

# Loop 101 / I-10 System Interchange Public Information Meeting

February 23, 2023 5 - 7 p.m.



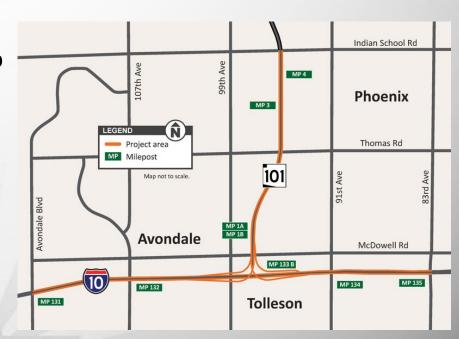
# **Purpose of Public Meeting**

- Gather feedback on alternatives and preliminary recommendations
- Share concepts for a potential new Direct High Occupancy Vehicle (DHOV) ramp
- Discuss other system-wide improvements
  - Loop 101 to 91st Avenue ramp alternatives
  - Improvements at traffic interchanges
- Present study timeline and next steps
- Provide opportunity to ask questions and provide comments



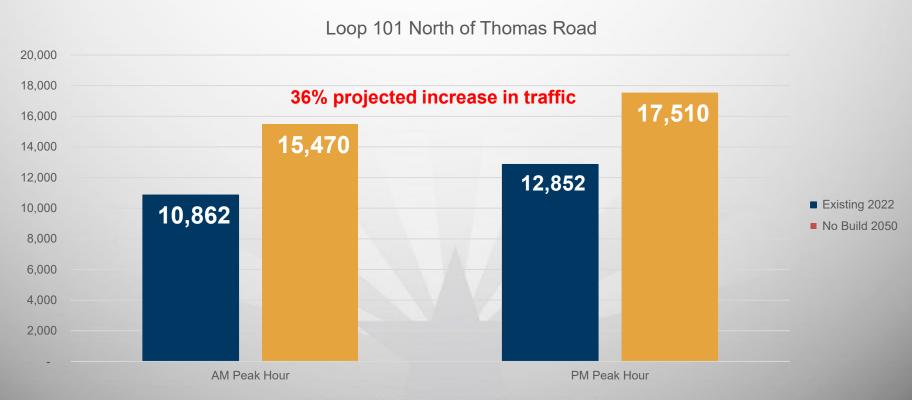
# **Project Need**

- Traffic congestion approaching the Loop 101/I-10 interchange
- Arterial street traffic congestion within the project area
- Traffic weaving contributes to congestion and crashes
- High crash rates within the study area
- No current direct HOV connection between Loop 101 and I-10 to the east
- Limited access to neighborhoods and large distribution centers south of I-10





## **Existing and Future Traffic Conditions**



ARIZONA DEPARTMENT OF TRANSPORTATION



## **Existing and Future Traffic Conditions**



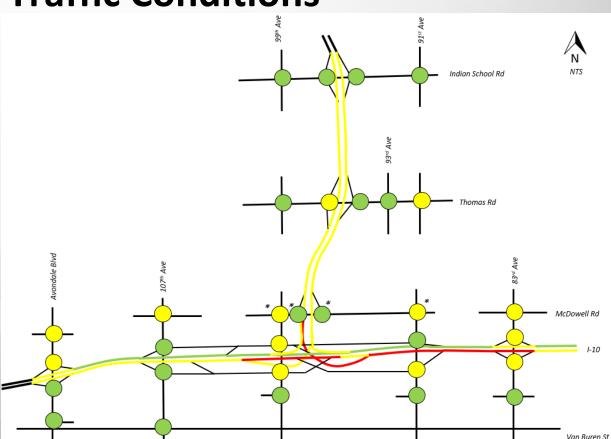


ARIZONA DEPARTMENT OF TRANSPORTATION



# **Existing AM Peak Traffic Conditions**

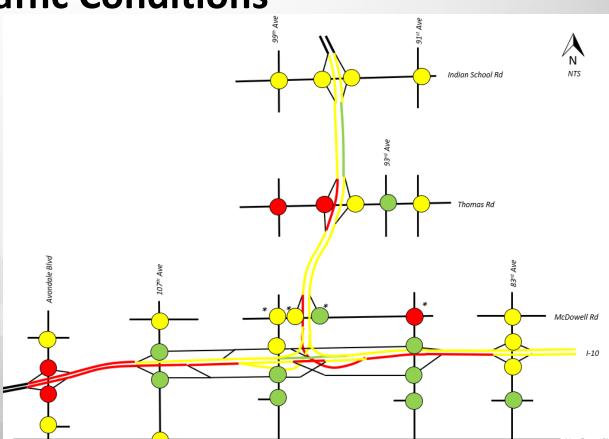
- Level of Service A or B
- Level of Service C or D (moderate congestion)
- Level of Service E or F (high congestion)





