberlein	Pending	---

Stage 2

No decision makers assigned

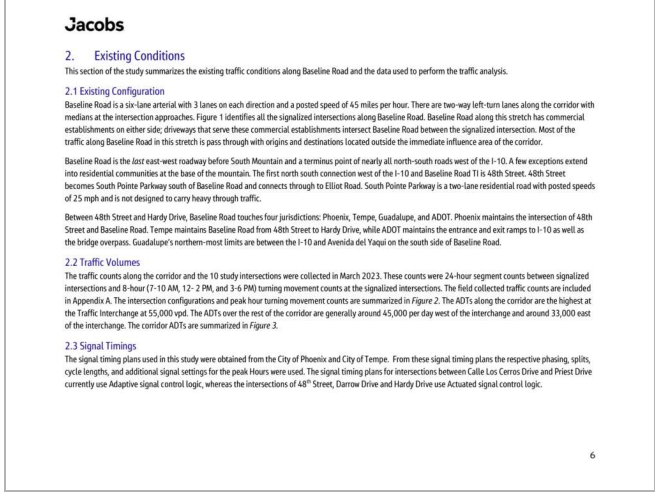
Comments

1 kkiser@azdot.gov 17 May 2024 11:06

I did not see in the report a mention of the existing conditions, that the TI is currently in the middle of a large freeway construction project which may or may not have influence with the data collected (I-10 ramp restrictions, some closures, construction zone TC setups etc.). Is this done on purpose? or if not, would it need to a least be mentioned in the Intro or Existing Conditions section(s)?

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

Page **6**



Jacobs

2. Existing Conditions

This section of the study summarizes the existing traffic conditions along Baseline Road and the data used to perform the traffic analysis.

2.1 Existing Configuration

Baseline Road is a six-lane arterial with 3 lanes on each direction and a posted speed of 45 miles per hour. There are two-way left-turn lanes along the corridor with medians at the intersection approaches. Figure 1 identifies all the signalized intersections along Baseline Road. Baseline Road along this stretch has commercial establishments on either side; driveways that serve these commercial establishments intersect Baseline Road between the signalized intersection. Most of the traffic along Baseline Road in this stretch is pass through with origins and destinations located outside the immediate influence area of the corridor.

Baseline Road is the *last* east-west roadway before South Mountain and a terminus point of nearly all north-south roads west of the I-10. A few exceptions extend into residential communities at the base of the mountain. The first north south connection west of the I-10 and Baseline Road TI is 48th Street. 48th Street becomes South Pointe Parkway south of Baseline Road and connects through to Elliot Road. South Pointe Parkway is a two-lane residential road with posted speeds of 25 mph and is not designed to carry heavy through traffic.

Between 48th Street and Hardy Drive, Baseline Road touches four jurisdictions: Phoenix, Tempe, Guadalupe, and ADOT. Phoenix maintains the intersection of 48th Street and Baseline Road. Tempe maintains Baseline Road from 48th Street to Hardy Drive, while ADOT maintains the entrance and exit ramps to I-10 as well as the bridge overpass. Guadalupe's northern-most limits are between the I-10 and Avenida del Yaqui on the south side of Baseline Road.

2.2 Traffic Volumes

The traffic counts along the corridor and the 10 study intersections were collected in March 2023. These counts were 24-hour segment counts between signalized intersections and 8-hour (7-10 AM, 12- 2 PM, and 3-6 PM) turning movement counts at the signalized intersections. The field collected traffic counts are included in Appendix A. The intersection configurations and peak hour turning movement counts are summarized in *Figure 2*. The ADTs along the corridor are the highest at the Traffic Interchange at 55,000 vpd. The ADTs over the rest of the corridor are generally around 45,000 per day west of the interchange and around 33,000 east of the interchange. The corridor ADTs are summarized in *Figure 3*.

2.3 Signal Timings

The signal timing plans used in this study were obtained from the City of Phoenix and City of Tempe. From these signal timing plans the respective phasing, splits, cycle lengths, and additional signal settings for the peak Hours were used. The signal timing plans for intersections between Calle Los Cerros Drive and Priest Drive currently use Adaptive signal control logic, whereas the intersections of 48th Street, Darrow Drive and Hardy Drive use Actuated signal control logic.

6

1.1 Priscilla Hernandez 17 May 2024 12:00

I have no additional comments. Thank you.

1.2 A - Will Comply 30 May 2024 13:43

Action was applied by Alyssa Morrison

1.3 Alyssa Morrison 30 May 2024 13:43

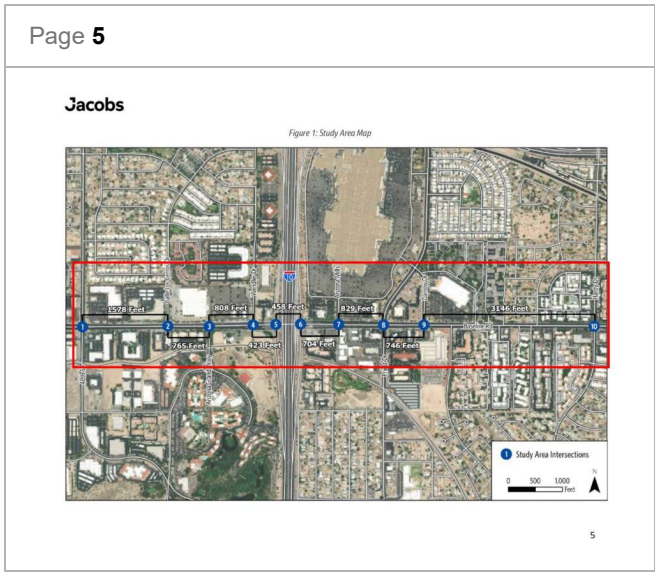
Jacobs to verify

2 catherine_hollow@tempe.gov 17 May 2024 15:42

please check distances

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

Page **5**



Jacobs

Figure 1: Study Area Map

1578 Feet
808 Feet
458 Feet
829 Feet
3146 Feet
765 Feet
529 Feet
704 Feet
746 Feet
Study Area Intersections
0 500 1,000 Feet

5

2.1 A - Will Comply 30 May 2024 13:42

Action was applied by Alyssa Morrison

2.2 Alyssa Morrison 30 May 2024 13:42

Jacobs to verify

3 **catherine_hollow@tempe.gov** 17 May 2024 15:44

Do we have data on this? Or is it anecdotal?

3.1 **B - Consultant/Designer to Evaluate** 30 May 2024 13:44

Action was applied by Alyssa Morrison

3.2 **Alyssa Morrison** 30 May 2024 13:44

Jacobs to evaluate

3.3 **A - Will Comply** 14 Jun 2024 09:49

Action was applied by Alyssa Morrison

3.4 **Alyssa Morrison** 17 Jun 2024 09:04

Per CRM discussion

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

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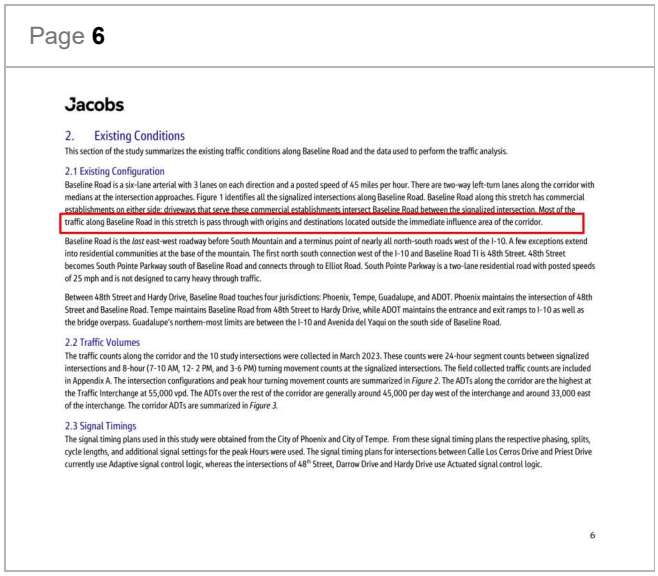

Jacobs

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6

4 **catherine_hollow@tempe.gov** 17 May 2024 15:47

But not the signals

4.1 **A - Will Comply** 30 May 2024 13:45

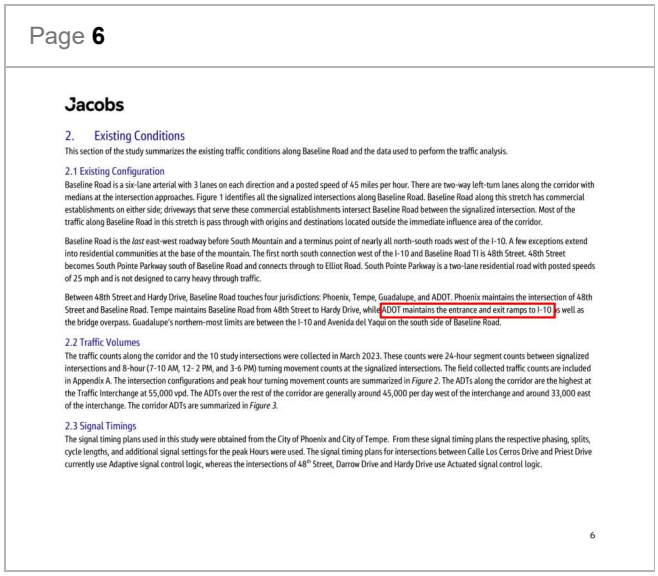
Action was applied by Alyssa Morrison

4.2 **Alyssa Morrison** 30 May 2024 13:46

Jacobs to address

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

Page **6**



Jacobs

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6

5 catherine_hollow@tempe.gov 17 May 2024 15:52

Please add distances to the table

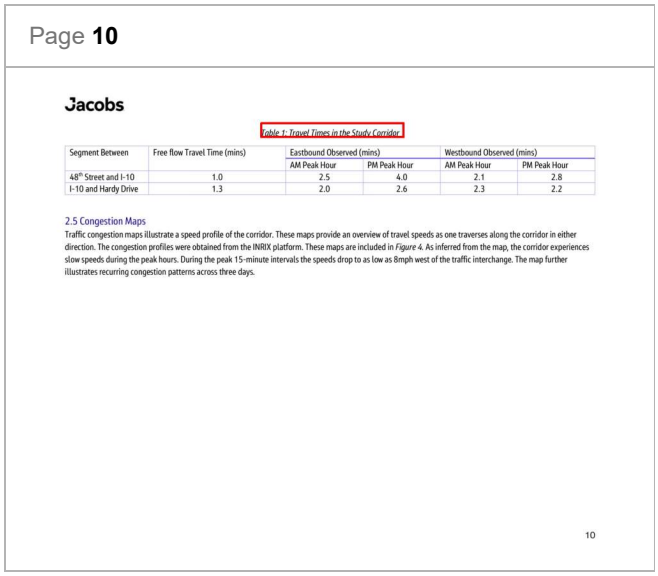
5.1 A - Will Comply 30 May 2024 13:46

Action was applied by Alyssa Morrison

5.2 Alyssa Morrison 30 May 2024 13:47

Jacobs to address

F0523_BaselineRd_TI_Initial_TraffRpt.pdf


Page **10**

Jacobs

Table 1: Travel Times in the Study Corridor

Segment Between	Free flow Travel Time (mins)	Eastbound Observed (mins)		Westbound Observed (mins)	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
48th Street and I-10	1.0	2.5	4.0	2.1	2.8
I-10 and Hardy Drive	1.3	2.0	2.6	2.3	2.2

2.5 Congestion Maps

Traffic congestion maps illustrate a speed profile of the corridor. These maps provide an overview of travel speeds as one traverses along the corridor in either direction. The congestion profiles were obtained from the INRIX platform. These maps are included in *Figure 4*. As inferred from the map, the corridor experiences slow speeds during the peak hours. During the peak 15-minute intervals the speeds drop to as low as 8mph west of the traffic interchange. The map further illustrates recurring congestion patterns across three days.

10

6 Myesha Harris 22 May 2024 17:29

The City of Phoenix is generally in agreement with proceeding with presenting the three alternatives for the I-10 Baseline Traffic Interchange (TI) Initial Design Concept Report (DCR) to the public. The Street Transportation Department has reviewed the Initial DCR and the concepts regarding the Modified Directional Interchange (MDI) and the Diverging Diamond Interchange (DDI), and we find that they generally align with the City's objectives.
While we are supportive of the proposed alternatives, we do have initial concerns regarding the anticipated increase in delay for northbound movements at 48th Street. However, the city believes that this difference in delay, as well as the Level of Service (LOS), can be effectively addressed through signal timing and phasing adjustments.
In moving forward, the city would appreciate continued collaboration and dialogue to ensure that the chosen alternative optimally addresses both traffic flow and community needs. The city remains committed to working closely with all stakeholders involved to achieve the best possible outcome for the residents and commuters of Phoenix.

F0523_BaselineRd_TI_Initial_TraffRpt.pdf

Page **1**

Jacobs

I-10 and Baseline Road TI DCR (F0523 01L)

Initial Traffic Report

1

6.1 Alyssa Morrison 6 Jun 2024 13:21

We will continue to collaborate with the City.

6.2 A - Will Comply 6 Jun 2024 13:21

Action was applied by Alyssa Morrison

F0523_Baseline_Rd_TI_FDCR.pdf

Printed at 20 Dec 2024 08:26

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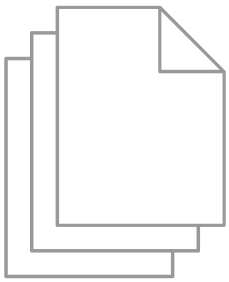

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14 Nov 2024 11:43 by Alyssa Morrison

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Version ID
139359223

Comments
11

Pages
67

Files

F0523_Baseline_Rd_TI_FDCR.pdf

Workflow

Stages

Stage 1

S O C D **Pending**

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
aaron@gordleygroup.com	Read only	S O	0	0
Ali Zareh	Reviewer	S O C	0	0
Alyssa Morrison	Reviewer & Approver	S O C D	0	14
Anahita Behrad	Reviewer	S O C	7	0
Brandon S Campbell	Reviewer	S O C	0	0
Breeann Draper	Read only	S O	0	0
catherine_hollow@tempe.gov	Reviewer	S O C	0	0
chase_walman@tempe.gov	Reviewer	S O C	0	0
Dan Woelzlein	Author	S O C D	0	0
dbaker@y2keng.com	Read only	S O	0	0
Dennis Haley	Reviewer	S O C	0	0
Diana Dunn	Author	S O C D	0	7
E L Brady	Reviewer	S O C	0	0
Eric Hitchcock	Reviewer	S O C	0	0
Gael Luna	Reviewer	S O C	0	0
George Williams	Reviewer	S O C	0	0
Guled Ahmed	Reviewer	S O C	1	0
HirenKumar Shah	Reviewer	S O C	0	0
jan@gordleygroup.com	Read only	S O	0	0
Jeff Kulaga	Reviewer	S O C	0	0
Jennifer Acuna	Reviewer	S O C	0	0
John R Hucko	Reviewer	S O C	0	0
Katie Rodriguez	Reviewer	S O C	0	0
kkiser@azdot.gov	Reviewer	S O C	0	0
Mark Gilliland	Author	S O C D	0	1
Michael Morrison	Reviewer	S O C	0	0
Myesha Harris	Reviewer	S O C	0	0
Nancy Shelton	Read only	S O	0	0
Nicolai Oliden	Read only	S O	0	0
Nikki Green	Reviewer	S O C	0	0
Olivier Mirza	Reviewer & Approver	S O C D	0	0
Pancho Garza	Read only	S O	0	0
Priscilla Hernandez	Reviewer	S O C	0	0
Quinn Castro	Reviewer	S O C	0	0
Randy Everett	Reviewer	S O C	0	0
Raul Amavisca	Reviewer	S O C	0	0

ravi.ambadipudi@jacobs.com	Read only	S O	0	0
Ron Szwiec	Author	S O C D	0	0
Scott Weinland	Reviewer	S O C	0	0
Stephanie Stearns	Reviewer	S O C	0	0
Steve Lohide	Author	S O C D	0	0
Syed Alam	Reviewer	S O C	0	0
Tammy R Mivshek	Reviewer	S O C	0	0
Tim Mahon	Author	S O C D	0	0
tom@gordleygroup.com	Read only	S O	0	0
Tracy Eberlein	Reviewer & Approver	S O C D	3	0
Wisam Qasim	Reviewer	S O C	0	0
ykoprowski@y2keng.com	Read only	S O	0	0

Decisions

Stage 1

APPROVER	DECISION	DECISION DATE
Alyssa Morrison	Pending	---
Dan Woelzlein	Pending	---
Diana Dunn	Pending	---
Mark Gilliland	Pending	---
Olivier Mirza	Pending	---
Ron Szwiec	Pending	---
Steve Lohide	Pending	---
Tim Mahon	Pending	---
Tracy Eberlein	Pending	---

Comments

1 Guled Ahmed 18 Nov 2024 22:43

Would there be Wall Selection report during design stage?

