ARIZONA DEPARTMENT OF TRANSPORTATION

Draft Air Quality Report

Interstate 10 and Koli Road Traffic Interchange

Maricopa County, Arizona

ADOT Project No. F0701 01L

April 2025

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 June 25, 2024, and executed by FHWA and ADOT.

This page is intentionally left blank.

Contents

Appendices

Tables

Figures

1 Introduction

The Arizona Department of Transportation (ADOT), as the lead agency and as the Project sponsor, is initiating a design concept report and an environmental assessment (EA) for the Interstate 10 (I-10) Germann Road traffic interchange (TI) (Project). The EA will be carried out by ADOT pursuant to 23 United States Code 327. The project proposes to construct a new TI on I-10 approximately halfway between the existing Wild Horse Pass Boulevard and State Route (SR) 347/Queen Creek Road TIs. The EA will consider and assess several alternatives (type and location) for the TI, including a no-build alternative, as required by the National Environmental Policy Act.

The proposed Project is located within Maricopa County, Arizona, and entirely within the Gila River Indian Community (Community). The Study Area for the proposed TI extends approximately 0.5 mile east of I-10, 1.2 mile north of milepost 163.5, and 1.5 mile south of milepost 163.5. To the west, the Study Area extends farther out—from 0.5 to 1.7 mile west of I-10—to encompass the existing Maricopa Road, where the Koli Road Extension would tie into. Within the Project study area limits, I-10 currently consists of two lanes in each direction, with a dirt median separating traffic. The I-10 Wild Horse Pass Corridor Project, however, proposes to add one general purpose lane and a high-capacity vehicle lane. If the I-10 Wild Horse Pass Corridor Project proceeds, a Germann Road TI would accommodate this lane configuration.

The purpose of the proposed Project is to provide new and improved access to I-10 in the vicinity of Germann Road. This new access would accommodate traffic for current and future land use and developments, would help relieve future congestion at the adjacent TIs, and would relieve congestion on the local roadway network that occurs following Wild Horse Pass events.

The scope of work for this Project includes:

- Construct new TI of some type between the existing Wild Horse Pass Boulevard TI and SR 347 TI
- Acquire new easement on Gila River Indian Community lands to accommodate the TI
- Modify drainage features, where necessary
- Relocate utilities, where necessary
- Evaluate weaves between Germann Road and adjacent Tis
- Install or modify signing, pavement striping, and lighting
- Remove vegetation, including trees, and revegetate areas disturbed by construction

The Project limits are located within ADOT's existing I-10 easement and on the Community. Additional easement from the Community would be needed.

Figure 1. Project location in state

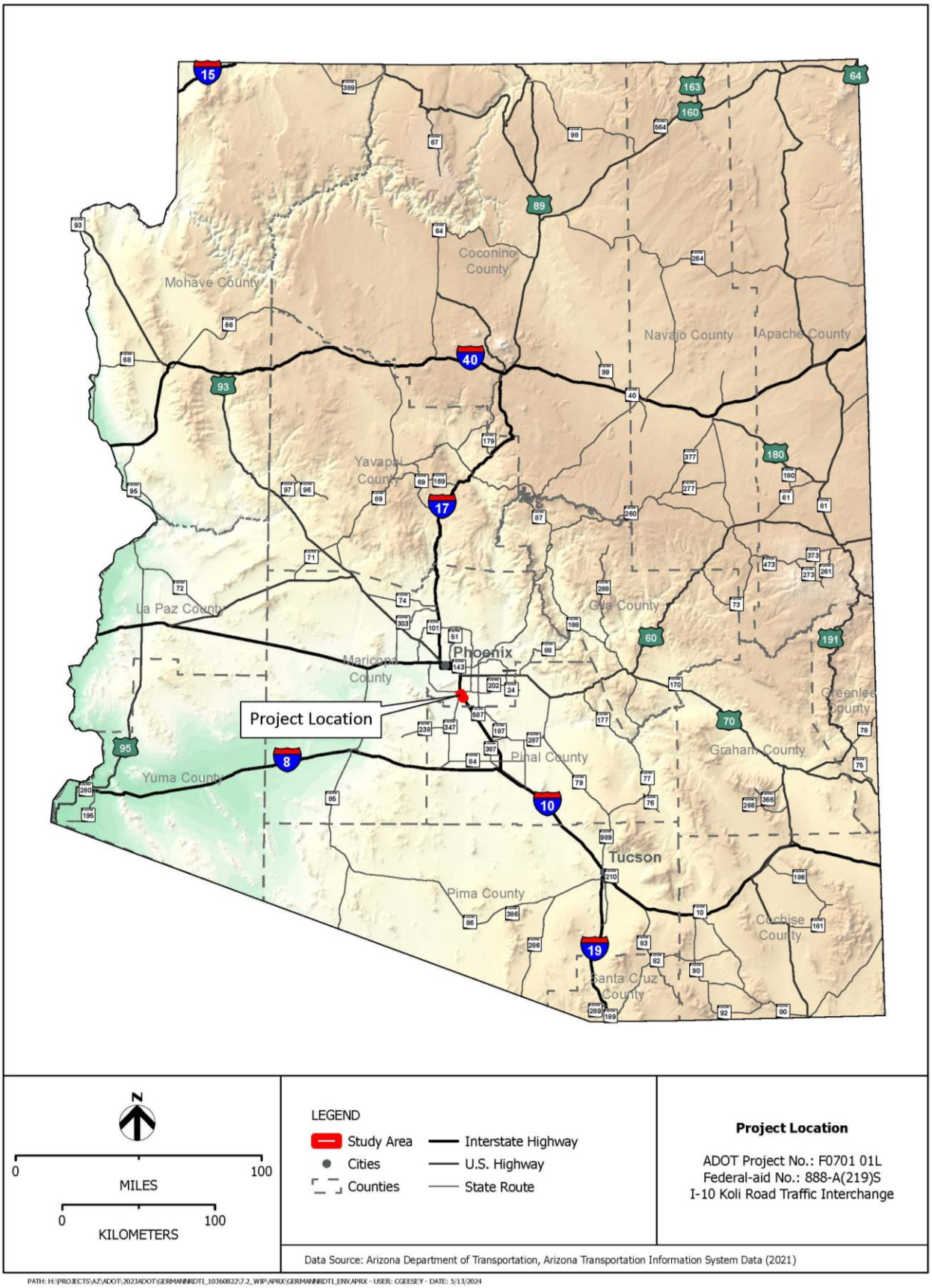
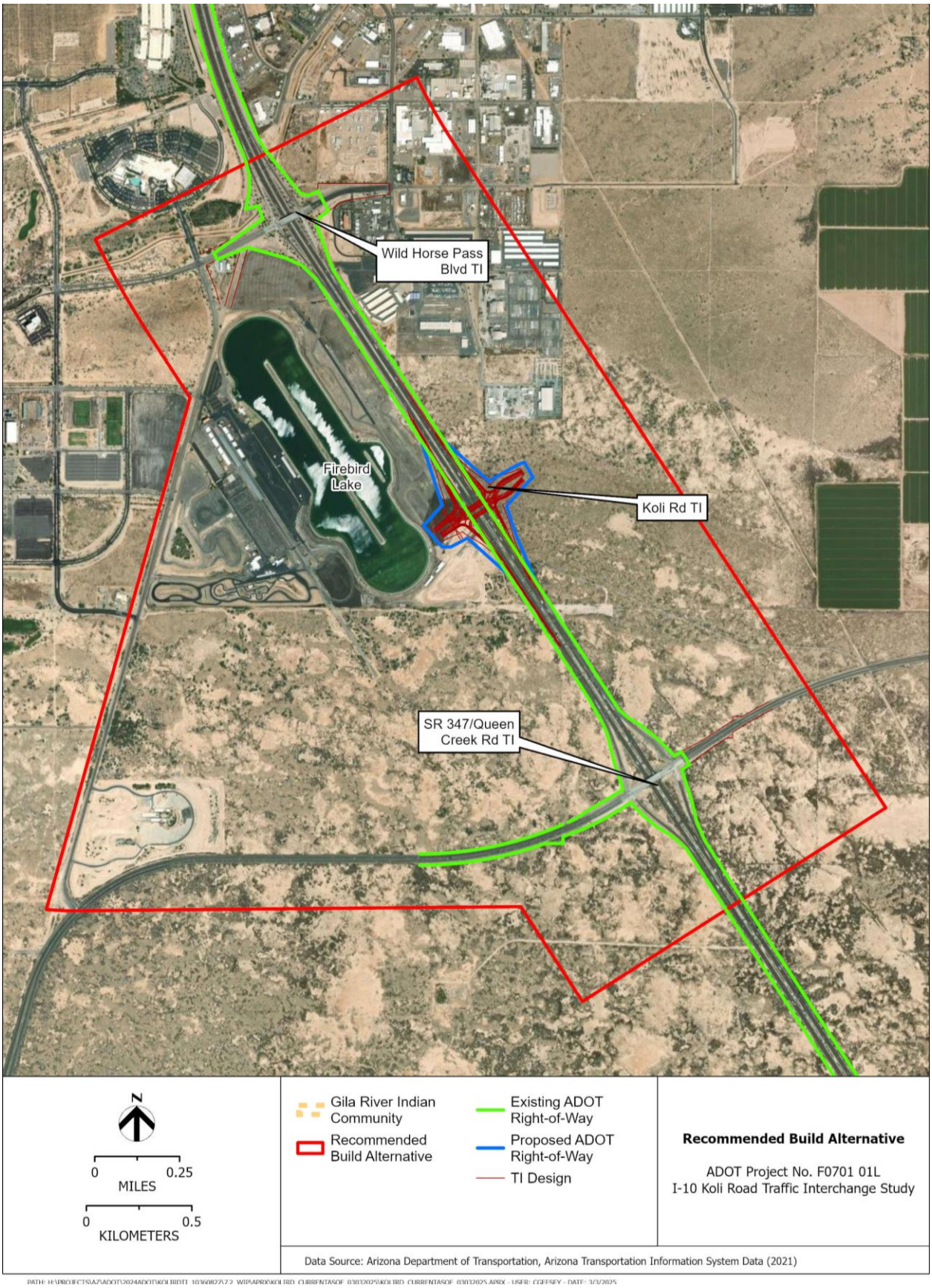


Figure 2. Project vicinity



2 Affected Environment

2.1 Regional Climatology

The project's study area elevation is approximately 1,100 – 1,600 feet above sea level. It lies in the Sonoran Desert, with a climate characterized by extremely hot summers, mild winters, and low precipitation. In the winter many days are over 70 degrees Fahrenheit (ºF). The normal high temperature is over 90 ºF from early May through late September, and over 100 ºF from early June through late August. Annual precipitation averages just less than 7 inches and occurs in the form of rain associated with afternoon showers or thunderstorms during the late summer months and with eastward-moving Pacific storms during the winter months. Snowfall is rare. A summary of average monthly temperature and precipitation is presented in Table 1.

Table 1. Climate Data for Phoenix, Arizona (2000–2023)

Month	Average Temperature (°F)	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Precipitation (inches)
January	56.9	68.0	45.8	0.72
February	59.7	71.1	48.4	0.75
March	66.5	78.6	54.5	0.68
April	74.1	86.8	61.4	0.17
May	82.6	95.3	69.8	0.09
June	92.5	105.5	79.6	0.05
July	96.3	107.2	85.3	0.82
August	94.4	105.2	83.6	0.92
September	89.7	101.0	78.4	0.53
October	77.5	89.3	65.7	0.58
November	65.6	77.2	54.1	0.44
December	56.1	66.7	45.5	0.71

Source: National Weather Service, 2025

[a] in degrees Fahrenheit

2.2 Air Quality Standards

The federal Clean Air Act (CAA) of 1970 was the first comprehensive legislation aimed at reducing levels of air pollution throughout the country. The 1970 law required the U.S. Environmental Protection Agency (EPA) to establish the National Ambient Air Quality Standards (NAAQS), which set maximum allowable concentrations for six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10})/fine particulate matter ($PM_{2.5}$), sulfur dioxide (SO_2), and lead, as shown in Table 2 and briefly described below.

Table 2. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary Standard	Secondary Standard
Carbon monoxide (CO)	1-hour	35 ppm[a]	No standard
	8-hour	9 ppm	No standard
Nitrogen dioxide (NO_2)	1-hour	0.100 ppm	No standard
	Annual	0.053 ppm	0.053 ppm
Ozone (O_3)	8-hour	0.070 ppm	0.070 ppm
Particulate matter (PM_{10})	24-hour	150 µg/m^3 [b]	150 µg/m^3
Fine particulate matter ($PM_{2.5}$)	24-hour	35 µg/m^3	35 µg/m^3
	Annual	9 µg/m^3	15 µg/m^3
Sulfur dioxide (SO_2)	1-hour	0.075 ppm	No standard
	Annual	No standard	0.01 ppm
Lead	Rolling 3-month average	0.15 µg/m^3	0.15 µg/m^3

Source: 40 Code of Federal Regulations (C.F.R.) § 50

Note: The 1-hour standard for O_3 listed here was phased out in June 2005, but is still applicable to previously designated nonattainment areas.