### **2050 AM Peak Traffic Conditions**

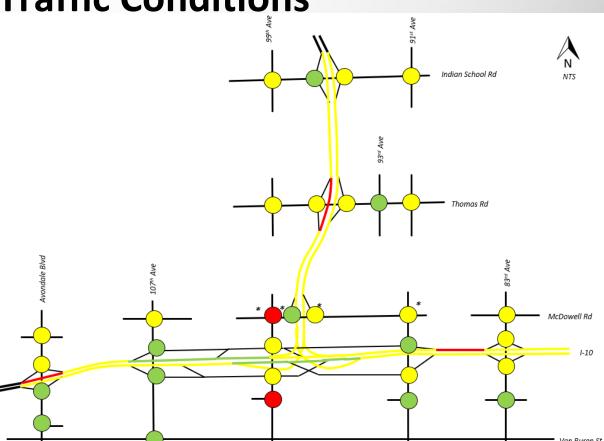
- Level of Service A or B
- Level of Service C or D (moderate congestion)
- Level of Service E or F (high congestion)





**Existing PM Peak Traffic Conditions** 

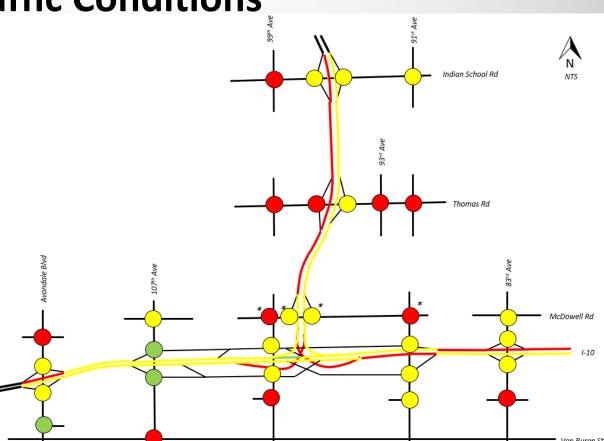
- Level of Service A or B
- Level of Service C or D (moderate congestion)
- Level of Service E or F (high congestion)





## **2050 PM Peak Traffic Conditions**

- Level of Service A or B
- Level of Service C or D (moderate congestion)
- Level of Service E or F (high congestion)





# **Project Purpose**

- Mitigate weaving movements for HOV traffic
- Improve safety by minimizing traffic conflict points
- Improve mainline traffic operations
- Improve operations at traffic interchanges and surface streets
- Accommodate future widening projects
- Provide opportunities for incident management



# **No Build Alternative**





# **Overview of Potential Improvements**

- Direct HOV (DHOV)
  - Southbound L101 to eastbound I-10
  - o Eastbound I-10 to northbound L101
- 91st Avenue Connector
- Traffic interchange improvements





## **DHOV Alternative B**





#### **DHOV Alternative B**

#### **Advantages**

- Accommodates all traffic movements during construction
- Traffic entering from Thomas Road may be able to use DHOV lanes, but multiple lane changes would be required (neutral)

#### Challenges

- Requires removal of existing EB I-10 to NB Loop 101 ramp & construction of new ramp
- New EB I-10 to NB Loop 101 ramp is shifted slightly closer to adjacent properties
- Construction required over both directions of I-10 traffic
- Slightly higher utility and/or right-of-way impacts
- Lower design and operating speeds for DHOV traffic

**Recommendation: Advance for Public and Agency Comment** 



## **DHOV Alternative F**





#### **DHOV Alternative F**

#### **Advantages**

- Does not affect any of the existing system ramps
- Minimal traffic control requirements during construction
- Most construction is away from I-10 and Loop 101 traffic
- Provides more room for future maintenance of the DHOV ramp
- Minimal utility and/or right-of-way impacts
- Highest design and operating speeds for DHOV traffic
- Lowest construction cost

#### **Challenges**

DHOV ramp is closer to adjacent properties

**Recommendation: Advance for Public and Agency Comment** 

ARIZONA DEPARTMENT OF TRANSPORTATION



## SB Loop 101 Ramp to 91st Ave Alternative 1



#### <u>Advantages</u>

- Does not relocate southbound Loop 101 to McDowell Road exit
- Lower utility and right-of-way impacts

#### **Challenges**

- Does not improve traffic operational performance on southbound Loop 101
- Requires construction over both directions of I-10 traffic
- Very high construction cost due to the new flyover ramp bridge
- Possible noise concerns due to the height of the flyover bridge