1.1 Mark Gilliland 11 Dec 2024 13:21

C - ADOT to evaluate during scoping of the final design

1.2 C - ADOT Team to Evaluate 19 Dec 2024 09:09

Action was applied by Alyssa Morrison

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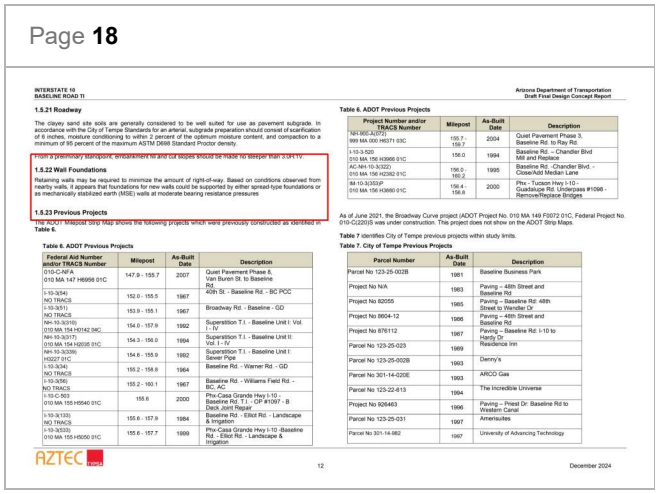

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Draft Final Design Concept Report

1.5.21 Roadway

The clayey sand site soils are generally considered to be well suited for use as pavement subgrade. In accordance with the City of Tempe Standards for an arterial, subgrade preparation should consist of scarification of 6 inches, moisture conditioning to within 2 percent of the optimum moisture content, and compaction to a minimum of 95 percent of the maximum ASTM D698 Standard Proctor density.

From a preliminary standpoint, embankment fill and cut slopes should be made no steeper than 3:1(H:V).

1.5.22 Wall Foundations

Retaining walls may be required to minimize the amount of right-of-way. Based on conditions observed from nearby walls, it appears that foundations for new walls could be supported by either spread-type foundations or as mechanically stabilized earth (MSE) walls at moderate bearing resistance pressures

1.5.23 Previous Projects

The ADOT Mapcod strip map shows the following projects which were previously constructed as identified in Table 6.

Table 6. ADOT Previous Projects

Federal Aid Number and/or TRACS Number	Milepost	As-Built Date	Description
010-C-NFA 010 MA 147 H6956 01C	147.9 - 155.7	2007	Quiet Pavement Phase 8, Van Buren St. to Baseline Rd.
I-10-3(54) NO TRACS	152.0 - 155.5	1967	40th St. - Baseline Rd. - BC PCC
I-10-3(51) NO TRACS	153.9 - 155.1	1967	Broadway Rd. - Baseline - GD
NH-10-3(310) 010 MA 154 H7142 04C	154.0 - 157.9	1992	Superstition T.I. - Baseline Unit I: Vol. I - IV
NH-10-3(317) 010 MA 154 H2035 01C	154.3 - 156.0	1994	Superstition T.I. - Baseline Unit II: Vol. I - IV
NH-10-3(339) H5027 01C	154.6 - 155.9	1992	Superstition T.I. - Baseline Unit I: Sewer Pipe
I-10-3(34) NO TRACS	155.2 - 158.8	1964	Baseline Rd. - Warner Rd. - GD
I-10-3(56) NO TRACS	155.2 - 160.1	1967	Baseline Rd. - Williams Field Rd. - BC, AC
I-10-C-503 010 MA 155 H5540 01C	155.6	2000	Phx-Casa Grande Hwy I-10 - Baseline Rd. T.I. - DP #1097 - B Deck Joint Repair
I-10-3(133) NO TRACS	155.6 - 157.9	1984	Baseline Rd. - Elliot Rd. - Landscape & Irrigation
I-10-3(533) 010 MA 155 H5050 01C	155.6 - 157.7	1999	Phx-Casa Grande Hwy I-10 -Baseline Rd. - Elliot Rd. - Landscape & Irrigation

Table 6. ADOT Previous Projects

Project Number and/or TRACS Number	Milepost	As-Built Date	Description
NH-900-A(207) 999 MA 000 H6371 03C	155.7 - 159.7	2004	Quiet Pavement Phase 3, Baseline Rd. to Ray Rd.
I-10-3-520 010 MA 156 H3666 01C	156.0	1994	Baseline Rd. – Chandler Blvd Mill and Replace
AC-NH 10-3(322) 010 MA 156 H2382 01C	156.0 - 160.2	1995	Baseline Rd. -Chandler Blvd. - Close/Add Median Lane
IM-10-3(353)P 010 MA 156 H3880 01C	156.4 - 156.8	2000	Phx - Tucson Hwy I-10 - Guadalupe Rd. Underpass #1096 - Remove/Replace Bridges

As of June 2021, the Broadway Curve project (ADOT Project No. 010 MA 149 F5572 01C, Federal Project No. 010-C(220)S was under construction. The project does not show on the ADOT Strip Maps.

Table 7 identifies City of Tempe previous projects within study limits.

Table 7. City of Tempe Previous Projects

Parcel Number	As-Built Date	Description
Parcel No 123-25-002B	1981	Baseline Business Park
Project No N/A	1983	Paving – 48th Street and Baseline Rd
Project No 82055	1985	Paving – Baseline Rd: 48th Street to Wendler Dr
Project No 8604-12	1986	Paving – 48th Street and Baseline Rd
Project No 876112	1987	Paving – Baseline Rd: I-10 to Hardy Dr
Parcel No 123-25-023	1989	Residence Inn
Parcel No 123-25-002B	1993	Denny's
Parcel No 301-14-020E	1993	ARCO Gas
Parcel No 123-22-613	1994	The Incredible Universe
Project No 926463	1996	Paving – Priest Dr: Baseline Rd to Western Canal
Parcel No 123-25-031	1997	Americuites
Parcel No 301-14-982	1997	University of Advancing Technology

AZTEC

12

December 2024

2 Anahita Behrad 19 Nov 2024 13:45

Please reference CE manual instead of EA and EIS manual since this is anticipated to be a CE.

2.1 Diana Dunn 9 Dec 2024 15:51

Will revised to CE Checklist Manual (October 2024)

2.2 A - Will Comply 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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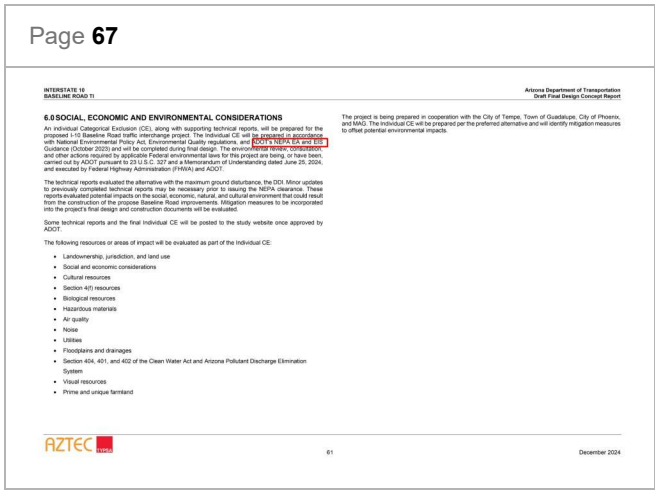

INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Draft Final Design Concept Report

6.0 SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

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AZTEC

61

December 2024

3 Anahita Behrad 19 Nov 2024 13:48

please make sure that you are consistent with the project's naming convention and capitalization throughout the report.

3.1 Diana Dunn 9 Dec 2024 15:51

Will ensure name matches rest of document

3.2 A - Will Comply 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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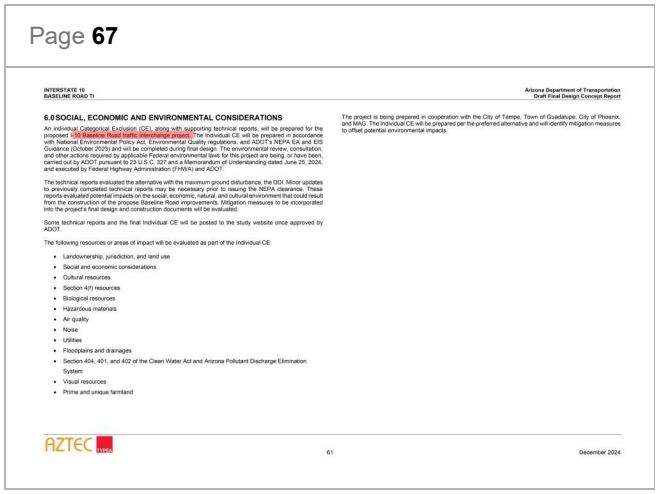
Page **67**



INTERSTATE 10
BASELINE ROAD TI

Arizona Department of Transportation
Draft Final Design Concept Report

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AZTEC

61

December 2024

4 **Anahita Behrad** 19 Nov 2024 13:49

will be

4.1 **Diana Dunn** 9 Dec 2024 15:49

Will revised

4.2 **A - Will Comply** 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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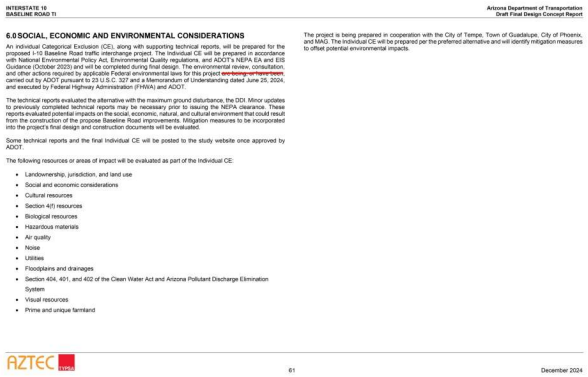
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Draft Final Design Concept Report

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AZTEC

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December 2024

5 **Anahita Behrad** 19 Nov 2024 13:51

previously defined in the document, no need to redefine.

5.1 **Diana Dunn** 9 Dec 2024 15:49

Will revise to FHWA

5.2 **A - Will Comply** 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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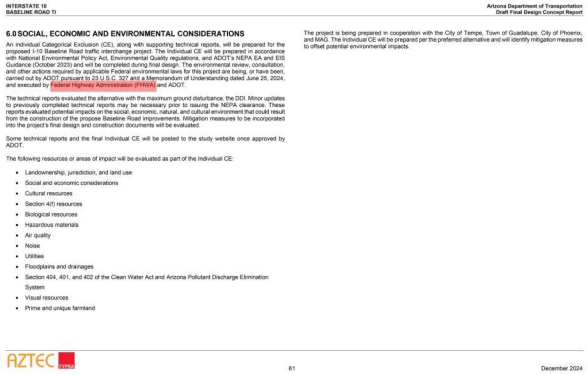
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Draft Final Design Concept Report

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December 2024

6 **Anahita Behrad** 19 Nov 2024 13:52

we normally don't put CE documents on the website, please remove.

6.1 **Diana Dunn** 9 Dec 2024 15:49

Will remove sentence.

6.2 **A - Will Comply** 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

6.3 **A - Will Comply** 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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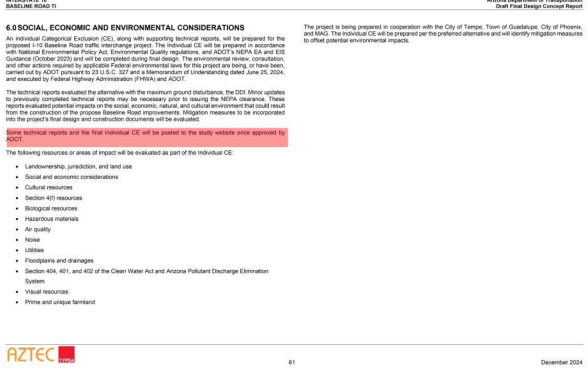
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BASELINE ROAD TI

Arizona Department of Transportation
Draft Final Design Concept Report

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61

December 2024

7 Anahita Behrad 19 Nov 2024 13:54

please reconsider this paragraph now that we are not advancing NEPA. I would just delete to be safe

7.1 Diana Dunn 9 Dec 2024 15:48

Will remove paragraph.

7.2 A - Will Comply 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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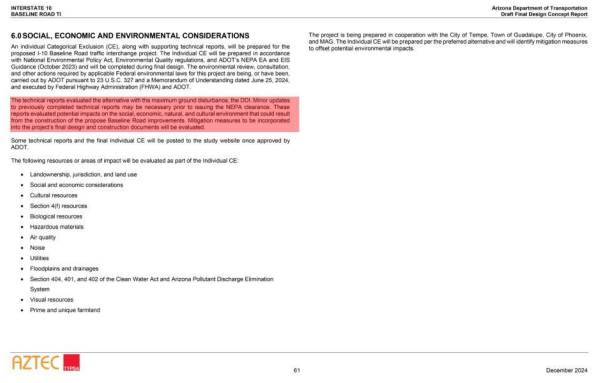

INTERSTATE 10
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Arizona Department of Transportation
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61

December 2024

8 Anahita Behrad 27 Nov 2024 13:43

change to next phase of design

8.1 Diana Dunn 9 Dec 2024 15:51

Will revised

8.2 A - Will Comply 19 Dec 2024 09:16

Action was applied by Alyssa Morrison

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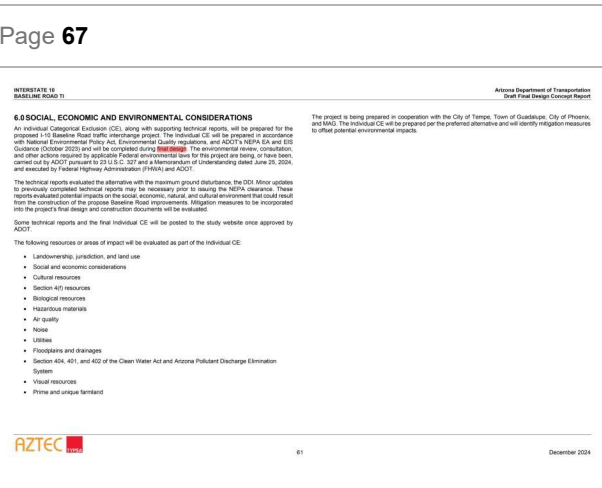

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61

December 2024

9 Tracy Eberlein 17 Dec 2024 14:00

Section 2.3.3 - Please add average travel time WB and EB for AM and PM Peak Hour for MDI and DDI.

9.1 A - Will Comply 20 Dec 2024 08:26

Action was applied by Alyssa Morrison

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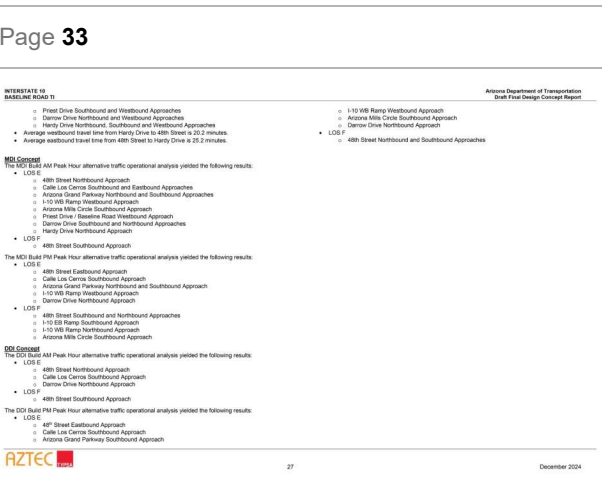

INTERSTATE 10
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- Priest Drive Southbound and Westbound Approaches
- Darrow Drive Northbound and Westbound Approaches
- Hardy Drive Northbound, Southbound and Westbound Approaches
- Average westbound travel time from Hardy Drive to 48th Street is 20.2 minutes.
- Average eastbound travel time from 48th Street to Hardy Drive is 25.2 minutes.