[a] parts per million [b] micrograms per cubic meter

- CO is a colorless, odorless gas resulting from the incomplete combustion of carbon-based fuels, including petroleum products. In most areas, vehicle emissions are the primary source of CO. Mobile sources (on-road motor vehicle exhaust) are the primary source of CO in both Maricopa County and in the U.S. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Prolonged exposure to high levels of CO can cause headaches, drowsiness, loss of equilibrium, or heart disease. CO levels are generally highest in the colder months of the year when inversion conditions (where warmer air traps colder air near the ground) are more frequent.
- Ozone (O_3) is a colorless toxic gas and is found in both the Earth's upper and lower atmospheric levels. In the upper atmosphere, O_3 is a naturally occurring gas that helps to prevent the sun's harmful ultraviolet rays from reaching the Earth. In the lower layer of the atmosphere, O_3 is human made. O_3 is produced through a complex chemical reaction in which precursor compounds, such as

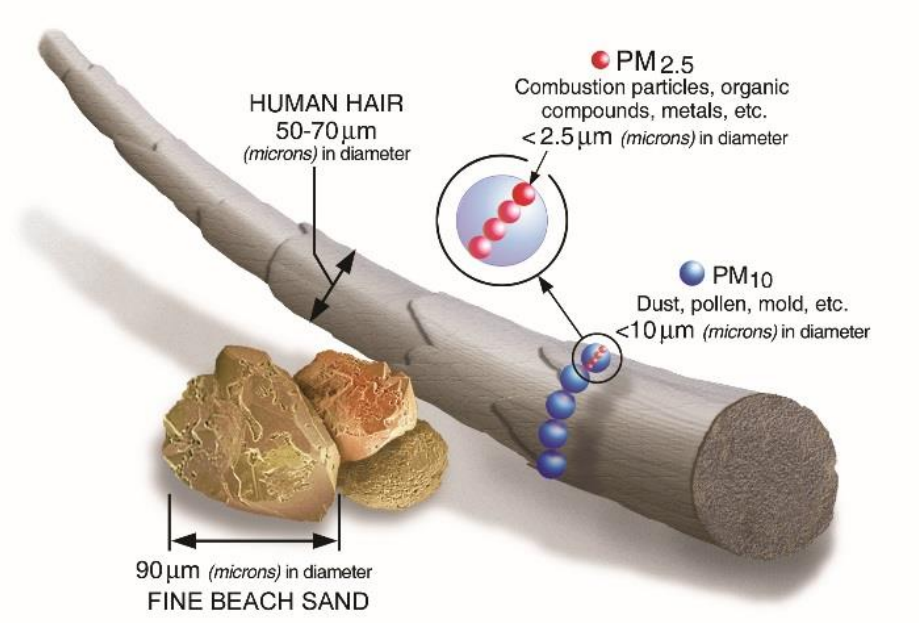
Figure 3. Ozone in the Atmosphere

Source: EPA

hydrocarbons and nitrogen oxides, are transformed by sunlight into ozone molecules, which consist of three oxygen atoms. The primary sources for O_3 precursors are vehicular and industrial emissions.

- NO_2 is a yellowish-orange to reddish-brown gas resulting from high-temperature combustion. Diesel vehicles and power plants are major sources of NO_2.
- PM_{10} and $PM_{2.5}$ consist of suspended dust, fibers, combustion ash, and other fine particles. The major source is industrial emissions, but these pollutants also result from diesel vehicle emissions, unpaved roadways, agricultural activity, and dirt on paved roads kicked up by passing vehicles. PM_{10} is inhalable particles, with diameters that are generally 10 micrometers and smaller; and $PM_{2.5}$ is fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Figure 4 shows the sizes of PM_{10} and $PM_{2.5}$ relative to fine beach sand and human hair.

Figure 4. Size Comparisons for PM Particles



Source: EPA

- SO_2 is a colorless gas with a rotten egg odor that results from the combustion of fuels containing sulfur. Primary sources are coal-fired power plants, industrial plants, and metal smelters, with some emissions from diesel vehicles burning low-grade fuels.
- Lead in the atmosphere results primarily from the burning of leaded fuels. Lead pollution has been drastically reduced in the United States in recent years with the banning of leaded automobile fuels.

Amendments to the CAA were passed in 1977 and 1990. Among many other revisions included in the amendments are requirements for nonattainment areas and State Implementation Plans (SIPs) for areas that do not meet the standards.

For most of the six criteria pollutants, two standards have been established: a primary standard and a secondary standard. Although there is little difference between the two, the primary standard was established with the goal of protecting the public health, while the secondary standard is intended for the protection of the public welfare.

2.3 Mobile Source Air Toxics

In addition to the criteria air pollutants for which there are NAAQS, EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), and stationary sources (e.g., factories or refineries).

MSATs are a subset of 21 of the 188 air toxics defined by the CAA. The MSATs are compounds that are emitted not only from stationary sources such as power plants, factories, oil refineries, dry cleaners and gas stations, but also from highway vehicles and nonroad equipment. A subset of the 21 MSATs have been labeled by the Federal Highway Administration (FHWA) as the seven priority MSATs. These are acrolein, benzene, 1,3 butadiene, diesel particulate matter plus diesel exhaust organic gases, formaldehyde, naphthalene and polycyclic organic matter. These seven are currently considered the priority transportation toxics, but the list may be modified in the future.

Acrolein is a nearly clear to yellow liquid that burns easily, is easily volatized, and has a disagreeable odor. Acrolein can be formed from the breakdown of certain pollutants found in outdoor air, from tobacco burning, or from burning gasoline. Exposure to acrolein causes upper respiratory tract irritation and congestion in low concentrations and may cause death in high concentrations. Not enough information is available on acrolein to evaluate its carcinogenicity.

Benzene is a volatile, colorless, highly flammable liquid that dissolves easily in water and has sweet odor. Benzene is found in emissions from burning coal and oil, motor vehicle exhaust, evaporation from gasoline service stations, and in industrial solvents. Tobacco smoke contains benzene and accounts for nearly half the national exposure to benzene. Benzene exposure causes drowsiness, dizziness, headaches, unconsciousness, vomiting, convulsions, and irritation to the eyes, skin, and upper respiratory tract. Benzene is a known human carcinogen. Chronic exposure to benzene causes blood disorders and chromosomal aberrations.

1,3-butadiene is a colorless gas with a mild, gasoline-like odor. Sources of 1,3-butadiene in the air include motor vehicle exhaust, manufacturing and processing facilities, forest fires or other combustion, and cigarette smoke. Exposure to 1,3-butadiene causes irritation of the eyes, nasal passages, throat, and lungs in low concentrations and blurred vision, fatigue, headache, and vertigo in higher concentrations. 1,3-

butadiene has recently been reclassified from a probable human carcinogen to a known human carcinogen.

Diesel particulate matter is a collection of various-sized particles emitted from diesel powered vehicles, including primarily elemental carbon, organic carbon, and sulfate particles, with trace amounts of nitrate, metals, and other particles. Diesel particulate matter of concern for MSAT analyses are those particles sized 10 microns or smaller. Although particulate matter may be derived from a number of sources, diesel particulate matter by definition is derived exclusively from diesel vehicle exhaust. Exposure to diesel particulate matter results in irritation to the eyes, nose, throat, and lungs, and may exacerbate asthma. Diesel particulate matter is considered a probable human carcinogen.

Formaldehyde is a colorless gas with a pungent, suffocating odor that is readily soluble in water. High levels of formaldehyde have been detected in indoor air, where it is released from various consumer products such as building materials and home furnishings. Major sources of outdoor concentrations of formaldehyde include power plants, manufacturing facilities, incinerators, and automobile exhaust emissions. Exposure to formaldehyde results in irritation to the eyes, nose, and throat; coughing; chest pains; and bronchitis. Formaldehyde is classified as a probable human carcinogen.

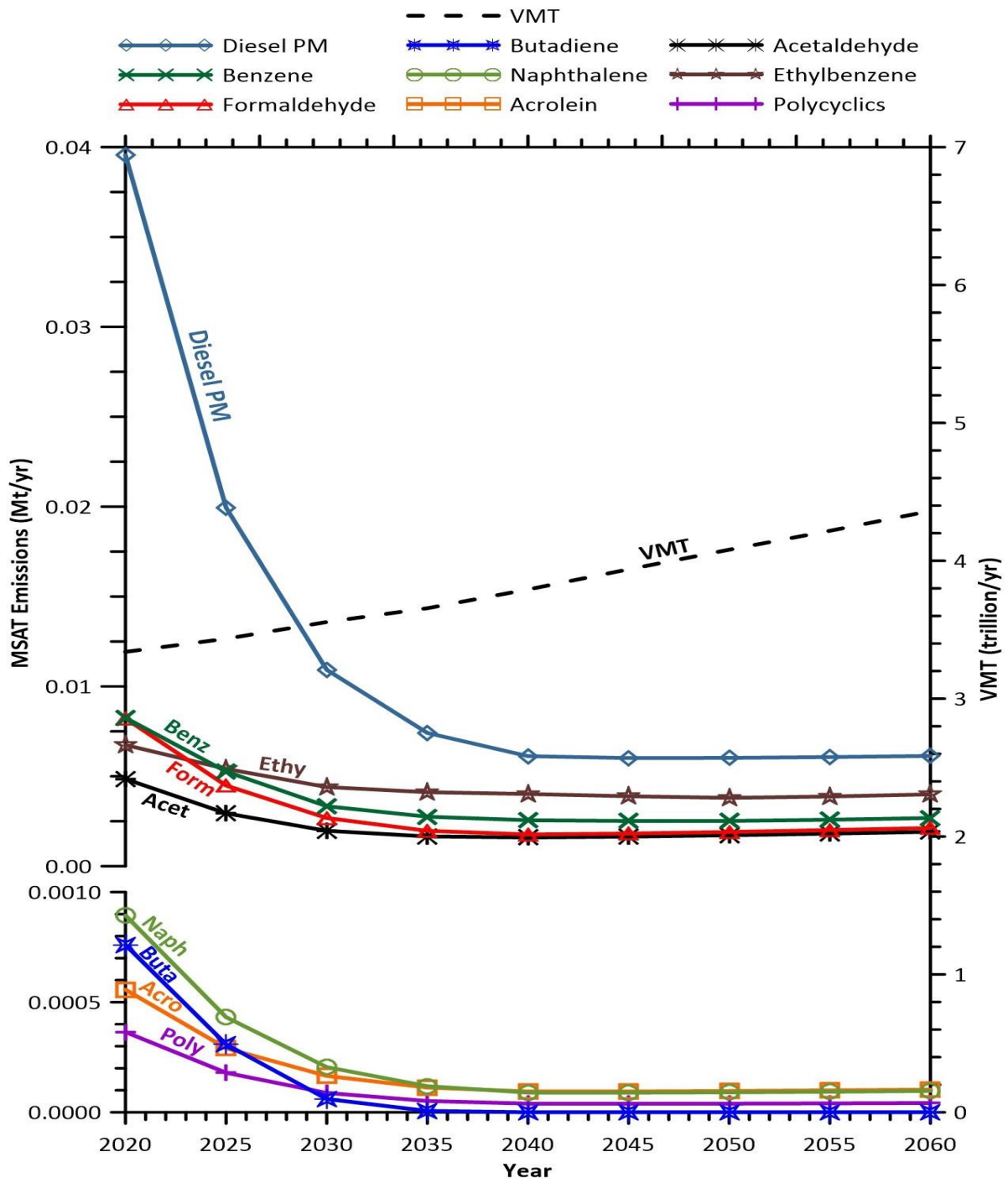
Polycyclic organic matter (POM) is a class of compounds that includes all organic structures having two or more fused aromatic rings, that have a boiling point greater than that of water, and that are extremely insoluble in water. There are eight major categories of POM, the most common being polycyclic aromatic hydrocarbon compounds (PAHs). POM compounds are formed primarily from combustion and are present in the atmosphere in particulate form. Major sources of POM include cigarette smoke, vehicle exhaust, and wood burning, among others. No information is available on the effects of short-term exposure to POM and PAHs. However, the EPA has classified several PAHs as probable human carcinogens, and evidence suggests possible reproductive toxicity, chronic blood and liver effects, and chronic respiratory effects from POM.

Naphthalene is a white solid or powder that is insoluble in water and has a strong, mothball odor. Primary sources of naphthalene in the air include the burning of coal and oil, the use of mothballs, and from cigarette smoke. Exposure to naphthalene results in headache, nausea, vomiting, liver damage, cataracts, neurological damage in infants, and chronic inflammation of the lungs and nasal passages. Naphthalene is classified as a possible human carcinogen.

While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. According to EPA's latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), controls are required to dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. Based on an FHWA analysis using MOVES3 model, as shown in Figure 5, even if vehicle miles traveled (VMT) increases by 31 percent as assumed from 2020 to 2060, a combined reduction of 76 percent in the

total annual emissions for the priority MSAT is projected for the same time period (FHWA, 2023). (Figure 5)

Figure 5. FHWA Predicted National MSAT Emission Trends, 2020–2060, for Vehicles Operating on Roadways



Note: Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors.
Source: EPA MOVES3 model runs conducted by FHWA, March 2021.