**Recommendation: Eliminate** 



## SB Loop 101 Ramp to 91st Ave Alternative 2



#### <u>Advantages</u>

- Improves Loop 101 traffic operational performance
- Reduces risk of McDowell Road exit traffic backing onto Loop 101

#### **Challenges**

- Requires construction over both directions of I-10 traffic
- Very high construction cost due to the new flyover ramp bridge
- Possible noise concerns due to the height of the flyover bridge
- Slightly higher utility and right-of-way impacts

**Recommendation: Advance for Public and Agency Comment** 



## SB Loop 101 Ramp to 91st Ave Alternative 3



#### <u>Advantages</u>

- Significantly lower construction cost
- Improves Loop 101 traffic operational performance
- Reduces risk of McDowell Road exit traffic backing onto Loop 101
- Eliminates the need for construction of a new flyover ramp

#### **Challenges**

- Adds traffic to existing Loop 101 to eastbound I-10 ramp
- May require a short-term lane closure during construction
- 91<sup>st</sup> Avenue exiting traffic could potentially back into the southbound Loop 101 to eastbound I-10 ramp in the event of an incident at the 91<sup>st</sup> Avenue Ramp intersection

**Recommendation: Advance for Public and Agency Comment** 



# **Recommended Traffic Interchange Improvements**

Location	Recommendation
I-10 at Avondale Blvd	Add Capacity/Turn Lane Improvements
I-10 at 107th Ave	Add Capacity/Turn Lane Improvements
I-10 at 99th Ave	Add Capacity/Turn Lane Improvements
I-10 at 91st Ave	Extend Left Turn Lanes
I-10 at 83rd Ave	Extend Left Turn Lanes
Loop 101 / McDowell Rd	Add Capacity & Turn Lane Improvements
Loop 101 at Thomas Rd	Add Capacity & Turn Lane Improvements
Loop 101 at Indian School Rd	Signal Timing and Phasing

ARIZONA DEPARTMENT OF TRANSPORTATION



## **Environmental Considerations**

- Document potential impacts to social, economic and natural environments
  - Socio-Economic (Environmental Justice/Title VI)
  - Air Quality
  - Land Use
  - Noise
  - Biology

- Section 4(f) Publicly owned Parks, Trails, and
  Wildlife Refuges; Historic Sites
- Historic Properties
- Hazardous Materials
- Cultural Resources
- Document public and agency outreach
- Noise Abatement
  - Preliminary Noise Analysis underway
  - Final Noise Analysis will be available on the ADOT website once complete

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated 04/16/2019, and executed by FHWA and ADOT.



# **Project Funding**

- Current Maricopa Association of Governments (MAG) programmed funding
  - \$194 million for construction (FY 2025)
- Loop 101/91st Avenue connection
  - \$25 million (partial funding provided through state appropriations)
- Initial DCR includes preliminary cost estimates; will be refined in Final DCR
- Implementation plan will determine sequence and timing of improvements
- Recommendations may be implemented as multiple projects, depending on funding

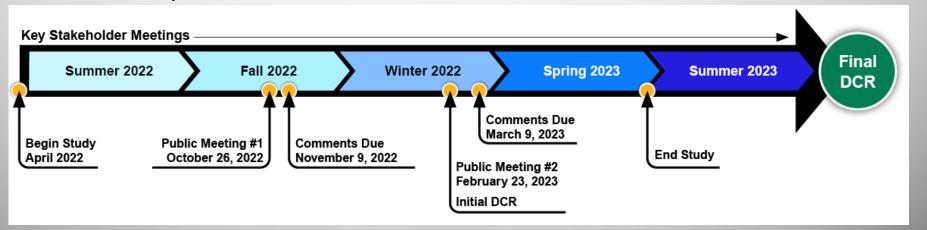


# **Study Timeline**

- Gather feedback
- Confirm recommendations
- Develop implementation plan
- Finalize Report

## **Next Steps**

- Final Design, including a public meeting
- Construction





# **Provide Input / Contact Us**

Ways to provide comments through March 9, 2023:

- Tonight's meeting
- Online Comment Form: azdot.gov/I10Loop101-CommentForm
- Email: klarson@azdot.gov
- Phone: 480-589-4366
- Mail: Kimberly Larson, ADOT Community Relations, 1655 W. Jackson St, Room 179, MD 126F, Phoenix, AZ 85007

Website: www.azdot.gov/I10 Loop101 TI

 More information, sign up for mailing list, comment or watch recording of tonight's meeting



# Thank you for attending!

Study team staff are available to answer any questions you may have.