MDI Concept
The MDI Build AM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Northbound Approach
  - Calle Los Cerros Southbound and Eastbound Approaches
  - Arizona Grand Parkway Northbound and Southbound Approaches
  - I-10 WB Ramp Westbound Approach
  - Arizona Mills Circle Southbound Approach
  - Priest Drive / Baseline Road Westbound Approach
  - Darrow Drive Southbound and Northbound Approaches
  - Hardy Drive Northbound Approach
- LOS F
  - 48th Street Southbound Approach

The MDI Build PM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Eastbound Approach
  - Calle Los Cerros Southbound Approach
  - Arizona Grand Parkway Northbound and Southbound Approach
  - I-10 WB Ramp Westbound Approach
  - Darrow Drive Northbound Approach
- LOS F
  - 48th Street Southbound and Northbound Approaches
  - I-10 EB Ramp Southbound Approach
  - I-10 WB Ramp Northbound Approach
  - Arizona Mills Circle Southbound Approach

DDI Concept
The DDI Build AM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Northbound Approach
  - Calle Los Cerros Southbound Approach
  - Darrow Drive Northbound Approach
- LOS F
  - 48th Street Southbound Approach

The DDI Build PM Peak Hour alternative traffic operational analysis yielded the following results:

- LOS E
  - 48th Street Eastbound Approach
  - Calle Los Cerros Southbound Approach
  - Arizona Grand Parkway Southbound Approach
- I-10 WB Ramp Westbound Approach
- Arizona Mills Circle Southbound Approach
- Darrow Drive Northbound Approach
- LOS F
  - 48th Street Northbound and Southbound Approaches

AZTEC

27

December 2024

10 Tracy Eberlein 17 Dec 2024 15:02

Is this COT standard? May need a design exception for lane width

10.1 Alyssa Morrison 19 Dec 2024 11:06

COT standard lane width is 12 ft and tapers to 11ft at intersections. Will revise.

10.2 A - Will Comply 19 Dec 2024 11:06

Action was applied by Alyssa Morrison

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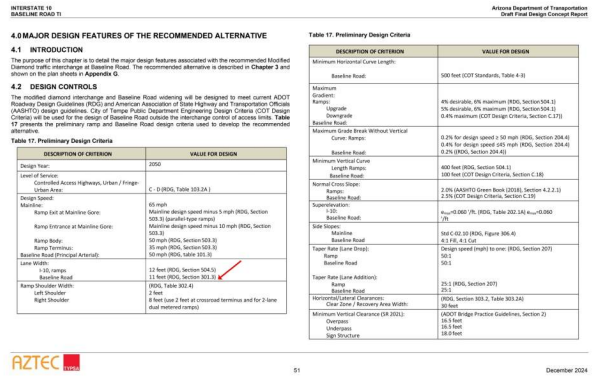

INTERSTATE 10
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4.0 MAJOR DESIGN FEATURES OF THE RECOMMENDED ALTERNATIVE

4.1 INTRODUCTION

The purpose of this chapter is to detail the major design features associated with the recommended Modified Diamond traffic interchange at Baseline Road. The recommended alternative is described in **Chapter 3** and shown on the plan sheets in **Appendix Q**.

4.2 DESIGN CONTROLS

The modified diamond interchange and Baseline Road widening will be designed to meet current ADOT Roadway Design Guidelines (RDG) and American Association of State Highway and Transportation Officials (AASHTO) design guidelines. City of Tempe Public Department Engineering Design Criteria (COT Design Criteria) will be used for the design of Baseline Road outside the interchange control of access limits. **Table 17** presents the preliminary ramp and Baseline Road design criteria used to develop the recommended alternative.

Table 17. Preliminary Design Criteria

DESCRIPTION OF CRITERION	VALUE FOR DESIGN
Design Year:	2050
Level of Service: Controlled Access Highways, Urban / Fringe-Urban Area:	C - D (RDG, Table 103.2A)
Design Speed: Mainline: Ramp Exit at Mainline Gore: Ramp Entrance at Mainline Gore: Ramp Body: Ramp Terminus: Baseline Road (Principal Arterial):	65 mph Mainline design speed minus 5 mph (RDG, Section 503.3) (parallel-type ramps) Mainline design speed minus 10 mph (RDG, Section 503.3) 50 mph (RDG, Section 503.3) 35 mph (RDG, Section 503.3) 50 mph (RDG, table 101.3)
Lane Width: I-10, ramps Baseline Road	12 feet (RDG, Section 504.5) 11 feet (RDG, Section 301.3)
Ramp Shoulder Width: Left Shoulder Right Shoulder	(RDG, Table 302.4) 2 feet 8 feet (use 2 feet at crossroad terminus and for 2-lane dual metered ramps)

Table 17. Preliminary Design Criteria

DESCRIPTION OF CRITERION	VALUE FOR DESIGN
Minimum Horizontal Curve Length: Baseline Road:	500 feet (COT Standards, Table 4-3)
Maximum Gradient: Ramps: Upgrade Downgrade Baseline Road:	4% desirable, 6% maximum (RDG, Section 504.1) 5% desirable, 6% maximum (RDG, Section 504.1) 0.4% maximum (COT Design Criteria, Section C.17))
Maximum Grade Break Without Vertical Curve: Ramps: Baseline Road:	0.2% for design speed ≥ 50 mph (RDG, Section 204.4) 0.4% for design speed ≤45 mph (RDG, Section 204.4) 0.2% (RDG, Section 204.4))
Minimum Vertical Curve Length Ramps: Baseline Road:	400 feet (RDG, Section 504.1) 100 feet (COT Design Criteria, Section C.18)
Normal Cross Slope: Ramps: Baseline Road:	2.0% (AASHTO Green Book (2018), Section 4.2.2.1) 2.5% (COT Design Criteria, Section C.19)
Superelevation: I-10: Baseline Road:	e_{max}=0.060 ^{ft}/$_{ft}$, (RDG, Table 202.1A) e_{max}=0.060 ^{ft}/$_{ft}$
Side Slopes: Mainline Baseline Road	Std C-02.10 (RDG, Figure 306.4) 4:1 Fill, 4:1 Cut
Taper Rate (Lane Drop): Ramp Baseline Road Taper Rate (Lane Addition): Ramp Baseline Road	Design speed (mph) to one: (RDG, Section 207) 50:1 50:1 25:1 (RDG, Section 207) 25:1
Horizontal/Lateral Clearances: Clear Zone / Recovery Area Width:	(RDG, Section 303.2, Table 303.2A) 30 feet
Minimum Vertical Clearance (SR 202L): Overpass Underpass Sign Structure	(ADOT Bridge Practice Guidelines, Section 2) 16.5 feet 16.5 feet 18.0 feet

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December 2024

11 Tracy Eberlein 17 Dec 2024 15:03

Is this COT or RDG?

11.1 Alyssa Morrison 19 Dec 2024 09:55

COT

11.2 A - Will Comply 19 Dec 2024 09:55

Action was applied by Alyssa Morrison

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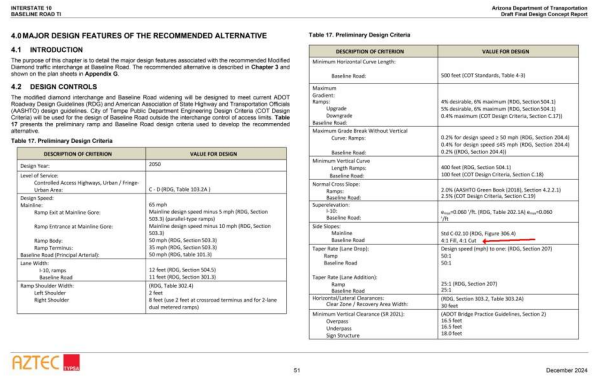

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Maximum Gradient: Ramps: Upgrade Downgrade Baseline Road:	4% desirable, 6% maximum (RDG, Section 504.1) 5% desirable, 6% maximum (RDG, Section 504.1) 0.4% maximum (COT Design Criteria, Section C.17))
Maximum Grade Break Without Vertical Curve: Ramps: Baseline Road:	0.2% for design speed ≥ 50 mph (RDG, Section 204.4) 0.4% for design speed ≤45 mph (RDG, Section 204.4) 0.2% (RDG, Section 204.4))
Minimum Vertical Curve Length Ramps: Baseline Road:	400 feet (RDG, Section 504.1) 100 feet (COT Design Criteria, Section C.18)
Normal Cross Slope: Ramps: Baseline Road:	2.0% (AASHTO Green Book (2018), Section 4.2.2.1) 2.5% (COT Design Criteria, Section C.19)
Superelevation: I-10: Baseline Road:	e_{max}=0.060 ^{ft}/$_{ft}$, (RDG, Table 202.1A) e_{max}=0.060 ^{ft}/$_{ft}$
Side Slopes: Mainline Baseline Road	Std C-02.10 (RDG, Figure 306.4) 4:1 Fill, 4:1 Cut
Taper Rate (Lane Drop): Ramp Baseline Road Taper Rate (Lane Addition): Ramp Baseline Road	Design speed (mph) to one: (RDG, Section 207) 50:1 50:1 25:1 (RDG, Section 207) 25:1
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December 2024

F0523_BaselineRd_TI_FDCR_Appendix.pdf v.1/1

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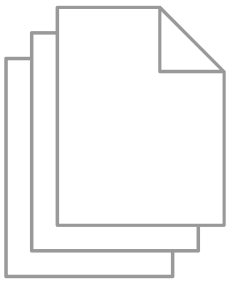

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Alyssa Morrison

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Version ID
139359222

Comments
32

Pages
423

Files

F0523_BaselineRd_TI_FDCR_Appendix.pdf

Workflow

Stages

Stage 1

S O C D **Pending**

RECIPIENT	PROOF ROLE	STATUS	COMMENTS	REPLIES
aaron@gordleygroup.com	Read only	S O	0	0
Ali Zareh	Reviewer	S O C	0	0
Alyssa Morrison	Reviewer & Approver	S O C D	0	55
Anahita Behrad	Reviewer	S O C	0	0
Brandon S Campbell	Reviewer	S O C	0	0
Breeann Draper	Read only	S O	0	0
catherine_hollow@tempe.gov	Reviewer	S O C	0	0
chase_walman@tempe.gov	Reviewer	S O C	0	0
Dan Woelzlein	Author	S O C D	0	0
dbaker@y2keng.com	Read only	S O	0	0
Dennis Haley	Reviewer	S O C	5	0
Diana Dunn	Author	S O C D	0	0
E L Brady	Reviewer	S O C	0	0
Eric Hitchcock	Reviewer	S O C	0	0
Gael Luna	Reviewer	S O C	0	0
George Williams	Reviewer	S O C	0	0
Guled Ahmed	Reviewer	S O C	0	0
HirenKumar Shah	Reviewer	S O C	0	0
jan@gordleygroup.com	Read only	S O	0	0
Jeff Kulaga	Reviewer	S O C	0	0
Jennifer Acuna	Reviewer	S O C	0	0
John R Hucko	Reviewer	S O C	0	0
kkiser@azdot.gov	Reviewer	S O C	0	0
Mark Gilliland	Author	S O C D	0	0
Michael Morrison	Reviewer	S O C	0	0
Myesha Harris	Reviewer	S O C	0	0
Nancy Shelton	Read only	S O	0	0
Nicolai Oliden	Read only	S O	0	0
Nikki Green	Reviewer	S O C	0	0
Olivier Mirza	Reviewer & Approver	S O C D	0	0
Pancho Garza	Read only	S O	0	0
Priscilla Hernandez	Reviewer	S O C	0	0
Quinn Castro	Reviewer	S O C	0	0
Randy Everett	Reviewer	S O C	0	0
Raul Amavisca	Reviewer	S O C	0	0

ravi.ambadipudi@jacobs.com	Read only	S O	0	0
Ron Szwiec	Author	S O C D	0	0
Scott Weinland	Reviewer	S O C	0	0
Stephanie Stearns	Reviewer	S O C	0	0
Steve Lohide	Author	S O C D	0	0
Syed Alam	Reviewer	S O C	0	0
Tammy R Mivshek	Reviewer	S O C	0	0
Tim Mahon	Author	S O C D	0	0
tom@gordleygroup.com	Read only	S O	0	0
Tracy Eberlein	Reviewer & Approver	S O C D	27	0
Wisam Qasim	Reviewer	S O C	0	0
ykoprowski@y2keng.com	Read only	S O	0	0

Decisions

Stage 1

APPROVER	DECISION	DECISION DATE
Alyssa Morrison	Pending	---
Dan Woelzlein	Pending	---
Diana Dunn	Pending	---
Mark Gilliland	Pending	---
Olivier Mirza	Pending	---
Ron Szwiec	Pending	---
Steve Lohide	Pending	---
Tim Mahon	Pending	---
Tracy Eberlein	Pending	---

Comments

1 **Dennis Haley** 19 Nov 2024 08:52

Show existing R/W on AZ Grand Pkwy.

1.1 **A - Will Comply** 19 Dec 2024 10:37

Action was applied by Alyssa Morrison

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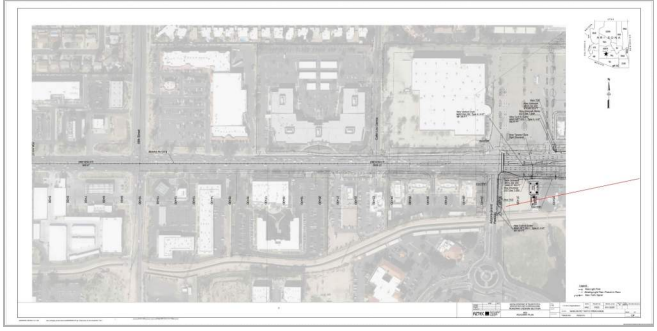

2 **Dennis Haley** 19 Nov 2024 08:56

Show existing R/W on south side of Baseline Rd. and east side of I-10

2.1 **A - Will Comply** 19 Dec 2024 10:36

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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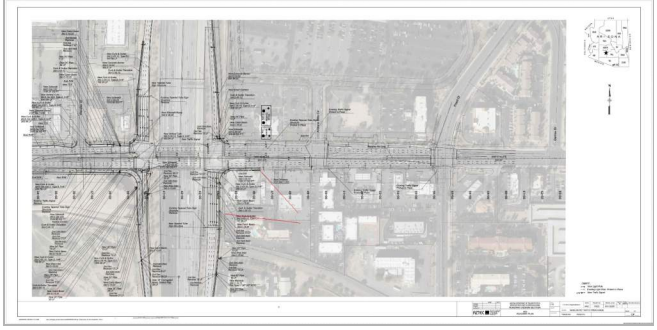

3 **Dennis Haley** 19 Nov 2024 08:59

Show existing R/W on north and south side of Baseline Rd.

3.1 **A - Will Comply** 19 Dec 2024 10:35

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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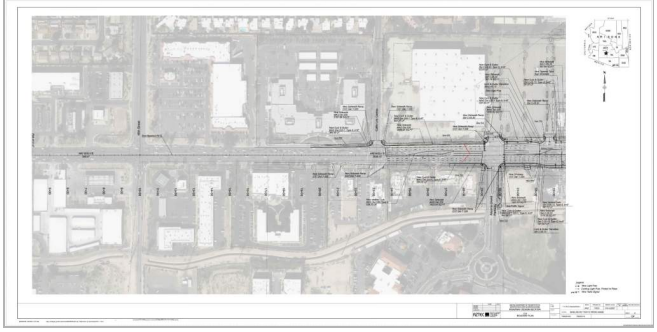

4 **Dennis Haley** 19 Nov 2024 09:02

Show existing R/W on both sides of I-10

4.1 **Thread resolved** 19 Dec 2024 09:39

This thread was resolved by Alyssa Morrison

4.2 **Thread reopened** 19 Dec 2024 09:39

This thread was reopened by Alyssa Morrison

4.3 **A - Will Comply** 19 Dec 2024 09:39

Action was applied by Alyssa Morrison

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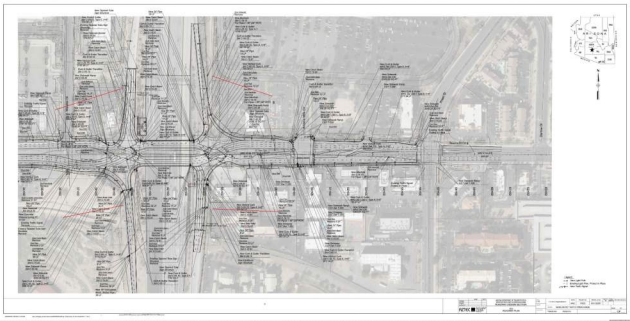

5 **Dennis Haley** 19 Nov 2024 09:14

Why is new R/W line shown here?