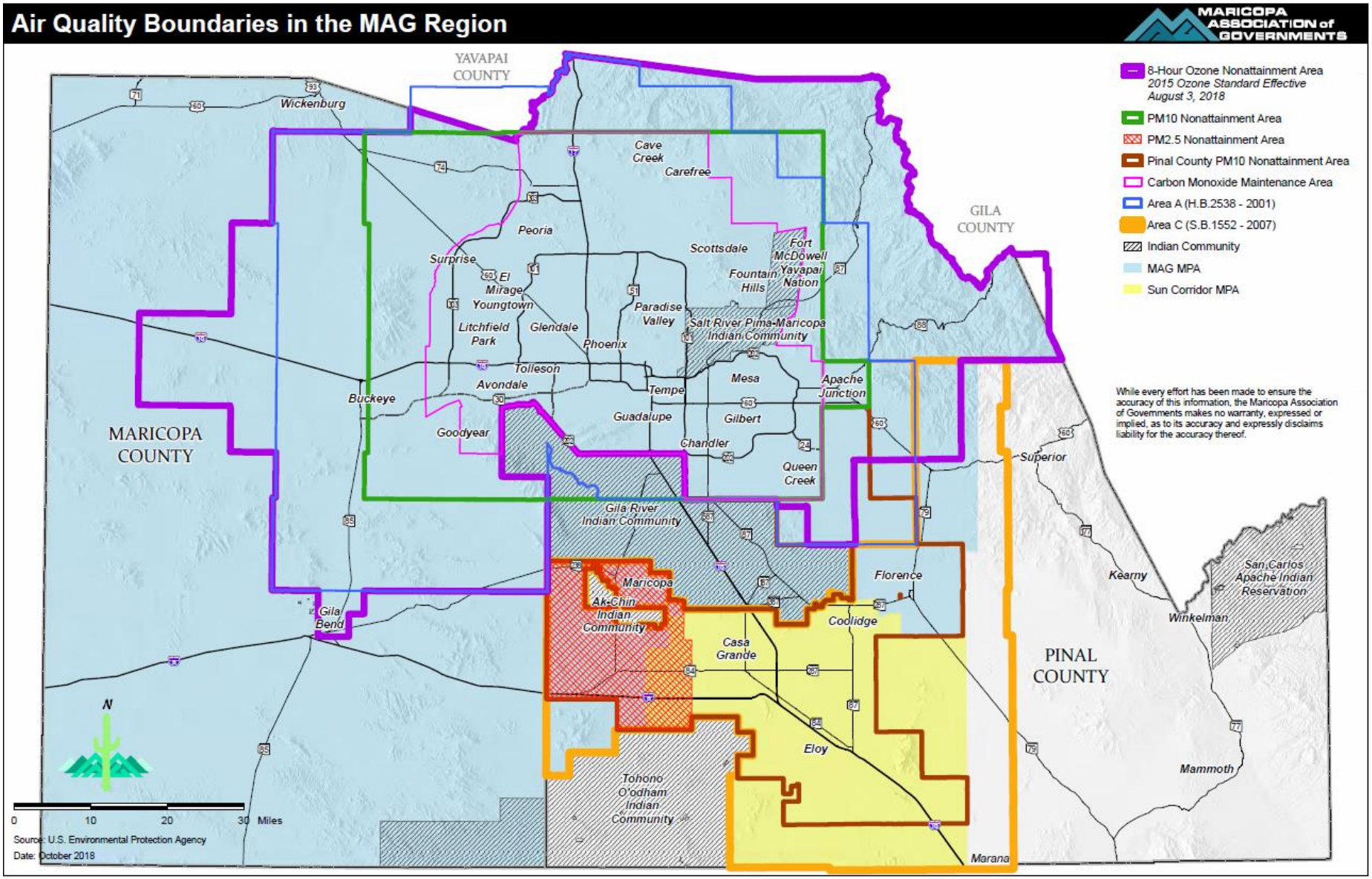
2.4 Nonattainment Areas

The CAA amendments of 1977 and 1990 authorized EPA to designate areas that have not met the NAAQS as nonattainment areas and to classify the severity of the nonattainment. Each nonattainment area requires a SIP that outlines actions to reduce air pollution to levels that comply with the NAAQS.

The proposed project lies within the Phoenix PM_{10} nonattainment area. The Phoenix Particulate Matter Nonattainment Area is defined as an area within eastern Maricopa County, approximately 60 miles long by 48 miles wide, and an additional area within Pinal County, 6 miles by 6 miles in size. It encompasses the Phoenix metropolitan area, including Apache Junction. (Figure 6)

The Phoenix Particulate Matter Nonattainment Area was originally classified in November 1990 as "moderate." The area was reclassified in June 1996 to "serious," requiring attainment by 2001. The State of Arizona submitted a revised plan to achieve attainment and requested a 5-year extension of the attainment deadline for the 24-hour and annual PM_{10} standards for the Phoenix area. On January 10, 2002, EPA announced approval of the plan and granted the extension to December 2006. Despite the Most Stringent Measures and Best Available Control Measures adopted and implemented earlier, the Phoenix area failed to attain the PM_{10} standard by the December 2006 deadline. The failure triggered a special requirement under Section 189(d) of the CAA that SIP revisions provide for annual reductions of PM_{10} and PM_{10} precursors of not less than 5 percent of the most recent emissions inventory until the NAAQS is attained. The SIP revision was submitted to EPA in December 2007, demonstrating the necessary 5 percent annual reductions through revisions to county dust control regulations, new agriculture best management practices, and paving unpaved roads and shoulders, among other control measures. On September 9, 2010, EPA proposed to approve in part and disapprove in part the SIP revisions. However, on January 25, 2011, prior to EPA's final action on the SIP revisions, the State of Arizona withdrew the submitted plan from EPA's consideration to be able to make improvements on the plan. This withdrawal triggered EPA to find, on February 14, 2011, that Arizona failed to make the required submittal under Section 189(d) of the CAA. The failure triggers an 18-month clock for mandatory application of sanctions (including loss of federal highway funds in 24 months) and a 2-year clock for a federal implementation plan. These sanctions clocks will stop when a new plan is submitted and EPA determines that the new plan is complete. The State of Arizona adopted and submitted the 2012 5% Plans on May 25, 2012, and submitted supplemental information to the EPA on June 22 and July 2, 2012. The EPA found the plans complete on July 20, 2012, stopping sanctions clocks. EPA concurred with Exceptional Events flags in letters dated September 6, 2012, and July 1, 2013. The EPA approved fugitive dust statutes for the plans on December 3, 2013. EPA published a Notice of Adequacy of the Motor Vehicle Emissions Budget on December 5, 2013.On June 10, 2014, EPA published the final rule approving the MAG 2012 5% Plan for PM_{10}.

Figure 6. Nonattainment and Maintenance Areas in Maricopa and Pinal Counties



2.5 Ambient Pollutant Levels

The Maricopa County Air Quality Department (MCAQD), the Pinal County Air Quality Control District (PCAQCD), and Gila River Indian Community Department of Environmental Quality maintain a network of air monitoring sites throughout the Maricopa County, Pinal County, and Gila River Indian Community. Monitoring sites vary in terms of the number of pollutants monitored, with some sites monitoring one pollutant and others monitoring up to five pollutants. Some monitoring sites operate for the entire year, while others operate for the peak pollutant season only. There are three monitoring sites adjacent to the proposed Koli Road TI Study Area.

The adjacent monitoring site in Maricopa County is the West Chandler site (located at Frye Rd & Ellis St, Chandler). This monitoring site collects data on concentrations of 24-hour PM_{10}, 8-hour O_3, and 8-hour CO. The West Chandler site recorded exceedances of PM_{10} standards in 2021 and 2022. For the years 2021 through 2023, West Chandler monitoring site recorded 4 exceedances of PM_{10} and 14 exceedances of O_3, but no exceedances of CO NAAQS.

The adjacent monitoring sites in Gila River Indian Community closest to the project site are the Casa Blanca site (3455 W Casa Blanca Rd) and St. Johns site (4665 W Pecos Rd). The Casa Blanca monitor collects data on concentrations of 24-hour PM_{10} and the St. Johns monitor collects data on concentrations of 24-hour PM_{10} and 8-hour O_3. Table 3 summarizes air monitoring data at the three sites.

Table 3. Air Quality Monitoring Data

Monitoring site	Pollutant	Averaging time	2021		2022		2023	
			Concentration	Number of Exceedances	Concentration	Number of Exceedances	Concentration	Number of Exceedances
West Chandler	PM_{10}	24-hour	181 µg/m^3	3	191 µg/m^3	1	152 µg/m^3	0
	O_3	8-Hour	0.081 ppm	8	0.083 ppm	4	0.075 ppm	2
	CO	8-Hour	1.2 ppm	0	1.1 ppm	0	1.1 ppm	0
Casa Blanca	PM_{10}	24-hour	259 µg/m^3	3	774 µg/m^3	3	216 µg/m^3	1
St. Johns	PM_{10}	24-hour	223 µg/m^3	3	259 µg/m^3	4	260 µg/m^3	2
	O_3	8-hour	0.076 ppm	2	0.077 ppm	3	0.076 ppm	5

Source: EPA, Outdoor Air Quality Data, accessed on 1/10/2025
Maricopa County Air Quality Department, 2022 – 2024 Air Monitoring Network Plan's, Final.
Gila River Indian Community 2021- 2023 Ambient Air Monitoring Network Review and 2022 - 2024 Plan's

3 Environmental Consequences

Project-level air quality analyses for proposed roadways typically focus on vehicle emissions of CO, PM_{10}, and MSATs. Although vehicle emissions include other pollutants, the concentrations of CO, PM_{10}, and MSATs are the most easily assessed and provide a convenient measure of the local air quality impacts

from a proposed roadway. Other pollutants, such as O_3, nitrogen oxides, and hydrocarbons, are regional in nature, making a project-level evaluation meaningless. Project-level analyses can be completed using qualitative or quantitative methods, depending on the scale of the project, the level of design information available for the analysis, and the overall purpose of the analysis.

This section describes the methods, impact criteria, and results of air quality analyses of the proposed project. The analyses use guidelines and procedures provided in applicable air quality analysis protocols from EPA and FHWA. A Project Level CO Hot-Spot Analysis Questionnaire was not developed for this project, as the Project area is not within a CO nonattainment zone. The Project Level PM Hot-Spot Analysis Questionnaire determined that conformity analysis wasn't warranted for PM analysis. In addition, the Project Level PM Quantitative Hot-Spot Analysis – Project of Air Quality Concern Questionnaire determined that this project does not require a PM_{10} quantitative analysis. Instead, a qualitative PM_{10} analysis was conducted for NEPA purposes.

3.1 CO NEPA Analysis

The FHWA Technical Advisory T 6640.8A notes "A microscale CO analysis is unnecessary where such impacts (project CO contribution plus background) can be judged to be well below the 1- and 8-hour National Ambient Air Quality Standards (or other applicable State or local standards). This judgment may be based on (1) previous analyses for similar projects; (2) previous general analyses for various classes of projects; or (3) simplified graphical or "look-up" table evaluations. In these cases, a brief statement stating the basis for the judgment is sufficient."

As a similar project, I-10 Broadway Curve project is a widening project located just north of the proposed Koli Road TI project. The predicted worst-case one-hour and eight-hour CO concentrations from the I-10 Broadway Curve project are well below National Ambient Air Quality Standards at the selected intersections. Therefore, it can be inferred that the proposed Koli Road TI project would not result in CO impacts.

3.2 PM_{10} NEPA Analysis

According to 40 CFR § 93.116 *Criteria and procedures: Localized PM_{10} violations (hot spots)*, the FHWA/FTA project must not cause or contribute to any new localized PM_{10} violations or increase the frequency or severity of any existing PM_{10} violations in PM_{10} nonattainment and maintenance areas. This criterion is satisfied if it is demonstrated that during the time frame of the transportation plan (or regional emissions analysis), no new local violations will be created and the severity or number of existing violations will not be increased as a result of the project.

3.2.1 Methodology

A comparison approach was used for this analysis in which anticipated traffic volumes on the I-10 were compared with those on other major roadways and highways near existing air quality monitoring sites in the greater Phoenix metropolitan area in Maricopa County. The project is tentatively scheduled for construction in fiscal year 2027.

The qualitative analysis of the potential impacts associated with the proposed project began with a review of future traffic conditions on the affected roadways. Annual average daily traffic (AADT) volumes and the percentage of trucks were reviewed, and all truck traffic was assumed to consist of diesel trucks because these data were not available.

Roadway segments and/or intersections with the traffic scenarios for the and existing and Build Conditions in 2023 and 2050 are summarized in Appendix A. The AADT on I-10 is approximately 104,245 vehicles in 2023. The highest AADT would be approximately 189,375 vehicles between Wild Horse Pass Blvd and Koli Rd in 2050 Build condition. The percentage of trucks is averaged 24.9 percent in 2050.

Based on the projected AADT volumes and results of the PM_{10} conformity analysis, I-10 between Wild Horse Pass Blvd and Koli Rd in the year 2050 was selected for a qualitative analysis of PM_{10} impacts. The analysis was a comparative approach that reviewed ambient concentrations of PM_{10} at various locations in the greater Phoenix metropolitan area. The analysis included vehicle-related emissions such as tailpipe exhaust, brake wear particles, tire wear particles, and re-entrained road dust, which is released into the air from passing vehicles. Emissions from construction activities were also included in the analysis. Of the 15 MCAQD PM_{10} monitoring sites in Maricopa County, seven were selected for review and discussion. These sites were selected to represent urban areas adjacent to freeways, urban areas removed from freeways, and rural areas. The selected sites, ambient concentrations of PM_{10} obtained during 2023, nearest roadway, traffic volumes, and diesel truck percentages are presented in Table 4.

Table 4. PM_{10} concentrations and roadway characteristics in urban and rural areas of Maricopa County in 2023

Location	PM_{10} Concentrations (mg/m^3)[a]			Number of Exceedances	Nearest Roadway	Distance From Roadway	Average ADT[c]	Percentage Diesel Trucks
	Maximum 24-hour	Second Maximum 24-hour	Annual average[b]					
Urban locations adjacent to freeways (less than or equal to 0.5 mile)								
Central Phoenix	207	151	34.6	1	I-10[d]	0.25 miles	150,651	10
					SR 51[e]	0.5 miles	43,206	3
					SR 202L[f]	0.75 mile	220,972	8
Dysart	194	140	27.3	1	US 60	0.2 miles	31,271	4
West Chandler	152	146	32.9	0	SR 202L	0.5 miles	111,481	7

Table 4. PM_{10} concentrations and roadway characteristics in urban and rural areas of Maricopa County in 2023

Location	PM_{10} Concentrations (mg/m^3)[a]			Exceedances of Standard	Nearest Roadway	Distance From	Average ADT[c]	Percentage Diesel
					SR 101L[g]	0.5 miles	113,875	3
Urban locations removed from freeways (greater than 0.5 mile)								
Durango Complex	319	112	37.1	1	I-17[h]	0.75 miles	135,820	9
South Phoenix	107	102	31.8	0	I-17	1.5 miles	105,080	13
West 43rd Avenue	216	199	58.6	3	I-17	2.5 miles	135,820	9
Rural Locations								
Buckeye	181	146	46.2	1	SR 85[i]	0.25 miles	21,745	24

Source: Maricopa County Air Quality Department (2024)
a micrograms per cubic meter
b Annual average standard was revoked in 2006 and is provided for information only.
c average daily traffic
d Interstate 10
e State Route 51
f State Route 202 Loop
g State Route 101 Loop
h Interstate 17
i State Route 85

A review of the monitoring data suggests that those locations that generally have the highest ambient concentrations of PM_{10} are in industrial, mining, or agricultural areas. The Buckeye location, near MC 85 and SR 85, is situated in a rural area adjacent to agricultural operations. This location exceeded the 24-hour PM_{10} standard on one occasion during 2023.

The Durango Complex location, near 27th Avenue and Durango Street, is situated in a mixture of land uses, including residential, industrial, open desert, dry riverbed, and landfill operations. The South Phoenix location, near Broadway Road and Central Avenue, is also situated in a mixture of land uses, including residential, industrial, commercial, and vacant land. The West 43rd Avenue location, near 43rd Avenue and Broadway Road, is surrounded by sand and gravel operations, automobile and metal recycling operations, landfills, paved and unpaved haul roads, and cement casting facilities. The 24-hour PM_{10} standard has been exceeded on one occasion at Durango Complex location and three occasions at West 43rd Avenue location.

Locations adjacent to a freeway typically have ambient concentrations within the standards. The Central Phoenix location, near 19th and Roosevelt streets, has been in operation for over 40 years and provides data representative of a high-population, high-density area near three major freeways – I-10, SR-51, and SR 202L. This location had one exceedance of the 24-hour standard in 2023.

The Dysart location, near Bell Road and Dysart Road, is situated within 0.2 mile away from US 60. This location is in a growing population area in the northwest valley and is surrounded by a variety of land uses. This location had one exceedance of the 24-hour standard in 2023.

The West Chandler location, near Ellis Street and Frye Road, is half mile away from SR 101L and SR 202L. This location is situated primarily in a residential area with some agricultural and industrial land uses nearby. This location had no exceedances of the 24-hour standard in 2023.

3.2.2 Results

Of the monitoring locations reviewed, the Central Phoenix site was compared with the Koli Road TI project because of their similar land uses and roadway characteristics. The Koli Road TI project vicinity is surrounded by mixed land uses and vacant properties. The traffic volume and truck volume for I-10 and SR 51 at the Central Phoenix site are similar to those predicted for I-10 in 2050 near the Koli Road TI project area. Although PM_{10} concentrations at the Central Phoenix site had one exceedance of the 24-hour standard in 2023, it was flagged as exceptional event and pending EPA's approval. It is unlikely that the proposed Koli Road TI project improvements would cause or contribute to an exceedance of the PM_{10} standards. This conclusion is based on the following reasons:

- Diesel exhaust is not a major contributor to ambient concentrations of PM_{10}.
- ADT volume and truck volume are predicted to be similar on Koli Road TI project in the design year compared to Central Phoenix site.
- Fugitive dust sources in Maricopa County are the largest contributors to ambient concentrations of PM_{10}. Fugitive dust emissions may be reduced as the area changes from undeveloped properties to a more urban and suburban area.
- The proposed Koli Road TI project would reduce travel time and traffic congestion on nearby arterial streets in the area.
- Per FHWA, the 2060 diesel PM emission is projected to reduce approximately 85% of the 2020 value.

This conformity determination meets all of the applicable CAA Section 176(c) requirements for federally funded or approved transportation projects. Specifically, the requirements for particulate matter hot-spot analyses are codified in 40 CFR § 93.116 and § 93.123. By meeting these regulatory requirements, as well as other requirements in the conformity regulations, this conformity determination demonstrates compliance with the requirements of CAA Section 176(a)(1).

3.3 MSAT NEPA Analysis

3.3.1 Methodology

On February 3, 2006, FHWA released Interim Guidance on Air Toxic Analysis in NEPA Documents (FHWA 2006a). This guidance was superseded on October 18, 2016, by FHWA's Updated Interim Guidance Update on Air Toxic Analysis in NEPA Documents (FHWA 2016). The purpose of FHWA's guidance is to

advise on when and how to analyze MSATs in the National Environmental Policy Act (NEPA) environmental review process for highways. This guidance is considered interim, since MSAT science is still evolving. As the science progresses, FHWA will update the guidance.

The FHWA has outlined a tiered approach for analyzing MSATs in NEPA documents, with three tiers representing the levels of potential impacts from projects.

Depending on specific project circumstances, the FHWA has identified three levels of analysis:

- No analysis for projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; or
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

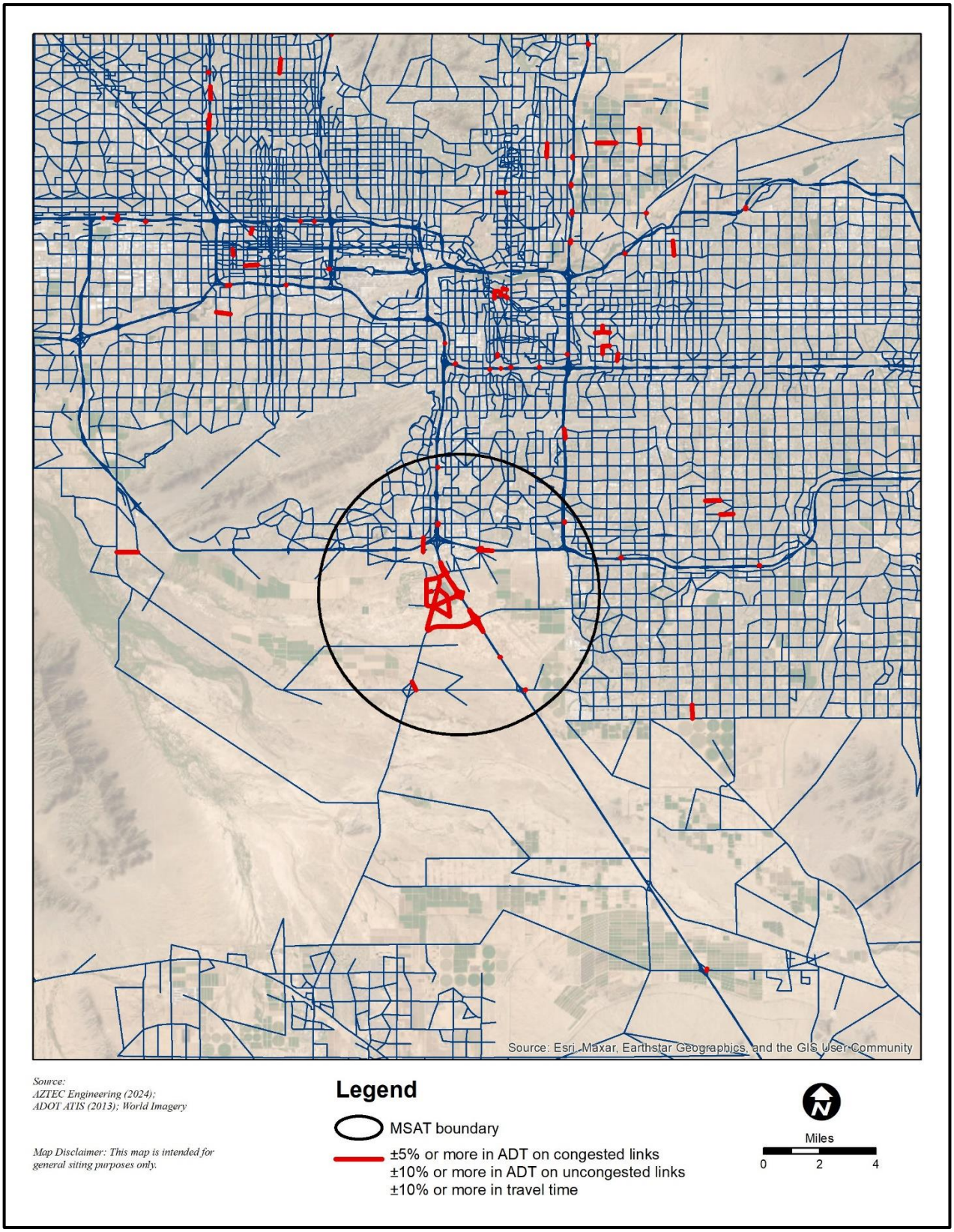
Based on FHWA's recommended tiering approach, the project falls within the Tier 3 approach (i.e., for projects with a high potential for MSAT effects). In accordance with FHWA's guidance, EPA's MOVES3 was used to calculate annual MSAT emissions for the No-Build Alternative and the Build Alternative.

Draft Guidance from the Council on Environmental Quality recommends that agencies quantify a proposed action's projected direct and reasonably foreseeable indirect GHG emissions when it is practicable to quantify them using available data and tools (CEQ 2019). Based upon consultation with FHWA, it was agreed upon that direct GHG emissions would be calculated using the MSAT study area and methodology. Indirect GHG emissions were not quantified.

3.3.2 Identify the Affected Transportation Network

The analysis began with a review of projected traffic volumes on arterial streets, and the I-10 freeway during existing 2023, 2050 No Build, and 2050 Build Conditions in areas where traffic volumes are expected to change as a result of the project. The MSAT Study Area was refined to focus on the portion of the Study Area substantially impacted by the project. FHWA recommends analyzing all segments associated with the project, plus those segments expecting meaningful changes in emissions because of the project (e.g., ±5 percent or more in AADT on congested highway links of level of service D or worse; ±10 percent or more in AADT on uncongested highway links of LOS C or better; ±10 percent or more in travel time; or ±10 percent or more in intersection delay). The Study Area was refined by conducting a comparison between the No Build and Build traffic volumes for all links in the regional model. Because intersection delay data is not available regional wide, this metric was not used. Using the recommendations described above, along with a level of judgment and local knowledge, a roadway network within a defined boundary as shown in Figure 7 was developed.

Figure 7. Roadway Network Used to Calculate Total MSAT & GHG Emissions



3.3.3 Compile Project-specific Traffic Data

A spreadsheet was created using traffic data supplied by Maricopa Association of Governments (MAG) for the areas of interest. The spreadsheet contained 2023 and 2050 traffic information within the MSAT study area. Each segment of the network was given a unique number and is identified by facility type, length, link hourly capacity, link hourly volumes, peak hour AM and PM volumes, ADT volumes, and average speeds. Local streets and neighborhood streets were not included in the spreadsheet. The number of links developed for the No Build/Build Conditions in 2050 was approximately 90. Project-specific traffic data were compiled from the affected transportation network as input files to the emission model. Average speed distribution was summarized according to categories of source type, road type, and hour-day. Annual VMT was entered for each HPMS vehicle class. VMT fraction was calculated based on each road type by a source type.

3.3.4 MOVES3

EPA's Motor Vehicle Emissions Simulator (MOVES) model version MOVES3 was used to estimate emissions from the MSAT network. MOVES input files were provided by MAG, consistent with their regional emissions analysis. MAG data were used to represent regional conditions, and link-by-link traffic data was used to develop project-specific input files to demonstrate the effects of the project for each scenario analyzed: 2023, 2050 No Build, and 2050 Build. Specific MOVES inputs are described in Table 5 and Table 6.

Table 5. MOVES RunSpec Options

MOVES Tab	Model Selections
Scale	County scale Inventory calculation type
Time Span	Hourly time aggregation including all months, days, and hours
Geographic Bounds	Maricopa County
Vehicles/Equipment	All on-road vehicle and fuel type combinations
Road Type	All road types in affected transportation network; not "off-network"
Pollutants and Processes	All MSAT pollutants and their precursors were selected processes included running exhaust and crankcase running exhaust

Table 6. MOVES County Data Manager Inputs

County Data Manager Tab	Data Source
Ramp Fraction	MAG
Source Type Population	MAG
Age Distribution	MAG
Fuel	MAG
Meteorology Data	MAG
Vehicle Type VMT	Created from project daily traffic data
Average Speed Distribution	Created from project daily traffic data
Road Type Distribution	Created from project daily traffic data

MOVES model was used to estimate the total emissions from the MSAT network for each scenario. The VMT and emissions of each MSAT pollutant were presented in a table and compared with the existing and no build scenarios. MSAT burdens were calculated for the following MSATs, as required by FHWA:

- 1,3 Butadiene
- Acetaldehyde
- Acrolein
- Benzene
- Diesel PM
- Ethylbenzene
- Formaldehyde
- Naphthalene
- Polycyclic Organic Matter (POM)

3.3.5 MSAT Results

The results of MSAT analysis for the existing conditions, 2050 No Build, and 2050 Build are shown in Table 7. As shown in Table 7, even if VMT increases by 77 percent in 2050 Build condition compared to that in 2023, a combined reduction of 50 percent in the total annual emissions for the priority MSAT is projected for the same time period. This is in consistency with the FHWA predicted national MSAT trends. When comparing 2050 Build MSAT burden to 2050 No-Build, the total MSATs would increase slightly, by approximately 3% because of increased VMT within the MSAT study area.