5.1 **Alyssa Morrison** 19 Dec 2024 09:32

Town of Guadalupe indicated the closure of driveways will result in a full right of way take of parcel.

5.2 **D - Design Team Recommends No Further Acti on Taken** 19 Dec 2024 09:32

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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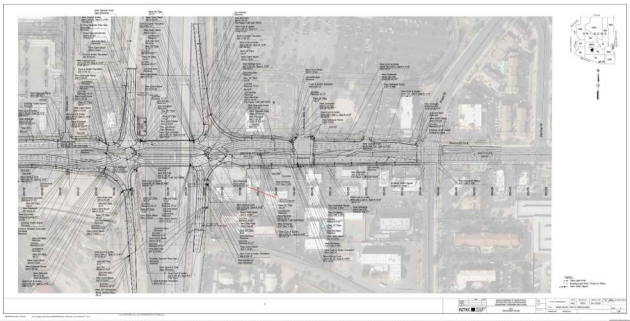

6 Tracy Eberlein 18 Dec 2024 15:05

[REPLACE] F0253
[WITH] F0523

6.1 A - Will Comply 19 Dec 2024 09:25

Action was applied by Alyssa Morrison

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PHOENIX – CASA GRANDE HIGHWAY
I-10

I-10; BASELINE RD TRAFFIC INTERCHANGE
TRACS NO. 010-C(229)T ~~F0253~~ 1 01L

AASHTO CONTROLLING DESIGN CRITERIA REPORT

May 2024

PREPARED FOR:

ARIZONA DEPARTMENT OF TRANSPORTATION

PREPARED BY:

AZTEC TYPSA

501 N. 44TH ST, SUITE 300
PHOENIX, AZ 85008

7 **Tracy Eberlein** 18 Dec 2024 15:07

add to the reference - A Policy on Design Standards - Interstate System, May 2016

7.1 **A - Will Comply** 19 Dec 2024 09:26

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

Page **4**

AASHTO Controlling Design Criteria Report — ADOT
Design Concept Report — I-10; Baseline Rd TI

SUMMARY OF NONCONFORMING EXISTING DESIGN FEATURES

(Note: The analysis of all design features is based upon the 2018 AASHTO Green Book.)

Baseline Rd T.I. (M.P. 156.0)

The following existing ramps do not meet horizontal curve standards as follows:

1. Ramp A available design speed of 15 mph is lower than required 35 mph for existing vertical geometry.

April 2023
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F0523_BaselineRd_TI_FDCR_Appendix.pdf

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AASHTO Controlling Design Criteria Report — ADOT
Design Concept Report — I-10; Baseline Rd TI

SUMMARY OF NONCONFORMING EXISTING DESIGN FEATURES

(Note: The analysis of all design features is based upon the 2018 AASHTO Green Book.)

Baseline Rd T.I. (M.P. 156.0)

The following existing ramps do not meet horizontal curve standards as follows:

1. Ramp A available design speed of 15 mph is lower than required 35 mph for existing vertical geometry.

April 2023

iii

8 Tracy Eberlein 18 Dec 2024 15:07

design exception is not required for sag vertical curves.

8.1 Alyssa Morrison 19 Dec 2024 11:08

Design exception removed.

8.2 A - Will Comply 19 Dec 2024 11:08

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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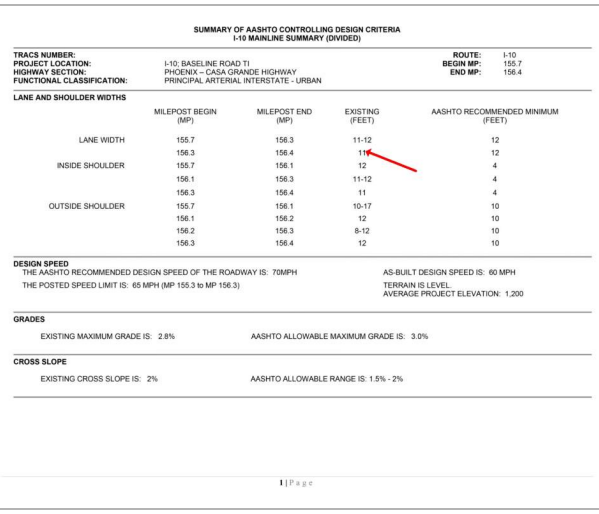


SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRACS NUMBER:
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL INTERSTATE - URBAN
ROUTE: I-10
BEGIN MP: 155.7
END MP: 156.4

LANE AND SHOULDER WIDTHS

	MILEPOST BEGIN (MP)	MILEPOST END (MP)	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
LANE WIDTH	155.7	156.3	11-12	12
	156.3	156.4	11	12
INSIDE SHOULDER	155.7	156.1	12	4
	156.1	156.3	11-12	4
	156.3	156.4	11	4
OUTSIDE SHOULDER	155.7	156.1	10-17	10
	156.1	156.2	12	10
	156.2	156.3	8-12	10
	156.3	156.4	12	10

DESIGN SPEED
THE AASHTO RECOMMENDED DESIGN SPEED OF THE ROADWAY IS: 70MPH
THE POSTED SPEED LIMIT IS: 65 MPH (MP 155.3 to MP 156.3)
AS-BUILT DESIGN SPEED IS: 60 MPH
TERRAIN IS LEVEL.
AVERAGE PROJECT ELEVATION: 1,200

GRADES
EXISTING MAXIMUM GRADE IS: 2.8%
AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2%
AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

1 | Page

9 Tracy Eberlein 18 Dec 2024 15:09

Need DE for lane and shoulder width?

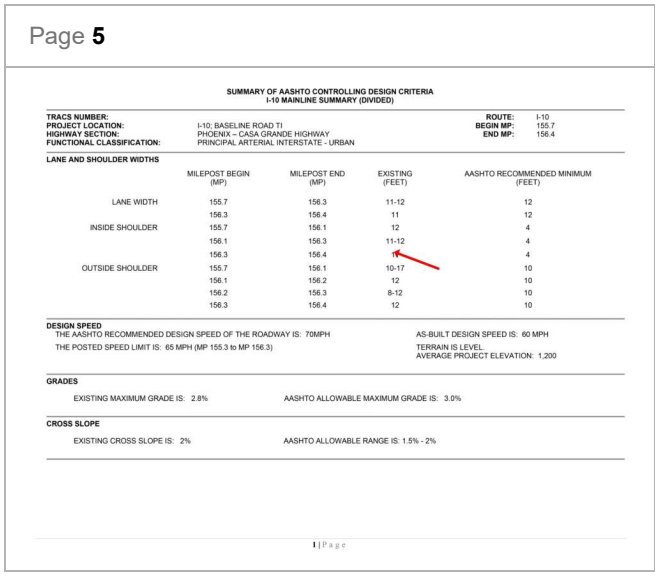
9.1 Alyssa Morrison 19 Dec 2024 13:45

DE from Broadway Curve to remain for Lane and Shoulder width. Added to design exception page

9.2 A - Will Comply 19 Dec 2024 13:45

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf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SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRACS NUMBER:
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL INTERSTATE - URBAN
ROUTE: I-10
BEGIN MP: 155.7
END MP: 156.4

LANE AND SHOULDER WIDTHS

	MILEPOST BEGIN (MP)	MILEPOST END (MP)	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
LANE WIDTH	155.7	156.3	11-12	12
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	156.1	156.3	11-12	4
	156.3	156.4	11	4
OUTSIDE SHOULDER	155.7	156.1	10-17	10
	156.1	156.2	12	10
	156.2	156.3	8-12	10
	156.3	156.4	12	10

DESIGN SPEED
THE AASHTO RECOMMENDED DESIGN SPEED OF THE ROADWAY IS: 70MPH
THE POSTED SPEED LIMIT IS: 65 MPH (MP 155.3 to MP 156.3)
AS-BUILT DESIGN SPEED IS: 60 MPH
TERRAIN IS LEVEL.
AVERAGE PROJECT ELEVATION: 1,200

GRADES
EXISTING MAXIMUM GRADE IS: 2.8%
AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2%
AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

1 | P a g e

10 Tracy Eberlein 18 Dec 2024 15:10

Per AASHTO green book, 10' inside and outside shoulders are required for more than 2 lanes in each direction

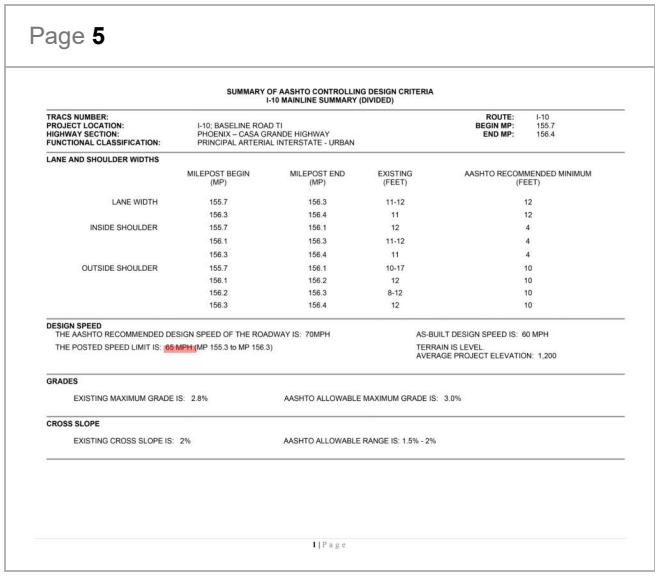
10.1 Alyssa Morrison 19 Dec 2024 13:46

DE from Broadway Curve to remain for Lane and Shoulder width. Added to design exception page

10.2 A - Will Comply 19 Dec 2024 13:46

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf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SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRACS NUMBER:
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL INTERSTATE - URBAN
ROUTE: I-10
BEGIN MP: 155.7
END MP: 156.4

LANE AND SHOULDER WIDTHS

	MILEPOST BEGIN (MP)	MILEPOST END (MP)	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
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	156.3	156.4	11	4
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	156.1	156.2	12	10
	156.2	156.3	8-12	10
	156.3	156.4	12	10

DESIGN SPEED
THE AASHTO RECOMMENDED DESIGN SPEED OF THE ROADWAY IS: 70MPH
THE POSTED SPEED LIMIT IS: ~~65 MPH~~ (MP 155.3 to MP 156.3)
AS-BUILT DESIGN SPEED IS: 60 MPH
TERRAIN IS LEVEL.
AVERAGE PROJECT ELEVATION: 1,200

GRADES
EXISTING MAXIMUM GRADE IS: 2.8%
AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2%
AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

1 | P a g e

11 Tracy Eberlein 18 Dec 2024 15:11

Posted speed is higher than design speed?

11.1 Alyssa Morrison 19 Dec 2024 14:50

Verified latest as-built data. 60 changed to 65mph

11.2 A - Will Comply 19 Dec 2024 14:50

Action was applied by Alyssa Morrison

12 Tracy Eberlein 18 Dec 2024 15:11

70 mph in rural areas?

12.1 Alyssa Morrison 19 Dec 2024 11:17

AASHTO Green Book states design speeds are between 50 - 85 mph for rural areas with 70mph being the most common.

12.2 D - Design Team Recommends No Further Action Taken 19 Dec 2024 11:17

Action was applied by Alyssa Morrison

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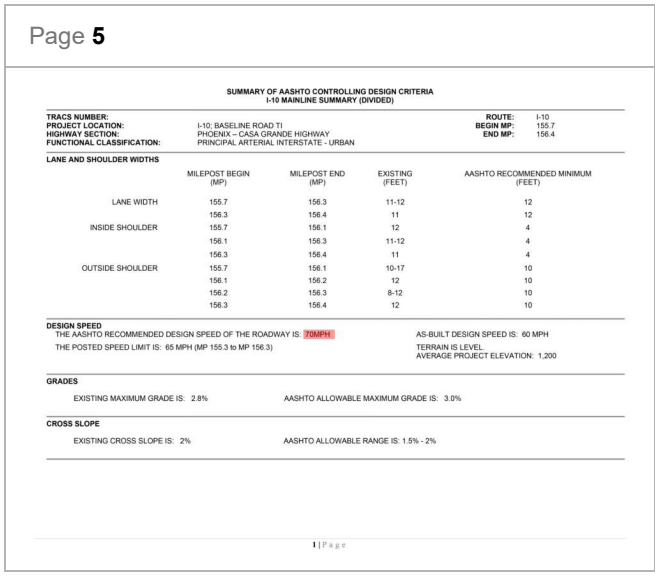

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRACS NUMBER:
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
FUNCTIONAL CLASSIFICATION: PRINCIPAL ARTERIAL INTERSTATE - URBAN
ROUTE: I-10
BEGIN MP: 155.7
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LANE AND SHOULDER WIDTHS

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	156.2	156.3	8-12	10
	156.3	156.4	12	10

DESIGN SPEED
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THE POSTED SPEED LIMIT IS: 65 MPH (MP 155.3 to MP 156.3)
AS-BUILT DESIGN SPEED IS: 60 MPH
TERRAIN IS LEVEL.
AVERAGE PROJECT ELEVATION: 1,200

GRADES
EXISTING MAXIMUM GRADE IS: 2.8%
AASHTO ALLOWABLE MAXIMUM GRADE IS: 3.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2%
AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

1 | Page

13 Tracy Eberlein 18 Dec 2024 15:12

Update the existing AADT to 2024 and design year AADT to 2045

13.1 Alyssa Morrison 20 Dec 2024 08:12

Updated to 2023 available data

13.2 A - Will Comply 20 Dec 2024 08:12

Action was applied by Alyssa Morrison

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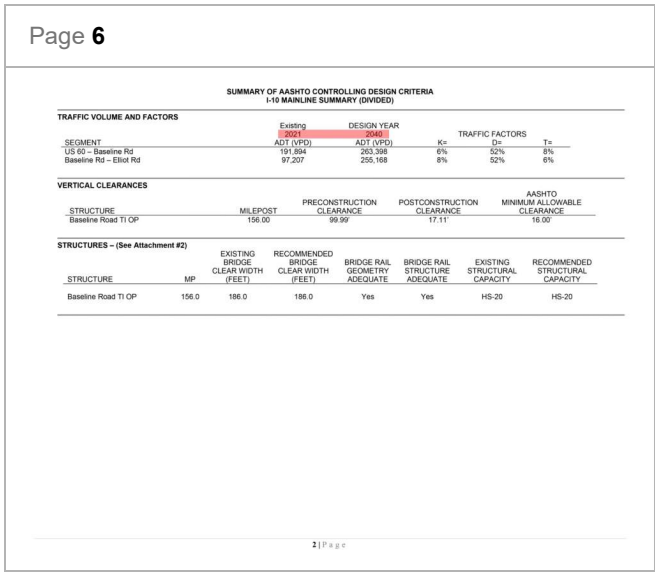

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2021 ADT (VPD)	DESIGN YEAR 2040 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
US 60 – Baseline Rd	191,894	263,398	6%	52%	8%
Baseline Rd – Elliot Rd	97,207	255,168	8%	52%	6%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Baseline Road TI OP	156.00	99.99'	17.11'	16.00'

STRUCTURES – (See Attachment #2)

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Baseline Road TI OP	156.0	186.0	186.0	Yes	Yes	HS-20	HS-20

2 | Page

14 Tracy Eberlein 18 Dec 2024 15:12

Not applicable (?)

14.1 Alyssa Morrison 19 Dec 2024 11:19

Information provided. Existing bridge will not be impacted.