Table 7. Predicted MSAT Emission Burdens (tons/year)

Pollutant	Existing 2023	2050 No-Build		2050 Build		
		Value	% Change from Existing	Value	% Change from Existing	% Change from No-Build
MSAT Study Area Annual VMT	74,871,562	130,064,756	74%	132,859,557	77%	2%
1,3-Butadiene	0.006	0.000	-100%	0.000	-100%	0%
Acetaldehyde	0.062	0.053	-14%	0.053	-15%	-1%
Acrolein	0.006	0.002	-57%	0.002	-58%	-2%
Benzene	0.076	0.042	-45%	0.042	-46%	-1%
Diesel Particulate Matter	0.402	0.154	-62%	0.168	-58%	9%
Ethylbenzene	0.038	0.021	-45%	0.021	-46%	-1%
Formaldehyde	0.096	0.059	-39%	0.058	-39%	-1%
Naphthalene	0.000	0.000	-33%	0.000	-33%	0%
Polycyclic Organic Matter	0.001	0.000	-65%	0.000	-65%	0%
Total MSATs	0.686	0.332	-52%	0.343	-50%	3%

In summary, it is projected that there would be slightly changes in MSAT emissions in the immediate area of the project under the Build Alternative relative to the No-Build Alternative, as a result of the VMT changes associated with the project. MSAT levels could be higher in some locations than others, such as adjacent to the I-10 mainline, but current tools and science are not adequate to quantify them.

This document has provided a quantitative analysis of MSAT emissions relative to the proposed project and has acknowledged that the alternatives could increase exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain. However, available technical tools do not enable prediction of project-specific health impacts of the emission changes associated with the alternatives. Because of these limitations, the following discussion is included in accordance with the President's Council on Environmental Quality (CEQ) regulations (40 CFR 1502.22[b]) regarding incomplete or unavailable information.

3.3.6 Incomplete or Unavailable Information for Project MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the CAA and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effect" (EPA, http://www.epa.gov/iris/). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts – each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70-year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI

(http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the CAA to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which a generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weight this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities, in addition to improved access for emergency response, that are better suited for a quantitative analysis.

3.4 GHG NEPA Analysis

Global Climate Change (GCC) refers to changes in average climatic conditions on earth as a whole, including temperature, wind patterns, precipitation and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O), which are known as greenhouse gases (GHGs). These gases allow solar radiation (sunlight) into the Earth’s atmosphere, but prevent radiant heat from escaping, thus warming the Earth’s atmosphere. Gases that trap heat in the atmosphere are often called greenhouse gases, analogous to a greenhouse. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth’s temperature. Without these natural GHGs, the Earth’s temperature would be about 61º Fahrenheit cooler. Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere.

GHGs have been at the center of a widely contested political, economic, and scientific debate surrounding GCC. Although the conceptual existence of GCC is generally accepted, the extent to which GHGs

contribute to it remains a source of debate. GCC refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. GCC may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land.

To date, no national standards have been established regarding GHGs, nor has EPA established criteria or thresholds for ambient GHG emissions pursuant to its authority to establish motor vehicle emission standards for CO_2 under the CAA. However, there is a considerable body of scientific literature addressing the sources of GHG emissions and their adverse effects on climate, including reports from the Intergovernmental Panel on Climate Change, the U.S. National Academy of Sciences, EPA, and other federal agencies. GHGs are different than other air pollutants evaluated in federal environmental reviews because their impacts are not localized or regional due to their rapid dispersion into the global atmosphere. The affected environmental for CO_2 and other GHG emissions is the entire planet. In addition, from a quantitative perspective, global climate change is the cumulative result of numerous and varied emissions sources (in terms of both absolute numbers and types), each of which makes a relatively small addition to global atmospheric GHG concentrations. In contrast to broad-scale actions such as those involving an entire industrial sector or very large geographic areas, it is difficult to isolate and understand the GHG emissions' impacts for a particular transportation project. Furthermore, presently there is no scientific methodology for attributing specific climatological changes to a particular transportation project's emissions.

The results of GHG analysis for the existing conditions, 2050 No Build, and 2050 Build are shown in Table 8. As shown, in 2050 No Build and Build conditions, GHG emission burdens would be greater compared to Existing GHG burdens because of increased VMT. Build GHG burdens would be approximately slightly higher than No Build burdens in the year 2050 because of increased VMT in the GHG study area.

Table 8. Predicted GHG Emission Burdens (metric tons/year)

Pollutant	Existing 2023	2050 No-Build		2050 Build		
		Value	% Change from Existing	Value	% Change from Existing	% Change from No-Build
GHG Study Area Annual VMT	74,871,562	130,064,756	74%	132,859,557	77%	2%
CO_{2e}	30,903	44,715	45%	44,822	45%	0%

CO_{2e} – carbon dioxide equivalent

3.5 Environmental Commitments and Mitigation Measures

The discussion of environmental commitments and mitigation measures in this document does not obligate ADOT to their implementation. ADOT may choose to modify, delete, or add to these measures.

Contractor Responsibility

- Fugitive dust generated from construction activities must be controlled in accordance with Maricopa County Rule 310, the Gila River Indian Community Air Quality Ordinance (GRIC Code – Title 17, Chapter 9), and the Arizona Department of Transportation's *Standard Specifications for Road and Bridge Construction*, Section 104.08 (2021 edition), special provisions, and other local rules and ordinances.

4 Conformity

Section 176c of the CAA requires that transportation projects conform to the approved air quality SIP for meeting the federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments. The conformity determinations for federal actions related to transportation projects must meet the requirements of 40 CFR Parts 51 and 93. This project is included in the conforming metropolitan transportation plan and TIP for project-level conformity determination. On September 25, 2023, a Finding of Conformity was made on the MAG MOMENTUM 2050 Regional Transportation Plan and FY 2022-2025 TIP and 2040 Regional Transportation Plan Update. Interagency consultation occurred on this project determining quantitative hot-spots are not required under 40 CFR 93.123 (Appendix A). This air quality report demonstrates that the project does not cause or contribute to any new localized CO, PM_{10} violations, increase the frequency or severity of any existing CO, PM_{10}, or delay timely attainment of any NAAQS project level conformity requirements under 40 CFR 93.116 Criteria and procedures: Localized CO, PM_{10}, and $PM_{2.5}$ violations (hot-spots):

> "(a)..This criterion is satisfied without a hot-spot analysis in PM_{10} and $PM_{2.5}$ nonattainment and maintenance areas for FHWA/FTA projects that are not identified in § 93.123(b)(1). This criterion is satisfied for all other FHWA/FTA projects in CO, PM_{10} and $PM_{2.5}$ nonattainment and maintenance areas if it is demonstrated that during the time frame of the transportation plan no new local violations will be created and the severity or number of existing violations will not be increased as a result of the project, and the project has been included in a regional emissions analysis that meets applicable §§ 93.118 and/or 93.119 requirements. The demonstration must be performed according to the consultation requirements of § 93.105(c)(1)(i) and the methodology requirements of § 93.123."

5 References

Arizona Department of Transportation, 2021. *Standard Specifications for Road and Bridge Construction*. Phoenix.

Arizona Department of Transportation, March 2020. *Air Quality Technical Report, I-10, I-17 to S.R. 202L (I-10 Broadway Curve) Improvement project.*

Federal Highway Administration, Accessed in 2024. *Guidance for Preparing and Processing Environmental and Section 4(F) Documents.* Environmental Review Toolkit (dot.gov)

Federal Highway Administration, Accessed in 2024. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents.* https://www.fhwa.dot.gov/environMent/air_quality/air_toxics/policy_and_guidance/msat//fhwa_nepa_msat_memorandum_2023.pdf

Maricopa Association of Governments, December 1, 2021. *Regional Transportation Plan – MOMENTUM 2050*

Maricopa Association of Governments, January 22, 2025. FY 2025-2030 MAG Transportation Improvement Program (TIP). https://azmag.gov/Portals/0/Transportation/TIP/FY-25-30-TIP-Report-Final-Signed-with-Errata.pdf?ver=Qv3l6JK3i0LjSdHa2gDtoA%3d%3d

United States Department of Transportation (Federal Highway Administration [FHWA]), 1993. *Air Quality Analysis for NEPA Documents – A Discussion Paper*. Washington, D.C.

United States Environmental Protection Agency, Accessed in 2024. National Ambient Air Quality Standards (NAAQS). https://www.epa.gov/criteria-air-pollutants/naaqs-table

Appendix A. Interagency Consultation Documentation

Project Level PM Quantitative Hot-Spot Analysis – Project of Air Quality Concern Questionnaire

Project Setting and Description

The Arizona Department of Transportation (ADOT), as the lead agency and as the Project sponsor, is initiating a design concept memo and an environmental assessment (EA) for the Interstate 10 (I-10) Koli Road traffic interchange (TI) (Project). The EA will be carried out by ADOT pursuant to 23 United States Code 327. The project proposes to construct a new TI on I-10 approximately halfway between the existing Wild Horse Pass Boulevard and State Route (SR) 347/Queen Creek Road TIs. In addition, the Gila River Indian Community will construct Koli Road from the proposed I-10/Koli Rd traffic interchange to Maricopa Road in parallel with the proposed traffic interchange. The EA will consider and assess several alternatives (type and location) for the TI, including a no-build alternative, as required by the National Environmental Policy Act.

The proposed Project is located within Maricopa County, Arizona, and entirely within the Gila River Indian Community (Community). The study area limits will extend approximately 2,800 feet from each side of the I-10 centerline and approximately 4,000 feet north of milepost 163.0 and 10,000 feet south of milepost 163.0 along I-10, generally between the Wild Horse Pass Blvd and SR 347/ Queen Creek Rd (Figure 1 – Vicinity Map). Within the Koli Road TI Project study area limits, I-10 currently consists of three through lanes in each direction at the Wild Horse Pass Blvd TI and transitions to two through lanes in each direction right before Queen Creek Road TI, with a dirt median separating traffic. The I-10 Wild Horse Pass Corridor Project, however, will add one general purpose lane and a high-capacity vehicle lane. The I-10 Wild Horse Pass Corridor Project is a separate project and its EA received a finding of no significant impact in March 2024. As a result, implementation of the I-10 improvements represents the existing condition for the proposed Koli Road TI and these improvements were included in both the No-Build and Build scenarios for the proposed Koli Road TI project. The Koli Road TI would accommodate the 5-lane configuration along I-10.

Figure 2 shows the diverging diamond interchange (DDI) configuration, which is the recommended Build alternative. On the west side of I-10, the Koli Road TI would connect with an extension of Koli Road from Maricopa Road to I-10, just south of the existing Firebird Lake. On the east side of I-10, the Koli Road TI would connect with an extension of Kyrene Road to the south. The Kyrene Road extension has not yet been defined; however, it is reasonably foreseeable based on information provided by the Community. The construction of these local roadway extensions would be privately funded by the Community and they are, therefore, outside the scope of any required ADOT approvals.

The purpose of the proposed Project is to provide new and improved access to I-10 in the vicinity of Koli Road. This new access would accommodate traffic for current and future land use and development, would help relieve future congestion at the adjacent TIs, and would relieve congestion on the local roadway network that occurs following Wild Horse Pass events.

The scope of work for this Project includes:

- Construct new TI between the existing Wild Horse Pass Boulevard TI and SR 347/Queen

Creek Road TI

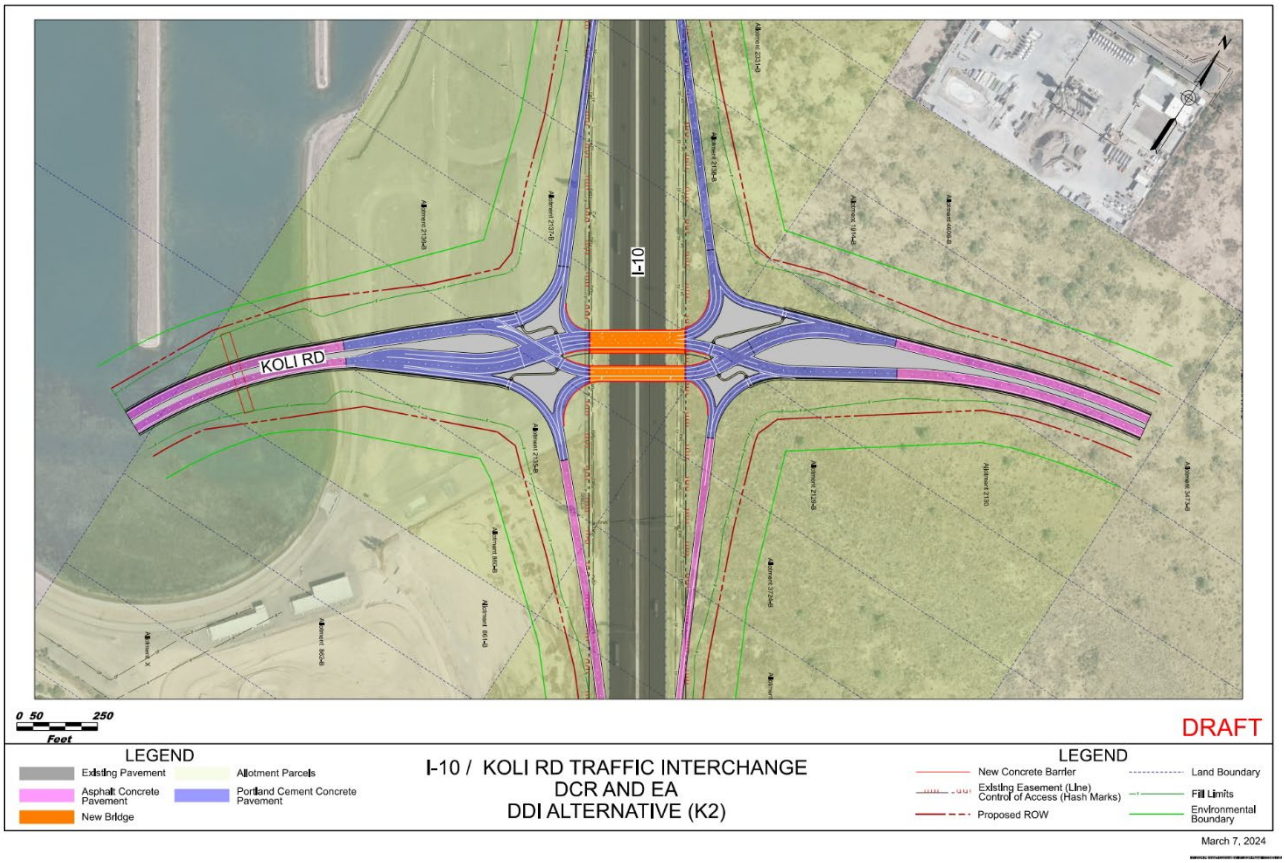
- Acquire new easement on Gila River Indian Community lands to accommodate the TI
- Modify drainage features, if necessary
- Relocate utilities, if necessary
- Evaluate weaves between Koli Road and adjacent TIs
- Install signing, pavement striping, and lighting
- Remove vegetation, including trees, and revegetate areas disturbed by construction

The Project limits are generally located within ADOT's existing I-10 easement; however, additional easement would likely be needed for the Project.

These projects are within the Phoenix PM10 nonattainment area. The proposed project is included in the *Maricopa Association of Governments (MAG) Regional Transportation Plan (RTP) MOMENTUM 2050*. In addition, the combined project is included in the *FY 2022-2025 MAG Transportation Improvement Program*.

Figure 1. Project Vincinity Map

Figure 2. Preferred Traffic Interchange DDI Alternative



Project Assessment

The following questionnaire is used to compare the proposed project to a list of project types in 40 CFR 93.123(b) requiring a quantitative analysis of local particulate emissions (Hot- spots) in nonattainment or maintenance areas, which include:

i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of an increase in traffic volumes from a significant number of diesel vehicles related to the project;
iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

If the project matches one of the listed project types in 40 CFR 123(b)(1) above, it is considered a project of local air quality concern and the hot-spot demonstration must be based on quantitative analysis methods in accordance to 40 CFR 93.116(a) and the consultation requirements of 40 CFR 93.105(c)(1)(i). If the project does not require a PM hot- spot analysis, a qualitative assessment will be developed that demonstrates that the project will not contribute to any new localized violations, increase the frequency of severity of any existing violations, or delay the timely attainment of any NAAQS or any required emission reductions or milestones in any nonattainment or maintenance area.

On March 10, 2006, EPA published *PM2.5 and PM10 Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM2.5 and Existing PM10 National Ambient Air Quality Standards; Final Rule* describing the types of projects that would be considered a project of air quality concern and that require a hot-spot analysis (71 FR 12468- 12511). Specifically on page 12491, EPA provides the following clarification: "Some examples of *projects of air quality concern* that would be covered by § 93.123(b)(1)(i) and (ii) are: A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic;" .." Expansion of an existing highway or other facility that affects a congested intersection (operated at Level-of-Service D, E, or F) that has a significant increase in the number of diesel trucks;" These examples will be used as the baseline for determining if the project is a project of air quality concern.

New Highway Capacity

Is this a new highway project that has a significant number of diesel vehicles? *Example: total traffic volumes ≥125,000 annual average daily traffic (AADT) and truck volumes ≥10,000 diesel trucks per day (8% of total traffic).*

NO – This is a "new" connection project. However, this project does not have a significant number of diesel vehicles. Traffic modeling and analysis confirm project improvements re-distribute existing truck traffic, and there is no capacity increase along I-10. Adding lanes to I-10 and improvements to Wild Horse Pass Blvd TI and Queen Creek Rd TI are part of I-10 Wild Horse Pass Corridor Project, a separate and independent project.

This highway project will not result in a significant increase in the number of diesel vehicles. The total AADT and truck AADT for the Build alternative were compared to the No Build alternative on roadway segments along the project corridor, as summarized in Table 1 below. Please note that the improvements from the I-10 Wild Horse Pass Corridor Project are the baseline existing condition in both the No Build and Build alternatives for the proposed Koli Road TI project. As can be seen in Table 1, only minor truck AADT difference would occur on roadway segments. For example, truck AADT differences range from -695 to 840 vehicles on I-10 mainline segments in 2050 Build alternative, compared to the No-Build alternative. On Koli Road from Maricopa Road to I-10, the highest truck AADT increase would be 1,745 vehicles within the study area. The truck AADT increase on the Koli Road is the result of traffic re-distribution in the network with the addition of the Koli Road extension to I-10, there is no capacity increase on the I-10 mainline. In addition, according to available data, around 75% of medium trucks utilize diesel fuel. This means that the actual diesel truck AADT absorbed by Koli Road itself would be even less.

Based on traffic data shown in Table 1, the project is not expected to result in a significant increase in the number of diesel vehicles. Koli Road extension between Maricopa Road to I-10 was not included and analyzed in Koli Road TI project because ADOT does not include projects that are not administered in ADOT project level conformity analysis. Only federal projects require project level conformity.

Table 1 – Roadway Average Daily Traffic and Truck Volumes

Segment	2023 Existing				2050 No-Build Alternative				2050 Build Alternative				Total Truck AADT Difference (Build - No-Build)
	AADT	Total Truck AADT	MT AADT	HT AADT	AADT	Total Truck AADT	MT AADT	HT AADT	AADT	Total Truck AADT	MT AADT	HT AADT	
I-10: Wild Horse Pass Blvd to Koli Rd	104,245	22,465	11,400	11,065	180,235	46,290	21,580	24,710	189,375	47,130	22,370	24,760	840
I-10: At the Koli Rd TI	104,245	22,465	11,400	11,065	180,235	46,290	21,580	24,710	170,855	45,595	21,060	24,535	-695
I-10: Koli Rd to Queen Creek Rd	104,245	22,465	11,400	11,065	180,235	46,290	21,580	24,710	174,675	45,805	21,265	24,540	-485
Koli Road: Between I-10 Ramps	0	0	0	0	0	0	0	0	11,055	885	760	125	885
Koli Road: I-10 EB Off-Ramp	0	0	0	0	0	0	0	0	9,445	765	655	110	765
Koli Road: I-10 EB On-Ramp	0	0	0	0	0	0	0	0	1,840	95	90	5	95
Koli Road: I-10 WB Off-Ramp	0	0	0	0	0	0	0	0	1,985	110	105	5	110
Koli Road: I-10 WB On-Ramp	0	0	0	0	0	0	0	0	9,080	775	655	120	775

Notes: AADT – Annual average daily traffic
MT – Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight – 10,000 to 26,400 pounds).
HT – Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds).
Source: MAG

Notes: Traffic data provided by HDR on October 25, 2024.

Expanded Highway Capacity

Is this an expanded highway projects that have a significant increase in the number of diesel

vehicles? *Example: the build scenario of the expanded highway or expressway causes a significant increase in the number of diesel trucks compared with the no-build scenario, truck volumes > 8% of the total traffic.*

NO – This is not an expanded highway project. Adding lanes to I-10 and improvements to Wild Horse Pass Blvd TI and Queen Creek Rd TI are part of I-10 Wild Horse Pass Corridor Project as a separate project. The improvements from the I-10 Wild Horse Pass Corridor Project are considered baseline existing conditions in both the No Build and Build alternatives for the proposed Koli Road TI project.

Projects with Congested Intersections

Is this a project that affects a congested intersection (LOS D or greater) that has a significant number of diesel trucks, OR will change LOS to D or greater because of an increase in traffic volumes from a significant number of diesel trucks related to the project?

NO – This project does not have congested intersections. None of the intersections would experience LOS D or greater in 2050 Build alternative for the preferred DDI TI configuration, as shown in Table 2 – Intersections LOS and Peak-Hour Volume. For information purposes, Wild Horse Pass Blvd TI and SR347 Queen Creek Road TI were analyzed in the I-10 Wild Horse Pass Corridor Project, and they would operate at LOS B in 2050 design year.

As shown in Table 3 – Intersection AADT and Truck Volumes, only minor truck difference would occur at these three intersections. At the Koli Road & I-10 EB Ramps intersection, the truck AADT would increase 1,745 vehicles. However, only 240 vehicles are heavy trucks and the majority of the truck AADT are medium trucks. At the Koli Road & I-10 WB Ramps intersection, the truck AADT would increase 220 vehicles with only 10 heavy trucks. At the Koli Road & Maricopa Road intersection, the truck AADT would increase 630 vehicles. Only 200 vehicles are heavy trucks and the majority of the truck AADT are medium trucks.

Table 2 – Intersections LOS and Peak-Hour Volume

Intersection	Peak Hour	2050 No-Build Alternative				2050 Build Alternative				Total Truck Volume Difference (Build Alternative - No Build Alternative, vph)[1]
		LOS (delay, sec.)	Volumes (vph)	Medium Truck Volumes (vph)	Heavy Truck Volumes (vph)	LOS (delay, sec.)	Volumes (vph)	Medium Truck Volumes (vph)	Heavy Truck Volumes (vph)	
Koli Road & I-10 EB Ramps	AM	N/A	0	0	0	B (13.7)	1,430	110	20	130
	PM	N/A	0	0	0	B (10.4)	1,645	130	25	155
Koli Road & I-10 WB Ramps	AM	N/A	0	0	0	A (1.4)	945	50	10	60
	PM	N/A	0	0	0	A (1.2)	705	80	20	100

[1] Truck Volume Difference includes both MT and HT

MT – Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight – 10,000 to 26,400 pounds) HT – Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds).

Notes: Traffic data provided by HDR on October 25, 2024.

Table 3 – Intersection AADT and Truck Volumes

Intersection	Veh Class	2050 No-Build Alternative					2050 Build Alternative					Difference (Build - No-Build)
		EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	
Koli Road & I-10 EB Ramps	Total AADT	0	0	0	0	0	10,920	1,975	0	9,445	22,340	22,340
	MT AADT	0	0	0	0	0	745	105	0	655	1,505	1,505
	HT AADT	0	0	0	0	0	125	5	0	110	240	240
Koli Road & I-10 WB Ramps	Total AADT	0	0	0	0	0	1,975	0	1,985	0	3,960	3,960
	MT AADT	0	0	0	0	0	105	0	105	0	210	210
	HT AADT	0	0	0	0	0	5	0	5	0	10	10

Notes: AADT – Annual average daily traffic
MT – Medium Trucks (vehicles with 2 axles & 6 wheels; gross vehicle weight – 10,000 to 26,400 pounds).
HT – Heavy Trucks (vehicles with 3 or more axles; gross vehicle weight greater than 26,400 pounds).
Source: MAG

Notes: Traffic data provided by HDR on October 25, 2024.

New Bus and Rail Terminals

Does the project involve construction of a new bus or intermodal terminal that accommodates a significant number of diesel vehicles?

NO – This project does not construct any new bus or rail terminals.

Expanded Bus and Rail Terminals

Does the project involve an existing bus or intermodal terminal that has a large vehicle fleet where the number of diesel buses (or trains) increases by 50% or more, as measured by arrivals?

NO – This project does not expand any bus or rail terminals.

Projects Affecting PM Sites of Violation or Possible Violation

Does the project affect locations, areas or categories of sites that are identified in the PM_{10} or $PM_{2.5}$ applicable plan or implementation plan submissions, as appropriate, as sites of violation or potential violation?

NO – The project location is not listed in MAG's 2012 SIP as a site of violation or potential violation.