14.2 D - Design Team Recommends No Further Action Taken 19 Dec 2024 11:19

Action was applied by Alyssa Morrison

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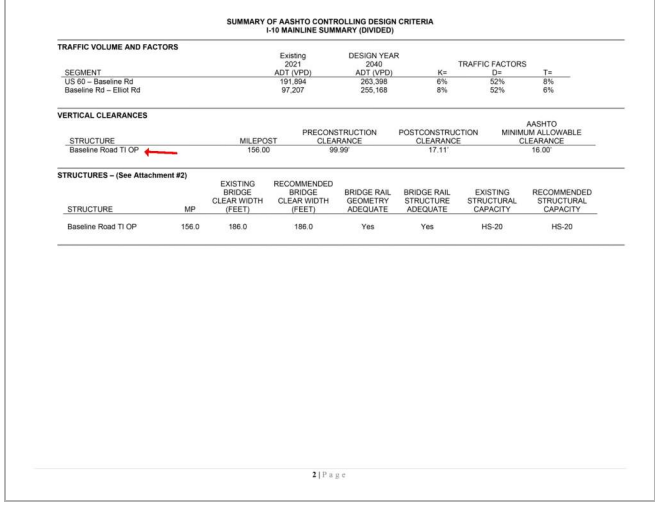

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2021 ADT (VPD)	DESIGN YEAR 2040 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
US 60 – Baseline Rd	191,894	263,398	6%	52%	8%
Baseline Rd – Elliot Rd	97,207	255,168	8%	52%	6%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Baseline Road TI OP	156.00	99.99'	17.11'	16.00'

STRUCTURES – (See Attachment #2)

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Baseline Road TI OP	156.0	186.0	186.0	Yes	Yes	HS-20	HS-20

2 | P a g e

15 Tracy Eberlein 18 Dec 2024 15:13

Mention which method was used - Method 2 or Method 5 (should be Method 5)

15.1 Alyssa Morrison 19 Dec 2024 11:32

Added Method 5 Note

15.2 A - Will Comply 19 Dec 2024 11:32

Action was applied by Alyssa Morrison

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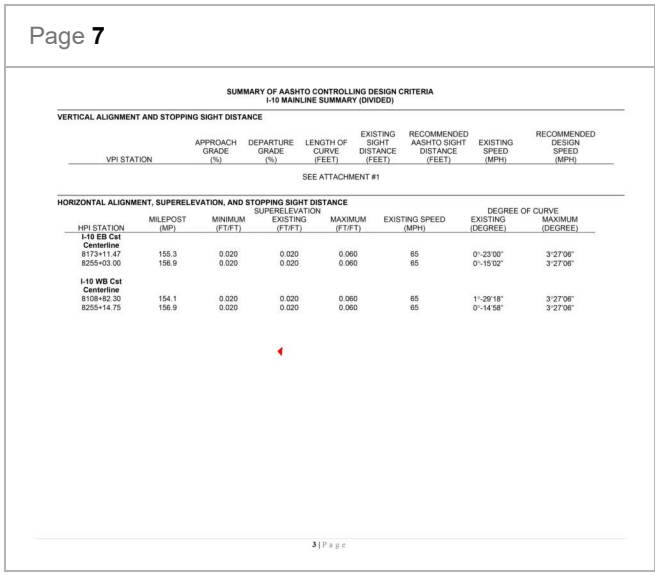

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
I-10 MAINLINE SUMMARY (DIVIDED)

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

HPI STATION	MILEPOST (MP)	SUPERELEVATION MINIMUM (FT/FT)	SUPERELEVATION EXISTING (FT/FT)	SUPERELEVATION MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	DEGREE OF CURVE EXISTING (DEGREE)	DEGREE OF CURVE MAXIMUM (DEGREE)
I-10 EB Cst Centerline							
8173+11.47	155.3	0.020	0.020	0.060	65	0°-23'00"	3°27'06"
8255+03.00	156.9	0.020	0.020	0.060	65	0°-15'02"	3°27'06"
I-10 WB Cst Centerline							
8108+82.30	154.1	0.020	0.020	0.060	65	1°-29'18"	3°27'06"
8255+14.75	156.9	0.020	0.020	0.060	65	0°-14'58"	3°27'06"

3 | P a g e

16 **Tracy Eberlein** 18 Dec 2024 15:13

update to 2024 and 2045

16.1 **Alyssa Morrison** 20 Dec 2024 08:13

Most current data shown

16.2 **D - Design Team Recommends No Further Action Taken** 20 Dec 2024 08:13

Action was applied by Alyssa Morrison

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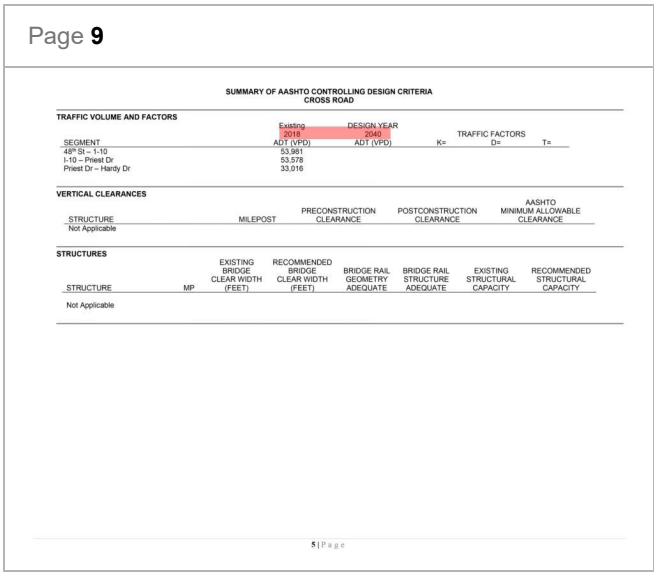

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
CROSS ROAD

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2018 ADT (VPD)	DESIGN YEAR 2040 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
48th St – I-10	53,981				
I-10 – Priest Dr	53,578				
Priest Dr – Hardy Dr	33,016				

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

5 | P a g e

17 **Tracy Eberlein** 18 Dec 2024 15:14

2

17.1 **A - Will Comply** 19 Dec 2024 11:19

Action was applied by Alyssa Morrison

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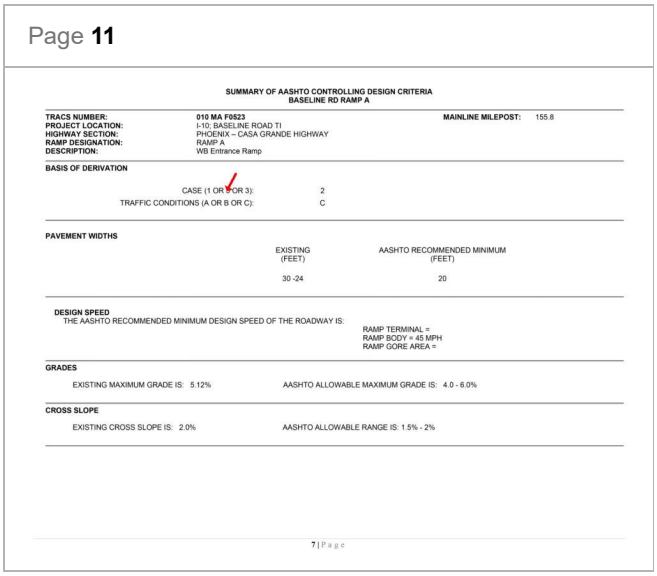

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

TRACS NUMBER: 010 MA F0523
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP A
DESCRIPTION: WB Entrance Ramp
MAINLINE MILEPOST: 155.8

BASIS OF DERIVATION

CASE (1 OR 2 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
30 -24	20

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 5.12%
AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0%
AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

7 | P a g e

18 **Tracy Eberlein** 18 Dec 2024 15:15

Provide shoulder widths

18.1 **Alyssa Morrison** 19 Dec 2024 14:49

Widths added

18.2 **A - Will Comply** 19 Dec 2024 14:49

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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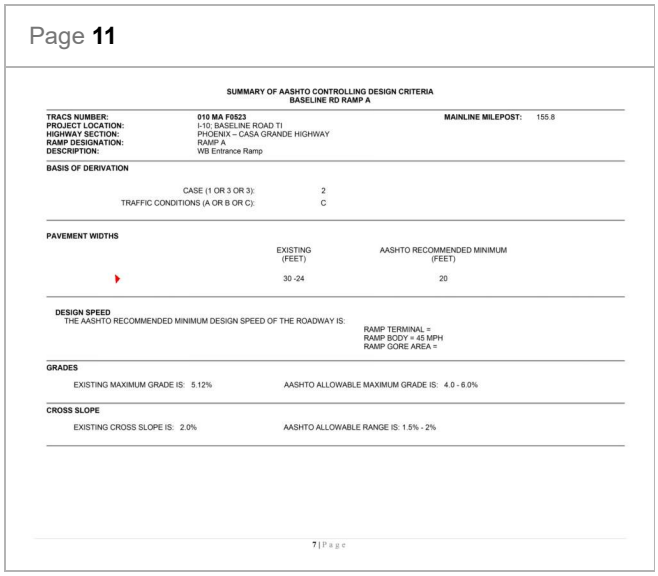

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 155.8
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP A
DESCRIPTION: WB Entrance Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	30 -24	20

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 5.12% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

7 | P a g e

19 **Tracy Eberlein** 18 Dec 2024 15:15

3%-5%?

19.1 **A - Will Comply** 19 Dec 2024 11:26

Action was applied by Alyssa Morrison

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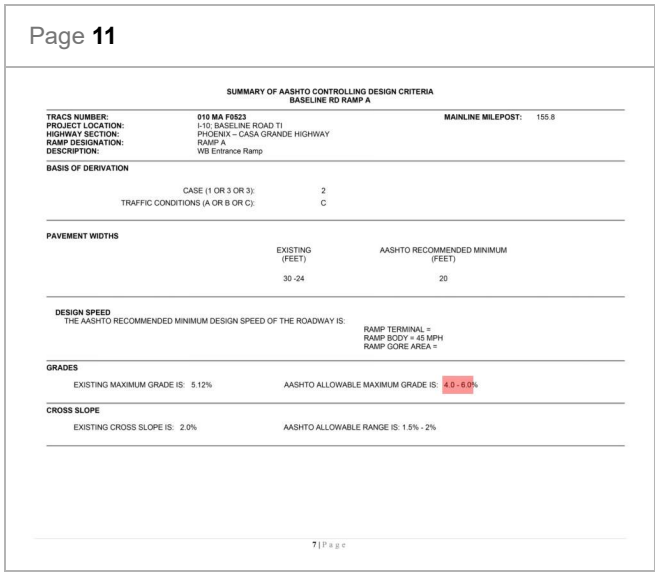

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 155.8
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP A
DESCRIPTION: WB Entrance Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	30 -24	20

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 5.12% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

7 | P a g e

20 **Tracy Eberlein** 18 Dec 2024 15:16

Mention which Method was used - 2 or 5

20.1 **Alyssa Morrison** 19 Dec 2024 11:31

Added "Method 5" to note after table

20.2 **A - Will Comply** 19 Dec 2024 11:31

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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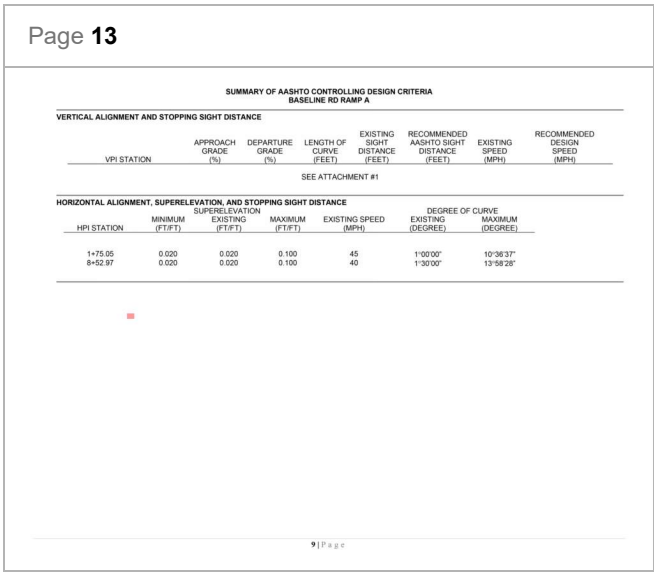

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP A

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)

SEE ATTACHMENT #1

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

HPI STATION	SUPERELEVATION MINIMUM (FT/FT)	SUPERELEVATION EXISTING (FT/FT)	SUPERELEVATION MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	DEGREE OF CURVE EXISTING (DEGREE)	DEGREE OF CURVE MAXIMUM (DEGREE)
1+75.05	0.020	0.020	0.100	45	1°00'00"	10°36'37"
8+52.97	0.020	0.020	0.100	40	1°30'00"	13°58'28"

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21 **Tracy Eberlein** 18 Dec 2024 15:16

Provide shoulder widths

21.1 **Alyssa Morrison** 19 Dec 2024 14:49

Widths added

21.2 **A - Will Comply** 19 Dec 2024 14:49

Action was applied by Alyssa Morrison

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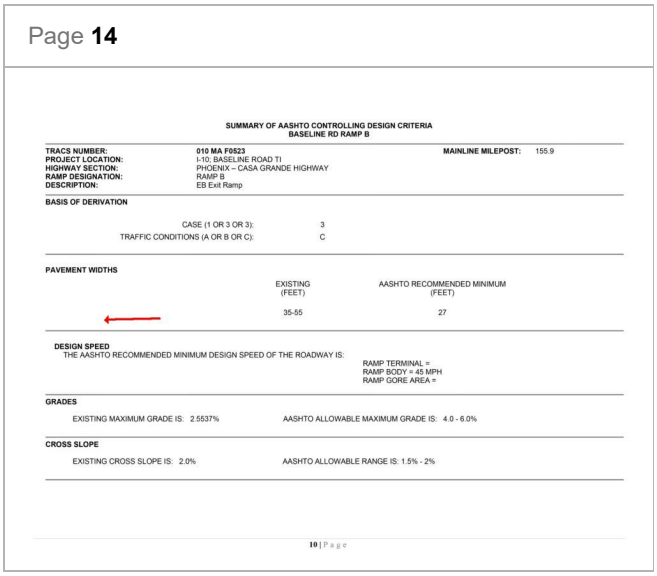

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

TRACS NUMBER: 010 MA F0523
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP B
DESCRIPTION: EB Exit Ramp
MAINLINE MILEPOST: 155.9

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 3
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
35-55	27

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 2.5537% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

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22 Tracy Eberlein 18 Dec 2024 15:16

3-5% ?