POAQC Determination

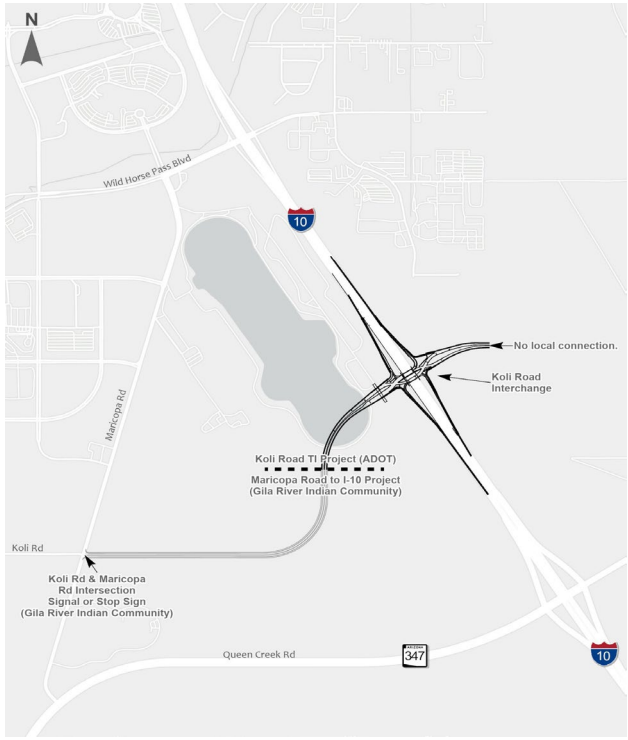
The traffic analysis does not show a significant increase in the number of diesel vehicles due to the project. Therefore, ADOT is presenting this project for interagency consultation in accordance with 40 CFR93.105 that this project is not a Project of Air Quality Concern and thereby will not require a PM hot-spot analysis.

ADOT
Environmental Planning

Interagency Consultation Comments

Project Name:	Koli Road Traffic Interchange	**Name: Lindsay Wickersham**	
Project Number(s):	F0701	**Agency: US EPA Region IX**	
Document Name:	F0701_ Koli Road Traffic Interchange_PM Consultation_12202024.pdf		
Document Date:	12/20/2024		**COMMENT RESOLUTION**
			For ADOT USE

Page Number	Paragraph	Table	Other	Comment	Response Notes
1	2			This paragraph states that the I-10 consists of 2 lanes in each direction, however when looking at the I-10 on google maps within the project area, I-10 appears to be 3 lanes in each direction, and then transitions to 2 lanes right before E Queen Creek Road (around exit 164). Please update this language and clarify if the 2 additional lanes will be added to the entirety of I-10, so that some areas will be a 5-lane highway or if the entire project will be expanded to 4 lanes on each side. Further, we would like to note that adding these lanes adds capacity to I-10 that should be considered in this analysis.	The existing and future I-10 lane configuration language has been updated. The approved Wild Horse Pass Corridor improvements are included in both the No-Build and Build scenarios for the Koli Road TI project, as they are imminent regardless of the study.
3			Figure 2	Please include more information and/or additional figures detailing the path of the new roads following the proposed Koli Road Traffic interchange. Please also add descriptions of the new/expanded intersections and connections to existing roads, and expanded TI's within the entire project area (i.e. Koli Rd Traffic interchange to Maricopa Road)	An updated graphic has been provided for reference only. ADOT's study scope is limited to the Koli Rd TI, other portions are independent of the study.
5	1			It is stated that this project is not a "New Highway Project", however adding a new traffic interchange at Koli road will create new roads that does not currently exist in each direction of this intersection, therefore we argue that project is a new highway project. We suggest amending this statement.	This is a new connection / interchange project as stated in the consultation document, there are not a significant number of diesel vehicles per guidelines. Adding lanes to I-10 and improvements to Wild Horse Pass Blvd TI and Queen Creek Rd TI are part of a separate and independent project. These improvemnts were included in both the No-Build and Build sceanrios for Koli Road TI project.
5	2			It is stated that, "The AADT increase on the Koli Road is the result of traffic re-distribution in the network with the addition of the Koli Road TI because there is no capacity increase on the I-10 mainline." However, this project proposes to add two additional lanes to the I-10 corridor, which should increase capacity. Further, the "I-10 Koli Road Traffic Interchange Traffic Memo" states that there is an EA for the increased capacity of these road ways and intersections. Please include the additional capacity in this analysis and adjust the traffic numbers to reflect this change in capacity.	This project only focuses on Koli Road TI, improvements to Wild Horse Pass Blvd TI and SR 347 Queen Creek Road TI are part of a separate and independent project. These improvemnts were included in both the No-Build and Build sceanrios for Koli Road TI project.
5	2			There is a misleading statement in this paragraph, "The total AADT is far lower than 125,000 and truck volumes are far less than 10,000 to be considered significant." The example referenced is an extreme case, and not the benchmark that should be used for a significant number of trucks. We recommend deleting or amending this statement.	Statement has been deleted.
5	4			On page 5, it states that this is not an expanded highway project, however there are new lanes being added to the project. We think this should be an expanded highway project and that this text should be amended.	The study scope is limited to the Koli Road TI, improvements to Wild Horse Pass Blvd TI and SR 347 Queen Creek Road TI are part of and independent project. These improvemnts were included as baseline existing conditons in both the No-Build and Build sceanrios for Koli Road TI project.
5		1		There is traffic data included in this table for North and South of Koli Road on Maricopa Road, however there is no map or mention of where Koli road will meet Maricopa in this document. Please document where this road will be, and what type of interchange will be created to accommodate this new road.	New graphic provides project and "by-others" roadway network, i.e. north and south of Maricopa Rd conneciton (based on best available information). Additionally, figure 2 in the traffic memo provides traffic model segment and node connections.
6		2		Please amend to include the LOS of the other intersections in the project area, "Wild Horse Pass Blvd TI" and the "SR 347 Queen Creek Road TI"	For information purposes, the LOS of the Wild Horse Pass Blvd TI and SR347 Queen Creek Road TI were analyzed in the I-10 Wild Horse Pass Corridor Project, and they would operate at LOS B in 2050 design year. This project scope is limited to Koli Road TI.



Gmail Beverly Chenausky <bchenausky@azdot.gov>

Re: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

1 message

Beverly Chenausky <bchenausky@azdot.gov> Thu, Feb 6, 2025 at 1:58 PM
To: Matthew Poppen <mpoppen@azmag.gov>, "Wickersham, Lindsay" <wickersham.lindsay@epa.gov>, Transportationconformity <transportationconformity@azdeq.gov>, "Hansen, Alan (FHWA)" <Alan.Hansen@dot.gov>, "Johanna Kuspert (AQD)" <Johanna.Kuspert@maricopa.gov>, ryan.eberle@gric.nsn.us, Lisa Gover <Lisa.Gover.DEQ@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, "Gabiou, Dan (FHWA)" <dan.gabiou@dot.gov>, Clifton Meek <meek.clifton@epa.gov>, Karina O'Conner <oconnor.karina@epa.gov>, "Unger, Audrey C." <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, Adam Xia <Axia@azmag.gov>, "Jackson, Jeremy L." <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, "Sanchez, Ever" <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>

Please find attached a revised consultation document with response to comments received. This project will be discussed next week for those interested in any additional clarifications, the meeting link is provided below. Thank you for your time in reviewing the documents. Let me know if you have any questions or concerns. Beverly

ADOT Transportation Conformity Coordination
Thursday, February 13 · 11:00am – 12:00pm
Time zone: America/Phoenix
Google Meet joining info
Video call link: https://meet.google.com/usc-ivuz-eof
Or dial: (US) +1 585-667-0052 PIN: 813 049 123#
More phone numbers: https://tel.meet/usc-ivuz-eof?pin=9640464285692

---------- Forwarded message ---------
From: **Beverly Chenausky** <bchenausky@azdot.gov>
Date: Fri, Dec 20, 2024 at 3:35 PM
Subject: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L
To: Matthew Poppen <mpoppen@azmag.gov>, Wickersham, Lindsay (she/her) <wickersham.lindsay@epa.gov>, Transportationconformity <transportationconformity@azdeq.gov>, Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>, Johanna Kuspert (AQD) <Johanna.Kuspert@maricopa.gov>, <Lisa.Grover.DEQ@gric.nsn.us>, <ryan.eberle@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>, Clifton Meek <meek.clifton@epa.gov>, Karina O'Conner <oconnor.karina@epa.gov>, Unger, Audrey C. <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, Adam Xia <Axia@azmag.gov>, Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, Sanchez, Ever <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>

To All:

ADOT is presenting the following project, **I-10 Koli Road Traffic Interchange**, for interagency consultation, per 40 CFR 93.105, to determine if the project should be treated as a project of air quality concern or not as a project of Air Quality Concern and thereby will not require a PM10 hot-spot analysis. ADOT is requesting responses to the attached *F0701_Koli Road Traffic Interchange_PM Consulation_12202024.pdf.,* within **30 days.** A non-response will be interpreted as concurrence that the project **is not** a project of air quality concern and does not require a hot-spot analysis. If any consulted party believes this project should be treated as a project of air quality concern that requires a Quantitative PM10 hot-spot analysis, please document the appropriate section under 40 CFR 93.123 (b) that applies to

ADOT Monthly Air Quality Coordination Meeting Agenda

Thursday, February 13, 2025

Google Meet

ADOT Transportation Conformity Coordination

Thursday, December 12 · 11:00am – 12:00pm

Time zone: America/Phoenix

Google Meet joining info

Video call link: https://meet.google.com/usc-ivuz-eof

Or dial: (US) +1 585-667-0052 PIN: 813 049 123#

More phone numbers: https://tel.meet/usc-ivuz-eof?pin=9640464285692

Notes added within each agenda item.

---

1. WELCOME & INTRODUCTIONS
   Attendees: Amanda Luecker, George Noel, Chris Dresser, Dan Gabiou, Katie Rodriguez, Beverly Chenausky, David Shu (Aztec), Greta Halle, Jason James, Leigh Osterling

2. REVIEW PROJECTS

   Active Projects (General Updates/Discussion)

   - **F0701 Interstate 10/Koli Road Traffic Interchange**
     - Project Team Discussion of final documents provided 2/6/2025
     - Aztec went over the response to comments
       - EPA has no further comments on the comment resolution documents
       - FHWA has no further comments on the comment resolution documents
     - ADOT will document the response to comments on 1/6/2025
       - Next Steps - ADOT will start efforts to prepare the AQ report and anticipate to have that ready by May 2025. The Draft EA is anticipated for Fall 2025 and will be included with the EA.

ADOT Monthly Air Quality Coordination Meeting Agenda

Upcoming Projects

- **T0428 City of Peoria - El Mirage Road, Loop 303 to Jomax Road**
  - Discussion of schedule and use of Atypical Events Report from L303 Project
  - Public Open House February 26, 2025
    https://www.elmirageroadextension.com/
    1. ADOT inquired what needs to be done for CO noting it is not an applicable requirement in the region anymore.
       a. FHWA recommended that when submitting the documents, ADOT make a note of the approach and just clarify to interagency consulting parties why CO is not included
       b. ADOT provided overview of approach to AQ - PM10 hot spot analysis would be provided through Workfront, consultation will be initiated late February
       c. ADOT has tentative meeting set for 3/20 to discuss the approach to modeling for this project
       d. ADOT discussed possibly using the same background monitor (Zuni Hills) for this project that was used for F0561/F0562
          i. EPA suggested that it would be appropriate to use the same analysis, but would need to resubmit as an atypical event again as it's a separate project and action.
          ii. FHWA agreed with EPA, asked what years were used for older project
              1. Aztec confirmed for the 303 project they used 2021-2023 data, MAG has not published 2024 data yet.
              2. FHWA said that was acceptable to use the 2021-2023 data.
       e. EPA said they are almost complete with review of F0561/F0562 and will be submitting final comments soon that are overall minor. Send documents to Lindsay Wickersham, Will, and Amy. EPA will provide comments on documents through the interagency consultation meeting.

- **F0719 SR 24, SR202L to Ironwood Drive**
    - Discussions of schedule and general approach
        - DIscussed timing of consultation documents, MAG programming to be adopted

<u>327 MOU Major Studies Monitoring Spreadsheet (General Updates)</u>

- General Discussions on approaching April 3, 2025 CO conformity no longer applicable - No longer consulting on CO
- Is any additional information needed on ADOT projects on 327 Major Studies Spreadsheet?
    - ADOT noted T0558 new project
    - EPA commented on the two major projects (SR30 and North South) and discussed the timing of the projects and information
    - FHWA made a comment about future SR30 project and MAG changes to programming for future 3rd segment.
- Are there any project specific breakout meetings needed?

3. OPEN DISCUSSION
    - PROCESS/PROGRAM UPDATES
    - ROUNDTABLE
        i. Future meetings
            1. March 20th, 2025
            2. Meetings after March will not shifted due to the daylight saving time changes.

the project and describe why the project should be treated as a project of air quality concern. Please forward to those as needed and let me know if you have any additional questions.

Beverly Chenausky
ASSISTANT ENVIRONMENTAL ADMINISTRATOR
ARIZONA DEPARTMENT OF TRANSPORTATION

MD EM02, 206 S. 17th Ave.
Phoenix, AZ 85007

480.390.3417
Website: azdot.gov

2 attachments

F0701_Interagency Consultation Comment Form_EPA_1.03.25_Response_v3 (1).xlsx
415K

F0701_I10_Project-Level-PM-Questionnaire_20250130 (1).docx
1094K

This page is intentionally left blank.

Appendix B. MSAT and CO_{2e} MOVES Modeling Files (Model Files by Request)

This page is intentionally left blank.

Appendix C. Public Comments on Air Quality (To be added)

Interagency review of draft Air Quality Report

Gmail Beverly Chenausky <bchenausky@azdot.gov>

RE: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

1 message

David Shu <DShu@aztec.us> Wed, Apr 30, 2025 at 12:12 PM
To: Beverly Chenausky <bchenausky@azdot.gov>
Cc: Steven Olmsted <solmsted@azdot.gov>, "audrey.unger@hdrinc.com" <audrey.unger@hdrinc.com>

HI Beverly,

Please review the revised AQ report addressing GRIC's comments (only Section 2.5 was revised per GRIC comments. GRIC comments a and b were addressed. For comment c, the third column in Table 3 is "averaging time", which shows if there are maximum 8-hr or 24-hr average concentrations.

Please let me know if you have any questions. Thanks,

David

From: Beverly Chenausky <bchenausky@azdot.gov>
Sent: Monday, April 28, 2025 9:52 AM
To: David Shu <DShu@aztec.us>
Cc: Steven Olmsted <solmsted@azdot.gov>
Subject: Fwd: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

David - Please address GRIC comments, make sure you modify the report that was provided to the group sent by me on March 25, 2025.

ARIZONA DEPARTMENT OF TRANSPORTATION

Beverly Chenausky

Assistant Environmental Administrator

ENVIRONMENTAL PLANNING

205 South 17th Ave.

Phoenix AZ 85007
480.390.3417 | azdot.gov

---------- Forwarded message ---------
From: **Ryan Eberle** <Ryan.Eberle@gric.nsn.us>

Date: Mon, Apr 28, 2025 at 9:41 AM
Subject: RE: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L
To: Beverly Chenausky <bchenausky@azdot.gov>, Matthew Poppen <mpoppen@azmag.gov>, Wickersham, Lindsay <wickersham.lindsay@epa.gov>, Transportationconformity <transportationconformity@azdeq.gov>, Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>, Johanna Kuspert (AQD) <Johanna.Kuspert@maricopa.gov>, Lisa Gover <Lisa.Gover.DEQ@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>, Clifton Meek <meek.clifton@epa.gov>, Karina O'Conner <oconnor.karina@epa.gov>, Unger, Audrey C. <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, Adam Xia <Axia@azmag.gov>, Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, Sanchez, Ever <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>

Hi, Beverly. I have a few comments on this document, which should also apply to the draft EA:

1. Section 2.5

    a. The 3rd paragraph states that the Casa Blanca (CB) monitor collects PM10 and Ozone data; however, the CB monitor only collects PM10 data.

    b. The CB monitor is only ~0.5 mile closer to the project than the GRIC St Johns (SJ) monitor. The CB monitor is located in Pinal County and in an unclassified PM10 area and only monitors PM10. The SJ monitor is located in Maricopa County in the PM10 NonAttainment Area and monitors Ozone and PM10. Consider including the SJ monitor in the discussion.

    c. In Table 3, it is not clear what the "concentrations" are - are they maximum 8-hr or 24-hr average concentrations for the calendar year? Table 4 seems to have the PM10 data better presented.

2. I've attached the 2023 Network Review.

Please let me know if you have any questions.

Thanks.

Ryan Eberle, P.E.

Air Program Manager

Gila River Indian Community

Department of Environmental Quality

c| 480.622-3326

d| 520.796.3781

Mailing Address: P.O. Box 2139

Sacaton, AZ 85147

Physical Address: 124 Skill Center Rd.

Sacaton, AZ 85147

Website: http://www.gricdeq.org/

From: Beverly Chenausky <bchenausky@azdot.gov>
Sent: Tuesday, March 25, 2025 4:11 PM
To: Matthew Poppen <mpoppen@azmag.gov>; Wickersham, Lindsay <wickersham.lindsay@epa.gov>; Transportationconformity <transportationconformity@azdeq.gov>; Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>; Johanna Kuspert (AQD) <Johanna.Kuspert@maricopa.gov>; Ryan Eberle <Ryan.Eberle@gric.nsn.us>; Lisa Gover <Lisa.Gover.DEQ@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>; Joonwon Joo <jjoo@azdot.gov>; ADOTAirNoise - ADOT <adotairnoise@azdot.gov>; MPD Programming - ADOT <mpdprogramming@azdot.gov>; Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>; Clifton Meek <meek.clifton@epa.gov>; Karina O'Conner <oconnor.karina@epa.gov>; Unger, Audrey C. <Audrey.Unger@hdrinc.com>; Dean Giles <dgiles@azmag.gov>; Adam Xia <Axia@azmag.gov>; Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>; David Shu <DShu@aztec.us>; Sanchez, Ever <Ever.Sanchez@hdrinc.com>; Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>; Trent Kelso <tkelso@azdot.gov>; Myrna Bondoc <mbondoc@azdot.gov>
Subject: Re: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

Please find attached a draft air quality report for this project, please provide any comments on this report by April 25th, 2025. A blank comment form is also provided, thank you.

Gmail ADOTAirNoise - ADOT <adotairnoise@azdot.gov>

RE: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

1 message

Wickersham, Lindsay <wickersham.lindsay@epa.gov> Fri, Apr 25, 2025 at 11:09 AM
To: Beverly Chenausky <bchenausky@azdot.gov>, Matthew Poppen <MPoppen@azmag.gov>, Transportationconformity <transportationconformity@azdeq.gov>, "Hansen, Alan (FHWA)" <Alan.Hansen@dot.gov>, "Johanna.Kuspert@maricopa.gov" <Johanna.Kuspert@maricopa.gov>, "ryan.eberle@gric.nsn.us" <ryan.eberle@gric.nsn.us>, Lisa Gover <Lisa.Gover.DEQ@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, "Gabiou, Dan (FHWA)" <dan.gabiou@dot.gov>, "Meek, Clifton" <meek.clifton@epa.gov>, "Oconnor, Karina" <OConnor.Karina@epa.gov>, "Unger, Audrey C." <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, "axia@azmag.gov" <axia@azmag.gov>, "Jackson, Jeremy L." <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, "Sanchez, Ever" <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>

Hi Beverly,

Thank you for the opportunity to review the draft air quality report for this project. At this time we have no additional comments.

Thank you,

Lindsay

Lindsay Wickersham | 415-947-4192

Physical Scientist | Planning Section | Air and Radiation Division | US EPA - Region 9

From: Beverly Chenausky <bchenausky@azdot.gov>
Sent: Tuesday, March 25, 2025 4:11 PM
To: Matthew Poppen <MPoppen@azmag.gov>; Wickersham, Lindsay <wickersham.lindsay@epa.gov>; Transportationconformity <transportationconformity@azdeq.gov>; Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>; Johanna.Kuspert@maricopa.gov; ryan.eberle@gric.nsn.us; Lisa Gover <Lisa.Gover.DEQ@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>; Joonwon Joo <jjoo@azdot.gov>; ADOTAirNoise - ADOT <adotairnoise@azdot.gov>; MPD Programming - ADOT <mpdprogramming@azdot.gov>; Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>; Meek, Clifton <meek.clifton@epa.gov>; Oconnor, Karina <OConnor.Karina@epa.gov>; Unger, Audrey C. <Audrey.Unger@hdrinc.com>; Dean Giles <dgiles@azmag.gov>; axia@azmag.gov; Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>; David Shu <DShu@aztec.us>; Sanchez, Ever <Ever.Sanchez@hdrinc.com>; Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>; Trent Kelso

<tkelso@azdot.gov>; Myrna Bondoc <mbondoc@azdot.gov>
Subject: Re: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L

Please find attached a draft air quality report for this project, please provide any comments on this report by April 25th, 2025. A blank comment form is also provided, thank you.

Beverly Chenausky

Assistant Environmental Administrator

ENVIRONMENTAL PLANNING

205 South 17th Ave.

Phoenix AZ 85007
480.390.3417 | azdot.gov

On Thu, Feb 6, 2025 at 1:58 PM Beverly Chenausky <bchenausky@azdot.gov> wrote:

> Please find attached a revised consultation document with response to comments received. This project will be discussed next week for those interested in any additional clarifications, the meeting link is provided below. Thank you for your time in reviewing the documents. Let me know if you have any questions or concerns. Beverly
>
> ADOT Transportation Conformity Coordination
> Thursday, February 13 · 11:00am – 12:00pm
> Time zone: America/Phoenix
> Google Meet joining info
> Video call link: https://meet.google.com/usc-ivuz-eof
> Or dial: (US) +1 585-667-0052 PIN: 813 049 123#
> More phone numbers: https://tel.meet/usc-ivuz-eof?pin=9640464285692
>
> ---------- Forwarded message ---------
> From: **Beverly Chenausky** <bchenausky@azdot.gov>

Date: Fri, Dec 20, 2024 at 3:35 PM
Subject: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L
To: Matthew Poppen <mpoppen@azmag.gov>, Wickersham, Lindsay (she/her) <wickersham.lindsay@epa.gov>, Transportationconformity <transportationconformity@azdeq.gov>, Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>, Johanna Kuspert (AQD) <Johanna.Kuspert@maricopa.gov>, <Lisa.Grover.DEQ@gric.nsn.us>, <ryan.eberle@gric.nsn.us>
Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>, Clifton Meek <meek.clifton@epa.gov>, Karina O'Conner <oconnor.karina@epa.gov>, Unger, Audrey C. <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, Adam Xia <Axia@azmag.gov>, Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, Sanchez, Ever <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>

To All:

ADOT is presenting the following project, **I-10 Koli Road Traffic Interchange**, for interagency consultation, per 40 CFR 93.105, to determine if the project should be treated as a project of air quality concern or not as a project of Air Quality Concern and thereby will not require a PM10 hot-spot analysis. ADOT is requesting responses to the attached *F0701_Koli Road Traffic Interchange_PM Consulation_12202024.pdf.,* within **30 days.** A non-response will be interpreted as concurrence that the project **is not** a project of air quality concern and does not require a hot-spot analysis. If any consulted party believes this project should be treated as a project of air quality concern that requires a Quantitative PM10 hot-spot analysis, please document the appropriate section under 40 CFR 93.123 (b) that applies to the project and describe why the project should be treated as a project of air quality concern. Please forward to those as needed and let me know if you have any additional questions.

Beverly Chenausky

ASSISTANT ENVIRONMENTAL ADMINISTRATOR

ARIZONA DEPARTMENT OF TRANSPORTATION

MD EM02, 206 S. 17th Ave.

Phoenix, AZ 85007

480.390.3417

Website: azdot.gov

Beverly Chenausky

Assistant Environmental Administrator

ENVIRONMENTAL PLANNING

205 South 17th Ave.

Phoenix AZ 85007
480.390.3417 | azdot.gov

On Thu, Feb 6, 2025 at 1:58 PM Beverly Chenausky <bchenausky@azdot.gov> wrote:

> Please find attached a revised consultation document with response to comments received. This project will be discussed next week for those interested in any additional clarifications, the meeting link is provided below. Thank you for your time in reviewing the documents. Let me know if you have any questions or concerns. Beverly
>
> ADOT Transportation Conformity Coordination
> Thursday, February 13 · 11:00am – 12:00pm
> Time zone: America/Phoenix
> Google Meet joining info
> Video call link: https://meet.google.com/usc-ivuz-eof
> Or dial: (US) +1 585-667-0052 PIN: 813 049 123#
> More phone numbers: https://tel.meet/usc-ivuz-eof?pin=9640464285692
>
> ---------- Forwarded message ---------
> From: **Beverly Chenausky** <bchenausky@azdot.gov>
> Date: Fri, Dec 20, 2024 at 3:35 PM
> Subject: Interagency Consultation: I-10 Koli Road Traffic Interchange 888-A(219)S | F0701 01L
> To: Matthew Poppen <mpoppen@azmag.gov>, Wickersham, Lindsay (she/her) <wickersham.lindsay@epa.gov>, Transportationconformity <transportationconformity@azdeq.gov>, Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>, Johanna Kuspert (AQD) <Johanna.Kuspert@maricopa.gov>, <Lisa.Grover.DEQ@gric.nsn.us>, <ryan.eberle@gric.nsn.us>
> Cc: Steven Olmsted <solmsted@azdot.gov>, Joonwon Joo <jjoo@azdot.gov>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, MPD Programming - ADOT <mpdprogramming@azdot.gov>, Gabiou, Dan (FHWA) <dan.gabiou@dot.gov>, Clifton Meek <meek.clifton@epa.gov>, Karina O'Conner <oconnor.karina@epa.gov>, Unger, Audrey C. <Audrey.Unger@hdrinc.com>, Dean Giles <dgiles@azmag.gov>, Adam Xia <Axia@azmag.gov>, Jackson, Jeremy L. <jeremy.jackson@hdrinc.com>, David Shu <DShu@aztec.us>, Sanchez, Ever <Ever.Sanchez@hdrinc.com>, Caitlyn Zaremba <zaremba.caitlyn@azdeq.gov>, Trent Kelso <tkelso@azdot.gov>, Myrna Bondoc <mbondoc@azdot.gov>
>
> To All:

ADOT is presenting the following project, **I-10 Koli Road Traffic Interchange**, for interagency consultation, per 40 CFR 93.105, to determine if the project should be treated as a project of air quality concern or not as a project of Air Quality Concern and thereby will not require a PM10 hot-spot analysis. ADOT is requesting responses to the attached *F0701_Koli Road Traffic Interchange_PM Consulation_12202024.pdf.,* within **30 days.** A non-response will be interpreted as concurrence that the project **is not** a project of air quality concern and does not require a hot-spot analysis. If any consulted party believes this project should be treated as a project of air quality concern that requires a Quantitative PM10 hot-spot analysis, please document the appropriate section under 40 CFR 93.123 (b) that applies to the project and describe why the project should be treated as a project of air quality concern. Please forward to those as needed and let me know if you have any additional questions.

Beverly Chenausky

ASSISTANT ENVIRONMENTAL ADMINISTRATOR

ARIZONA DEPARTMENT OF TRANSPORTATION

MD EM02, 206 S. 17th Ave.

Phoenix, AZ 85007

480.390.3417

Website: azdot.gov

I-10 Koli Rd Air Quality Tech Report_2025-04-29_complete.pdf
4262K