22.1 A - Will Comply 19 Dec 2024 11:40

Action was applied by Alyssa Morrison

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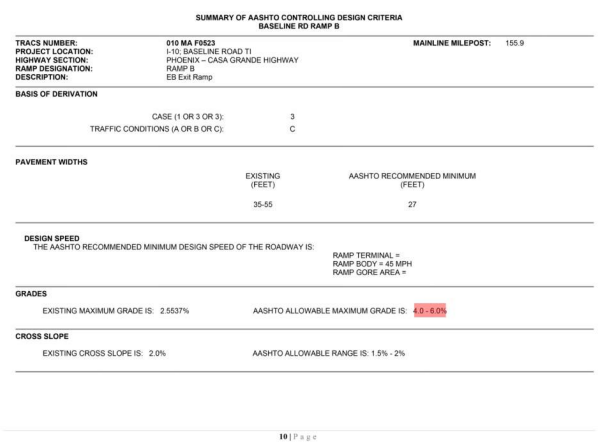

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 155.9
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP B
DESCRIPTION: EB Exit Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 3
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
35-55	27

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 2.5537% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

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23 Tracy Eberlein 18 Dec 2024 15:17

See previous comment

23.1 Alyssa Morrison 19 Dec 2024 11:41

Added Method 5

23.2 A - Will Comply 19 Dec 2024 11:41

Action was applied by Alyssa Morrison

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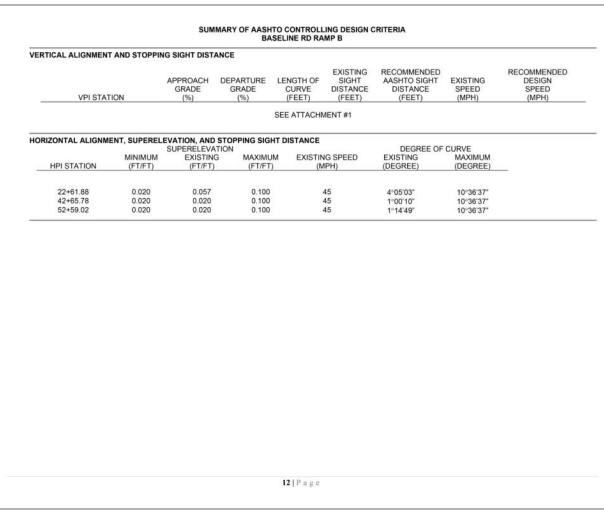

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP B

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

HPI STATION	SUPERELEVATION MINIMUM (FT/FT)	SUPERELEVATION EXISTING (FT/FT)	SUPERELEVATION MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	DEGREE OF CURVE EXISTING (DEGREE)	DEGREE OF CURVE MAXIMUM (DEGREE)
22+61.88	0.020	0.057	0.100	45	4°05'03"	10°36'37"
42+65.78	0.020	0.020	0.100	45	1°00'10"	10°36'37"
52+59.02	0.020	0.020	0.100	45	1°14'49"	10°36'37"

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24 **Tracy Eberlein** 18 Dec 2024 15:17

Provide shoulder widths

24.1 **Alyssa Morrison** 19 Dec 2024 14:49

Widths added

24.2 **A - Will Comply** 19 Dec 2024 14:49

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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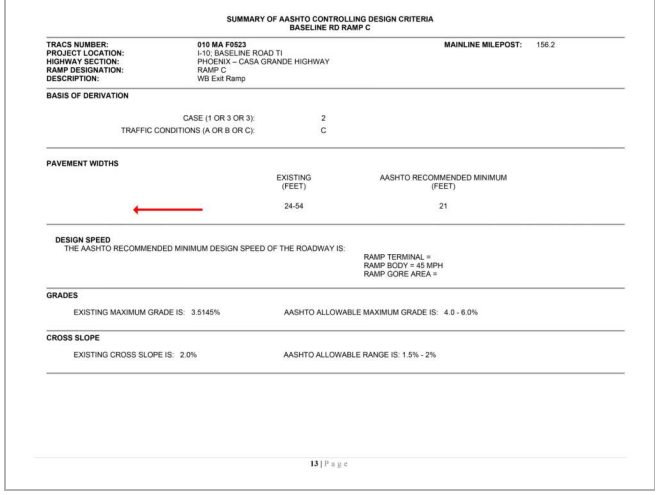

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 156.2
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP C
DESCRIPTION: WB Exit Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	24-54	21

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 3.5145% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

13 | P a g e

25 **Tracy Eberlein** 18 Dec 2024 15:17

3-5% ?

25.1 **A - Will Comply** 19 Dec 2024 11:40

Action was applied by Alyssa Morrison

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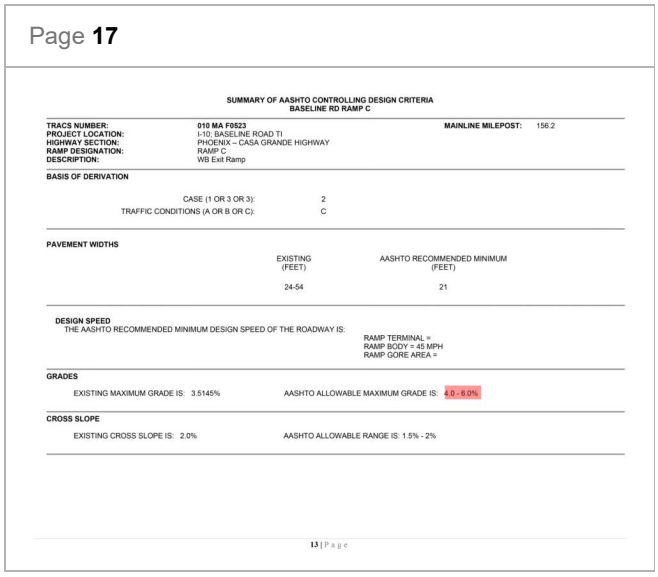

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 156.2
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP C
DESCRIPTION: WB Exit Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	24-54	21

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES

EXISTING MAXIMUM GRADE IS: 3.5145% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE

EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

13 | P a g e

26 **Tracy Eberlein** 18 Dec 2024 15:18

or C?

26.1 **Alyssa Morrison** 19 Dec 2024 11:40

Revised to C

26.2 **A - Will Comply** 19 Dec 2024 11:40

Action was applied by Alyssa Morrison

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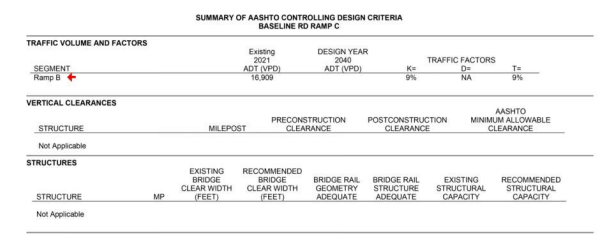

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

TRAFFIC VOLUME AND FACTORS

SEGMENT	Existing 2021 ADT (VPD)	DESIGN YEAR 2040 ADT (VPD)	TRAFFIC FACTORS K=	D=	T=
Ramp B	16,909		9%	NA	9%

VERTICAL CLEARANCES

STRUCTURE	MILEPOST	PRECONSTRUCTION CLEARANCE	POSTCONSTRUCTION CLEARANCE	AASHTO MINIMUM ALLOWABLE CLEARANCE
Not Applicable				

STRUCTURES

STRUCTURE	MP	EXISTING BRIDGE CLEAR WIDTH (FEET)	RECOMMENDED BRIDGE CLEAR WIDTH (FEET)	BRIDGE RAIL GEOMETRY ADEQUATE	BRIDGE RAIL STRUCTURE ADEQUATE	EXISTING STRUCTURAL CAPACITY	RECOMMENDED STRUCTURAL CAPACITY
Not Applicable							

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27 **Tracy Eberlein** 18 Dec 2024 15:18

See previous comment

27.1 **Alyssa Morrison** 19 Dec 2024 13:52

Added Method note

27.2 **A - Will Comply** 19 Dec 2024 13:52

Action was applied by Alyssa Morrison

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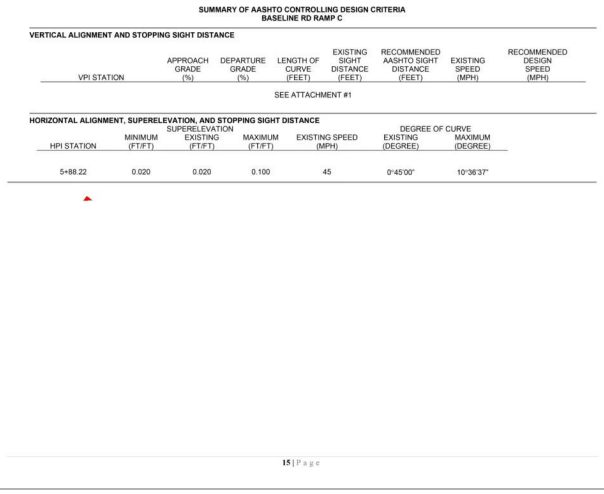

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP C

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

HPI STATION	SUPERELEVATION MINIMUM (FT/FT)	SUPERELEVATION EXISTING (FT/FT)	SUPERELEVATION MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	DEGREE OF CURVE EXISTING (DEGREE)	DEGREE OF CURVE MAXIMUM (DEGREE)
5+88.22	0.020	0.020	0.100	45	0°45'00"	10°36'37"

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28 **Tracy Eberlein** 18 Dec 2024 15:18

Provide shoulder widths

28.1 **Alyssa Morrison** 19 Dec 2024 14:49

Widths added

28.2 **A - Will Comply** 19 Dec 2024 14:49

Action was applied by Alyssa Morrison

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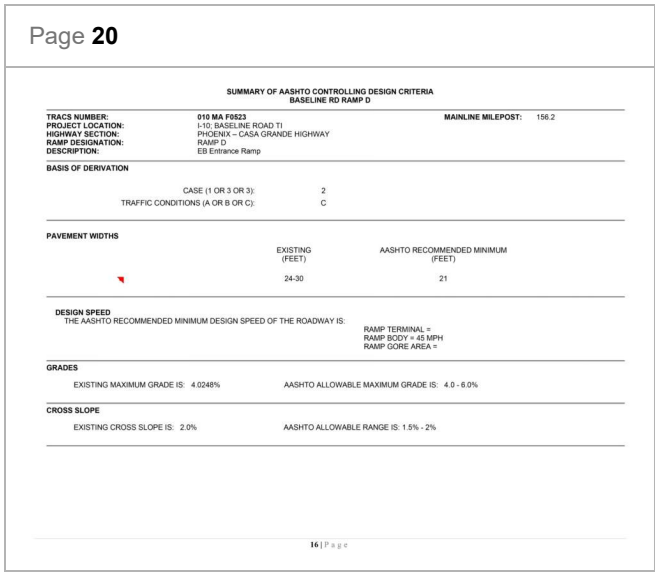

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 156.2
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP D
DESCRIPTION: EB Entrance Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	24-30	21

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 4.0248% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

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29 **Tracy Eberlein** 18 Dec 2024 15:19

3-5% ?

29.1 **A - Will Comply** 19 Dec 2024 11:40

Action was applied by Alyssa Morrison

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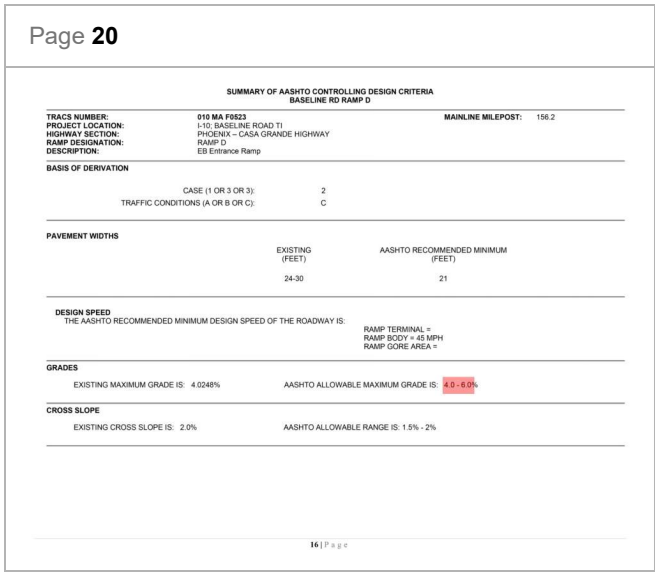

SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

TRACS NUMBER: 010 MA F0523 MAINLINE MILEPOST: 156.2
PROJECT LOCATION: I-10; BASELINE ROAD TI
HIGHWAY SECTION: PHOENIX – CASA GRANDE HIGHWAY
RAMP DESIGNATION: RAMP D
DESCRIPTION: EB Entrance Ramp

BASIS OF DERIVATION

CASE (1 OR 3 OR 3): 2
TRAFFIC CONDITIONS (A OR B OR C): C

PAVEMENT WIDTHS

	EXISTING (FEET)	AASHTO RECOMMENDED MINIMUM (FEET)
	24-30	21

DESIGN SPEED
THE AASHTO RECOMMENDED MINIMUM DESIGN SPEED OF THE ROADWAY IS:
RAMP TERMINAL =
RAMP BODY = 45 MPH
RAMP GORE AREA =

GRADES
EXISTING MAXIMUM GRADE IS: 4.0248% AASHTO ALLOWABLE MAXIMUM GRADE IS: 4.0 - 6.0%

CROSS SLOPE
EXISTING CROSS SLOPE IS: 2.0% AASHTO ALLOWABLE RANGE IS: 1.5% - 2%

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30 Tracy Eberlein 18 Dec 2024 15:19

See previous comment

30.1 Alyssa Morrison 19 Dec 2024 13:34

Added Methos 5 Note

30.2 A - Will Comply 19 Dec 2024 13:34

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

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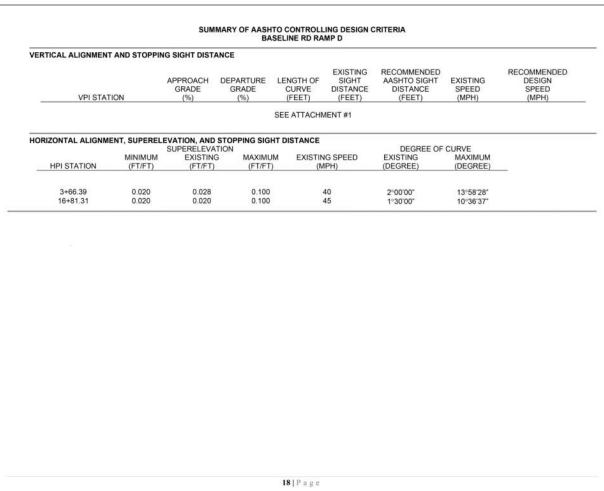


SUMMARY OF AASHTO CONTROLLING DESIGN CRITERIA
BASELINE RD RAMP D

VERTICAL ALIGNMENT AND STOPPING SIGHT DISTANCE

VPI STATION	APPROACH GRADE (%)	DEPARTURE GRADE (%)	LENGTH OF CURVE (FEET)	EXISTING SIGHT DISTANCE (FEET)	RECOMMENDED AASHTO SIGHT DISTANCE (FEET)	EXISTING SPEED (MPH)	RECOMMENDED DESIGN SPEED (MPH)
SEE ATTACHMENT #1							

HORIZONTAL ALIGNMENT, SUPERELEVATION, AND STOPPING SIGHT DISTANCE

HPI STATION	SUPERELEVATION MINIMUM (FT/FT)	SUPERELEVATION EXISTING (FT/FT)	SUPERELEVATION MAXIMUM (FT/FT)	EXISTING SPEED (MPH)	DEGREE OF CURVE EXISTING (DEGREE)	DEGREE OF CURVE MAXIMUM (DEGREE)
3+66.39	0.020	0.028	0.100	40	2°00'00"	13°58'28"
16+81.31	0.020	0.020	0.100	45	1°30'00"	10°36'37"

18 | Page

31 Tracy Eberlein 18 Dec 2024 15:20

I-10 Mainline summary (page 1) shows as-built design speed 60 mph.

31.1 Alyssa Morrison 19 Dec 2024 14:50

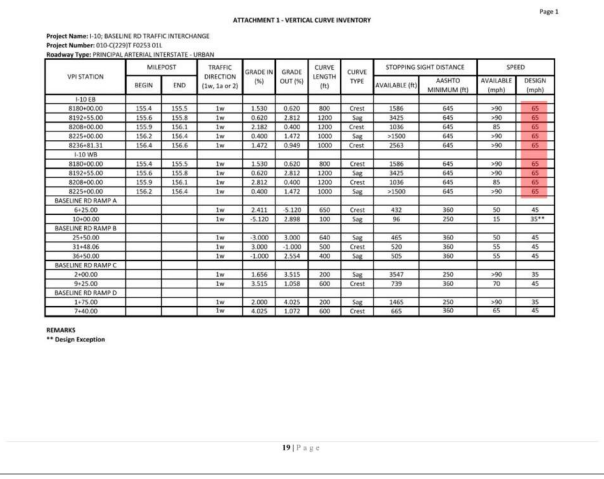
65 is correct

31.2 D - Design Team Recommends No Further Action Taken 19 Dec 2024 14:50

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

Page **23**



Page 1

ATTACHMENT 1 - VERTICAL CURVE INVENTORY

Project Name: I-10; BASELINE RD TRAFFIC INTERCHANGE
Project Number: 010-C(229)T F0253 011
Roadway Type: PRINCIPAL ARTERIAL INTERSTATE - URBAN

VPI STATION	MILEPOST BEGIN	MILEPOST END	TRAFFIC DIRECTION (1w, 1a or 2)	GRADE IN (%)	GRADE OUT (%)	CURVE LENGTH (ft)	CURVE TYPE	STOPPING SIGHT DISTANCE AVAILABLE (ft)	STOPPING SIGHT DISTANCE AASHTO MINIMUM (ft)	SPEED AVAILABLE (mph)	SPEED DESIGN (mph)
I-10 EB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.182	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
8236+81.31	156.4	156.6	1w	1.472	0.949	1000	Crest	2563	645	>90	65
I-10 WB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.812	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
BASELINE RD RAMP A											
6+25.00			1w	2.411	-5.120	650	Crest	432	360	50	45
10+00.00			1w	-5.120	2.898	300	Sag	96	250	15	35**
BASELINE RD RAMP B											
25+50.00			1w	-3.000	3.000	640	Sag	465	360	50	45
31+48.06			1w	3.000	-3.000	500	Crest	520	360	55	45
36+50.00			1w	-3.000	2.554	400	Sag	505	360	55	45
BASELINE RD RAMP C											
2+00.00			1w	1.656	3.515	200	Sag	3547	250	>90	35
9+25.00			1w	3.515	1.058	600	Crest	739	360	70	45
BASELINE RD RAMP D											
1+75.00			1w	2.000	4.025	200	Sag	1465	250	>90	35
7+40.00			1w	4.025	1.072	600	Crest	665	360	65	45

REMARKS
** Design Exception

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32 **Tracy Eberlein** 18 Dec 2024 15:20

Not needed for sag vertical curves

32.1 **Alyssa Morrison** 19 Dec 2024 10:44

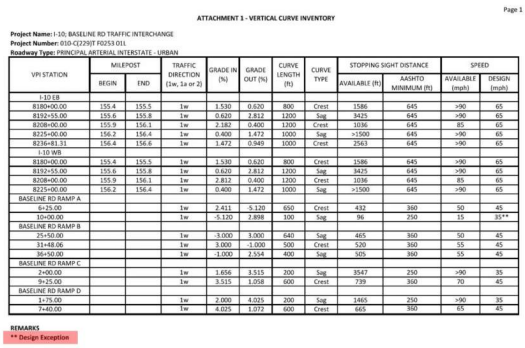
Will remove.

32.2 **A - Will Comply** 19 Dec 2024 10:44

Action was applied by Alyssa Morrison

F0523_BaselineRd_TI_FDCR_Appendix.pdf

Page **23**



Page 1

ATTACHMENT 1 - VERTICAL CURVE INVENTORY

Project Name: I-10; BASELINE RD TRAFFIC INTERCHANGE
Project Number: 010-C(229)T F0253 01L
Roadway Type: PRINCIPAL ARTERIAL INTERSTATE - URBAN

VPI STATION	MILEPOST		TRAFFIC DIRECTION (1w, 1a or 2)	GRADE IN (%)	GRADE OUT (%)	CURVE LENGTH (ft)	CURVE TYPE	STOPPING SIGHT DISTANCE		SPEED	
	BEGIN	END						AVAILABLE (ft)	AASHTO MINIMUM (ft)	AVAILABLE (mph)	DESIGN (mph)
I-10 EB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.182	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
8236+81.31	156.4	156.6	1w	1.472	0.949	1000	Crest	2563	645	>90	65
I-10 WB											
8180+00.00	155.4	155.5	1w	1.530	0.620	800	Crest	1586	645	>90	65
8192+55.00	155.6	155.8	1w	0.620	2.812	1200	Sag	3425	645	>90	65
8208+00.00	155.9	156.1	1w	2.812	0.400	1200	Crest	1036	645	85	65
8225+00.00	156.2	156.4	1w	0.400	1.472	1000	Sag	>1500	645	>90	65
BASELINE RD RAMP A											
6+25.00			1w	2.411	-5.120	650	Crest	432	360	50	45
10+00.00			1w	-5.120	2.898	100	Sag	96	250	15	35**
BASELINE RD RAMP B											
25+50.00			1w	-3.000	3.000	640	Sag	465	360	50	45
31+48.06			1w	3.000	-3.000	500	Crest	520	360	55	45
36+50.00			1w	-3.000	2.554	400	Sag	505	360	55	45
BASELINE RD RAMP C											
2+00.00			1w	1.656	3.515	200	Sag	3547	250	>90	35
9+25.00			1w	3.515	1.058	600	Crest	739	360	70	45
BASELINE RD RAMP D											
1+75.00			1w	2.000	4.025	200	Sag	1465	250	>90	35
7+40.00			1w	4.025	1.072	600	Crest	665	360	65	45

REMARKS
** Design Exception

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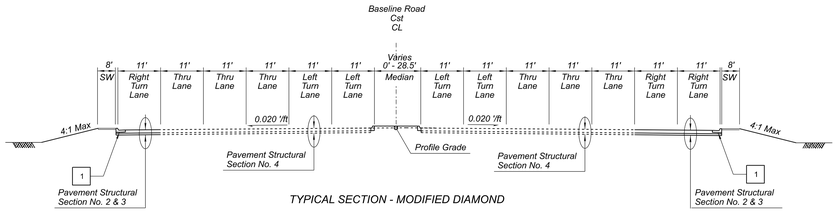
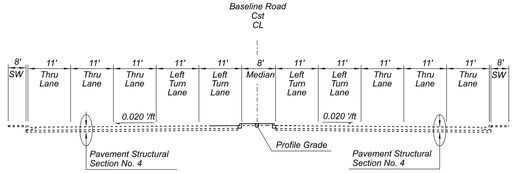
Appendix G– Build Alternative Typical Section and 15% Plans



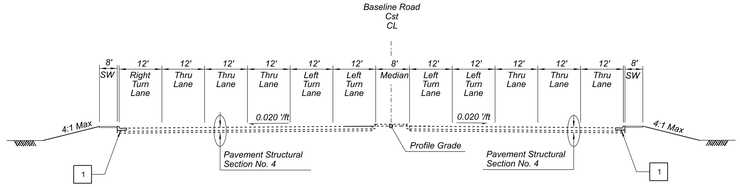
TYPICAL SECTION - MODIFIED DIAMOND

Baseline Road
(West Approach to Traffic Interchange)



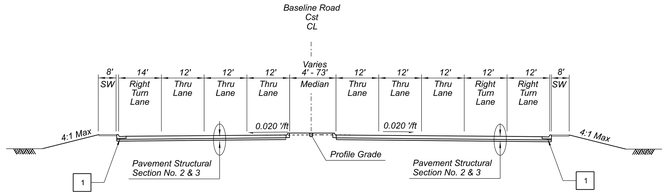
TYPICAL SECTION - MODIFIED DIAMOND

Baseline Road
(At Traffic Interchange)



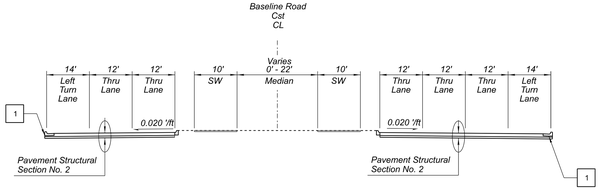
TYPICAL SECTION - MODIFIED DIAMOND

Baseline Road
(East Approach to Traffic Interchange)



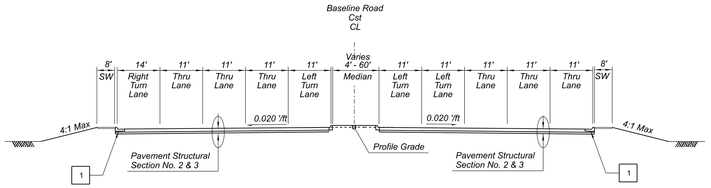
TYPICAL SECTION - DIVERGING DIAMOND

Baseline Road
(West Approach to Traffic Interchange)



TYPICAL SECTION - DIVERGING DIAMOND

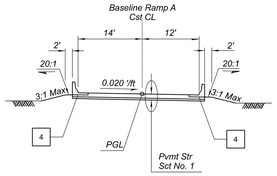
Baseline Road
(At Traffic Interchange)

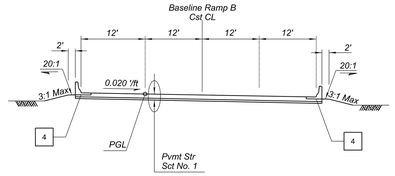


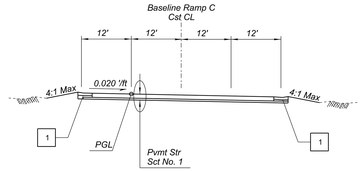
TYPICAL SECTION - DIVERGING DIAMOND

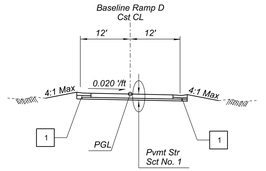
Baseline Road
(East Approach to Traffic Interchange)

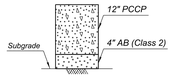
TYPICAL SECTION - DIVERGING DIAMOND
I-10 BASELINE RD TI RAMPS







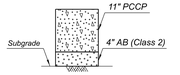




Total Thickness = 16"

SECTION NO. 1

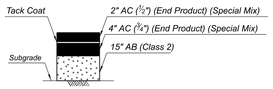
I-10 Mainline
Baseline Rd Ramps A, B, C & D



Total Thickness = 15"

SECTION NO. 2

Crossroads PCCP



Total Thickness = 21"

SECTION NO. 3

Crossroads AC

Total Thickness = 2"

SECTION NO. 4

Existing Crossroads

1 Conc. Curb and Gutter (See Plans for Locations)

4 Conc. Half Barrier (See Plans for Locations)

cccccSYSTIMEccccc cccccDGNcSPECIFICATIONccccc

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERS

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION

ROADWAY DESIGN SECTION

ROADWAY TYPICAL SECTIONS

ROUTE I-10

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	F0523	010-C(229)T			

LOCATION BASELINE RD TRAFFIC INTERCHANGE

SHEET OF

TRACS NO. F0523 01L

___ OF___

Legend

- *New Light Pole*
- *Existing Light Pole. Protect In Place*
- *New Trafic Signal*

0

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERING GROUP, INC. 40 N 54th St., Suite 300 Chandler, AZ 85226 Ph: (602) 354-4900 Fax: (602) 354-4950 www.aztecgroup.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION

ROADWAY DESIGN SECTION

MDI
ROADWAY PLAN

ROUTE: I-10
MILEPOST:
STRUCTURE NO.:

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	F0523	010-C(229)T			

LOCATION: BASELINE RD TRAFFIC INTERCHANGE

SHEET ___ OF ___

TRACS NO. F0523 01L

Legend

- New Light Pole
- Existing Light Pole. Protect In Place
- New Trafic Signal

0

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERING GROUP, INC. 63 E 4th St., Suite 300 Tempe, AZ 85281 ph. (602) 354-4900 fax (602) 354-4999 www.aztecgroup.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

MDI
ROADWAY PLAN

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
I-10		ARIZ.	F0523	010-C(229)T			
MILEPOST	LOCATION BASELINE RD TRAFFIC INTERCHANGE				SHEET		OF
STRUCTURE NO.	TRACS NO. F0523 01L						___ OF___

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	NAME	DATE
DESIGN		
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AZTEC ENGINEERING GROUP, INC. 60 E 6th St, Suite 300 Tempe, AZ 85281 Ph: (602) 957-4900 Fax: (602) 957-1522 www.aztecaz.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

MDI
ROADWAY PLAN

ROUTE: I-10
MILEPOST:
STRUCTURE NO.

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	F0523	010-C(229)T			

LOCATION: BASELINE RD TRAFFIC INTERCHANGE

SHEET OF

TRACS NO. F0523 01L

___ OF ___

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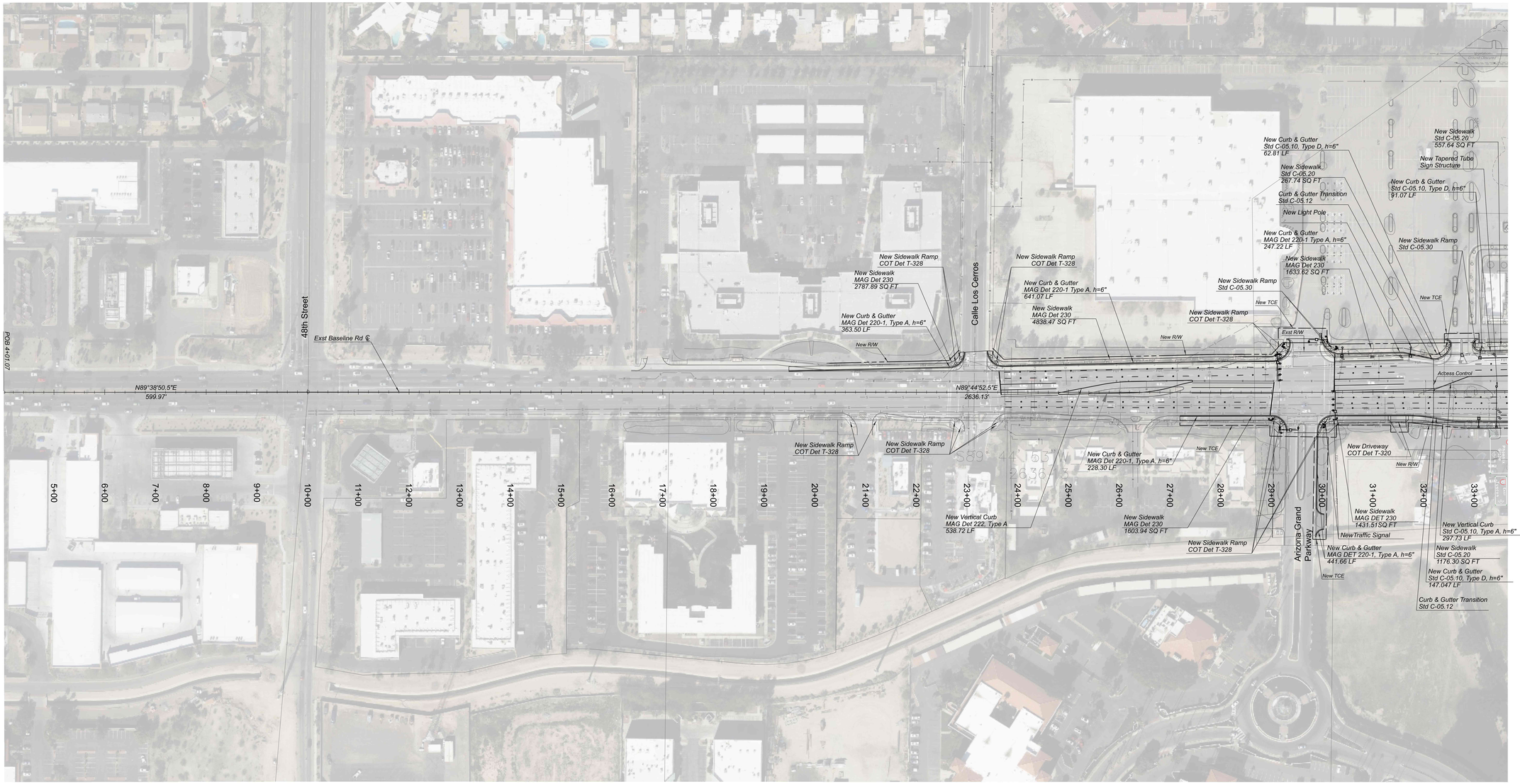


Legend

- *New Light Pole*
- *Existing Light Pole. Protect In Place*
- *New Trafic Signal*

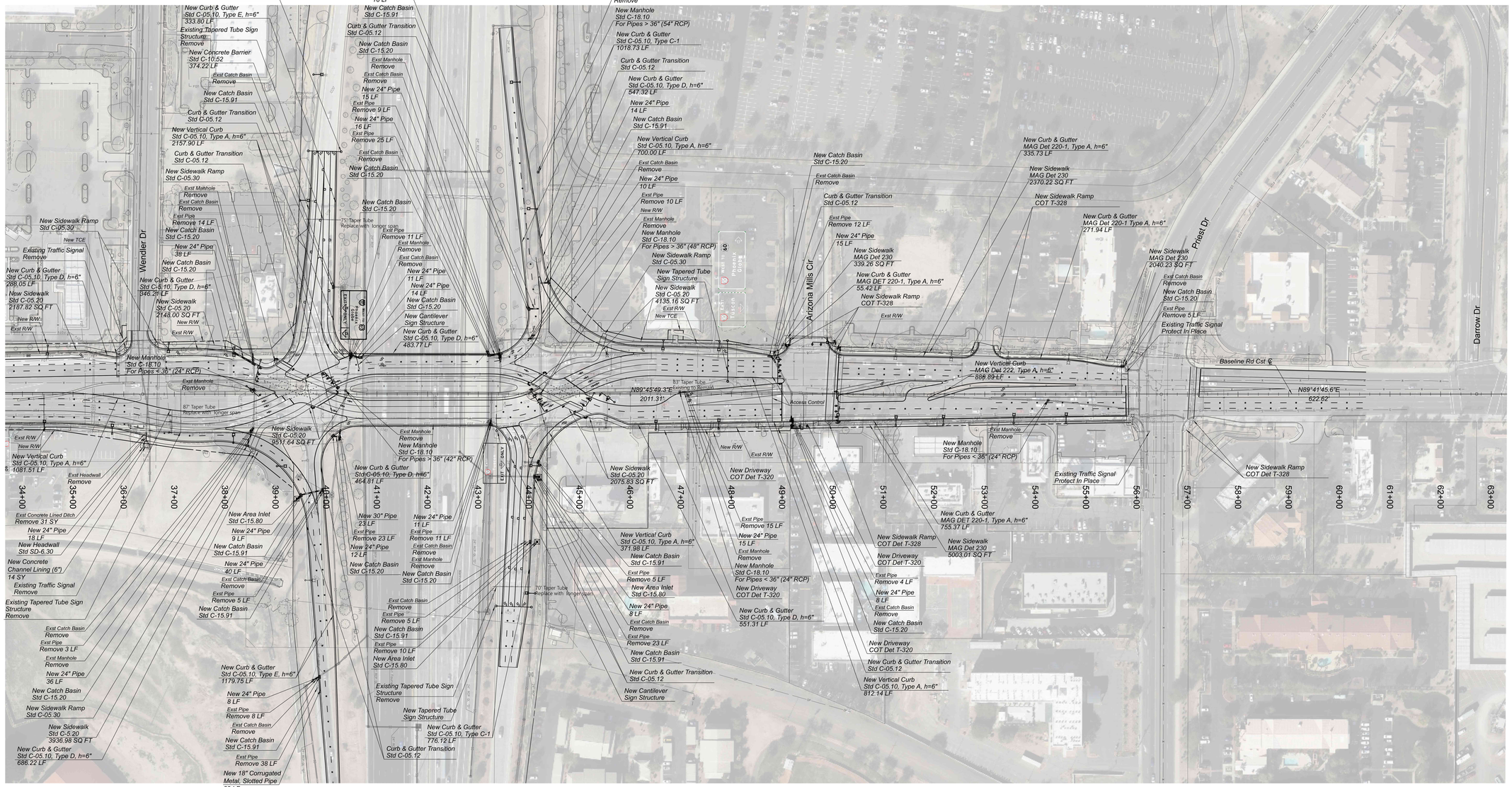
	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERING GROUP, INC. 60 E 9TH ST., Suite 300 TUCSON, AZ 85705 PH (520) 624-4902 FAX (520) 624-1522 www.aztecgroup.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DDI
ROADWAY PLAN

ROUTE NO.	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
I-10		ARIZ.	F0523	010-C(229)T			
MILEPOST	LOCATION: BASELINE RD TRAFFIC INTERCHANGE					SHEET	OF
STRUCTURE NO.	TRACS NO. F0523 01L					___ OF___	



Legend

- *New Light Pole*
- *Existing Light Pole. Protect In Place*
- *New Trafic Signal*

0

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERING GROUP, INC. 85 S 36th St., Suite 300 Phoenix, AZ 85034 Ph: (602) 254-4900 Fax: (602) 254-4990 www.aztecgroup.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DDI
ROADWAY PLAN

ROUTE I-10 | MILEPOST | STRUCTURE NO.

F.H.W.A. Arizona Division | STATE ARIZ. | PROJECT NO. F0523 | FEDERAL ID NO. 010-C(229)T | SHEET NO. | TOTAL SHEETS | RECORD DRAWING

LOCATION BASELINE RD TRAFFIC INTERCHANGE

TRACS NO. F0523 01L

SHEET ___ OF ___

0

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC ENGINEERING GROUP, INC. 101 N 44th St., Suite 300 Phoenix, AZ 85034 Ph. (602) 955-6900 Fax (602) 955-1944 www.aztecaz.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DDI
ROADWAY PLAN

ROUTE: I-10
MILEPOST:
STRUCTURE NO.:

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	F0523	010-C(229)T			

LOCATION: BASELINE RD TRAFFIC INTERCHANGE

SHEET OF

TRACS NO. F0523 01L

____ OF____

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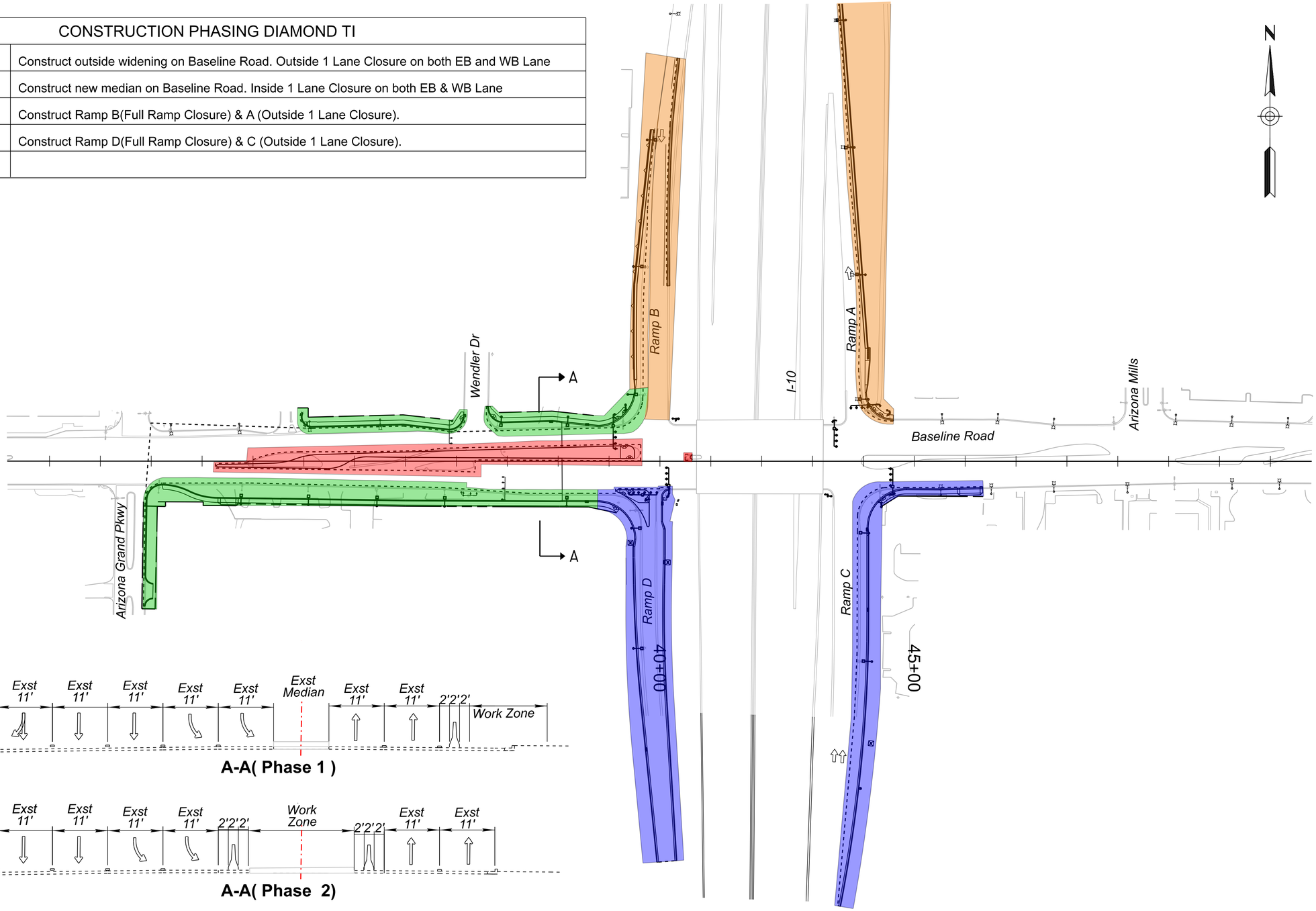
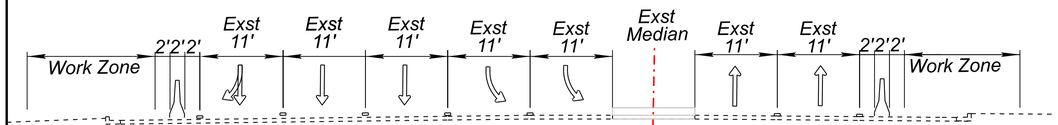
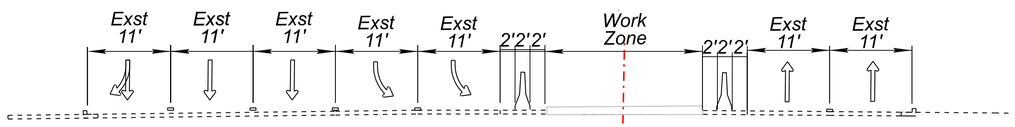
cccccSYSTIMEccccc ccccccDGNcSPECIFICATIONccccc

CONSTRUCTION PHASING DIAMOND TI		
	Phase 1	Construct outside widening on Baseline Road. Outside 1 Lane Closure on both EB and WB Lane
	Phase 2	Construct new median on Baseline Road. Inside 1 Lane Closure on both EB & WB Lane
	Phase 3a	Construct Ramp B(Full Ramp Closure) & A (Outside 1 Lane Closure).
	Phase 3b	Construct Ramp D(Full Ramp Closure) & C (Outside 1 Lane Closure).





A-A(Phase 1)



A-A(Phase 2)

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC TYPSA 501 N 44th St, Suite 300 Phoenix, AZ 85008-4505 Tel (602) 454-0402 Fax (480) 499-5565 www.aztec.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

TRAFFIC CONTROL EXHIBITS
EXHIBIT 1 - DIAMOND TI

ROUTE	MILEPOST	STRUCTURE NO.
I-10		

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	H6870		0		

LOCATION I-10 BASELINE ROAD TRAFFIC INTERCHANGE

TRACS NO.

SHEET OF

____ OF____

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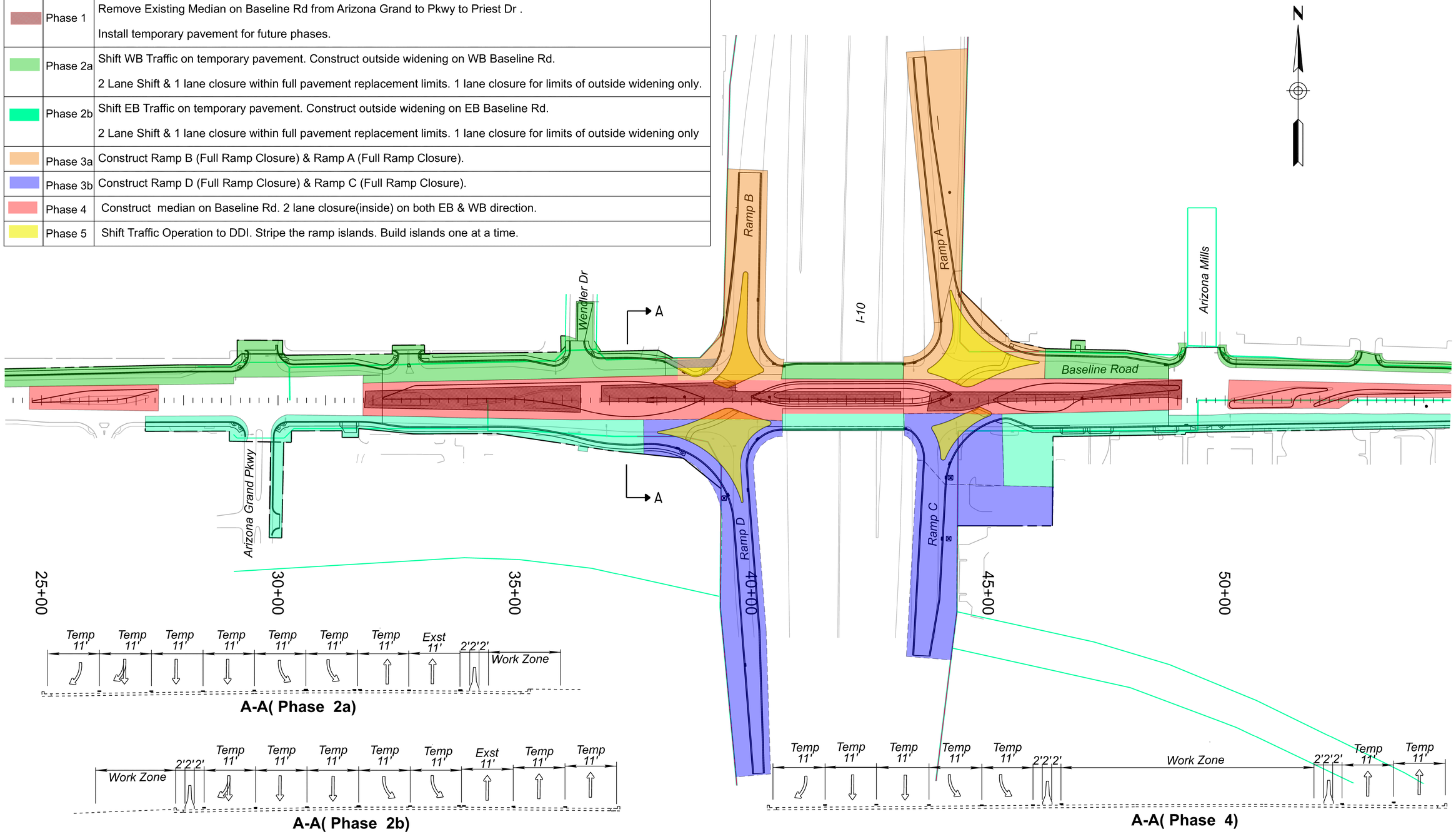
ccccSYSTIMEccccc ccccDGNcSPECIFICATIONccccc

CONSTRUCTION PHASING DIVERGING DIAMOND TI		
	Phase 1	Remove Existing Median on Baseline Rd from Arizona Grand to Pkwy to Priest Dr . Install temporary pavement for future phases.
	Phase 2a	Shift WB Traffic on temporary pavement. Construct outside widening on WB Baseline Rd. 2 Lane Shift & 1 lane closure within full pavement replacement limits. 1 lane closure for limits of outside widening only.
	Phase 2b	Shift EB Traffic on temporary pavement. Construct outside widening on EB Baseline Rd. 2 Lane Shift & 1 lane closure within full pavement replacement limits. 1 lane closure for limits of outside widening only
	Phase 3a	Construct Ramp B (Full Ramp Closure) & Ramp A (Full Ramp Closure).
	Phase 3b	Construct Ramp D (Full Ramp Closure) & Ramp C (Full Ramp Closure).
	Phase 4	Construct median on Baseline Rd. 2 lane closure(inside) on both EB & WB direction.
	Phase 5	Shift Traffic Operation to DDI. Stripe the ramp islands. Build islands one at a time.



A-A(Phase 2a)

A-A(Phase 2b)

A-A(Phase 4)

	NAME	DATE
DESIGN		
DRAWN		
CHECKED		

AZTEC TYPSA
501 N 44th St, Suite 300
Phoenix, AZ 85008-4505
Tel (602) 454-0402
Fax (480) 499-5565
www.aztec.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

TRAFFIC CONTROL EXHIBITS
EXHIBIT 2 - DDI TI

ROUTE	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
I-10	ARIZ.	H6870		0		
MILEPOST						
STRUCTURE NO.						

F.H.W.A. Arizona Division

LOCATION I-10 BASELINE ROAD TRAFFIC INTERCHANGE

SHEET OF

TRACS NO.

____ OF____

AMORRISON 11/13/2024 1:57:20 PM c:\pw_working\pw_prod\amorrison\dms66804\AZFWY2204_MOT_Exhibit 2.dgn \ Model Name: E_GeomBaselineRd-4 - MOT Exhibit Diamond-1 [Sheet]

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