

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

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### Project Setting and Description

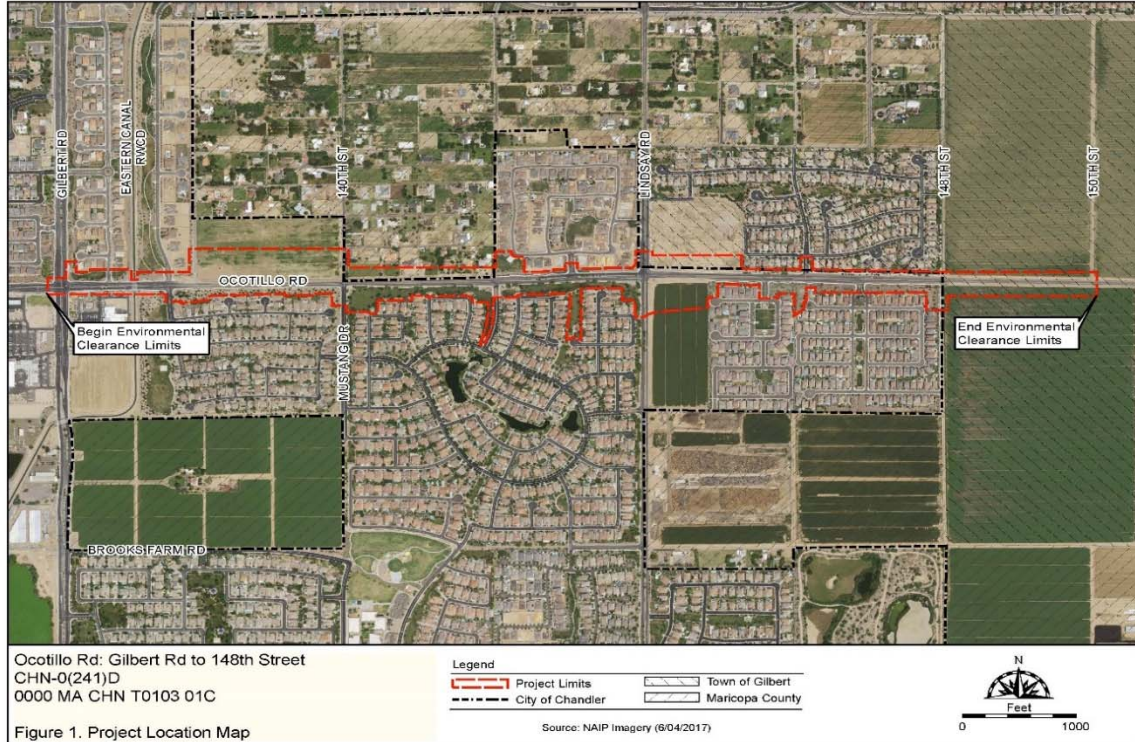
The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being carried out by ADOT pursuant to 23 U.S.C. 326 and a Memorandum of Understanding dated January 3, 2018, and executed by FHWA and ADOT. The City of Chandler (City), in coordination with the Arizona Department of Transportation (ADOT), proposes to improve Ocotillo Road from Gilbert Road to 148th Street. The project is located within the City of Chandler, Maricopa County, Arizona.

Ocotillo Road is classified as a minor arterial roadway. The existing roadway within the project limits consists of one or two travel lanes in each direction, with dedicated left- and right-turn lanes and intermittent sections of curb, gutter, and sidewalk adjacent to existing residential developments. The intersections at Gilbert Road and Lindsay Road have existing traffic signals. The purpose of the project is to improve traffic capacity by adding additional lanes along the corridor, improving drainage, and making improvements to the operation of intersections.

The scope of the project would include:

- Widen the roadway to provide two through lanes, one bicycle lane, curb and gutter, and sidewalk in each direction
- Construct a raised, landscaped median
- Upgrade existing sidewalks and curb ramps to meet Americans with Disabilities Act (ADA) guidelines
- Obliterate existing striping where necessary
- Install storm water conveyance systems and grade retention basins to accommodate roadway runoff
- Install street lights throughout project limits, and remove and replace existing street lights between Lindsay Road and 148th Street to meet City of Chandler standards
- Install striping and pavement markings throughout project limits
- Review existing signage for compliance with current standards and replace or add additional signage where necessary
- Remove existing traffic signal on the southeast corner of the Lindsay Road intersection and install new signal
- Install landscaping and irrigation systems
- Convert overhead SRP power lines to underground utility and relocate Roosevelt Water Conservation District irrigation ditch to underground pipe along the north side of Ocotillo Road between Rincon Drive and Cobblestone Drive
- Remove existing residential mailboxes on the north side of Ocotillo Road between 140th Street and Cobblestone Drive and relocate mail service to a cluster mailbox on 140th Street
- Geotechnical investigations

This project is listed in the MAG FY 2018-2022 Transportation Improvement Program (TIP), and is in the State of Arizona's current five-year (2017-2021) State Transportation Improvement Program (STIP). It is located in the Maricopa County CO Maintenance Area. The location of the project is shown in the Figure 1.



## 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 non-attainment 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<sub>10</sub> or PM<sub>2.5</sub> 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 or 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, the Environmental Protection Agency (EPA) published *PM<sub>2.5</sub> and PM<sub>10</sub> Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM<sub>2.5</sub> and Existing PM<sub>10</sub> 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  $\geq 125,000$  annual average daily traffic (AADT) and truck volumes  $\geq 10,000$  diesel trucks per day (8% of total traffic).*

NO - This is not a new highway project that has a significant number of diesel vehicles.

### Expanded Highway Capacity

Is this an expanded highway project that has 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 that would have a significant increase in the number of diesel vehicles. Table 1 summarizes the average daily traffic and truck traffic data which was provided by Lee Engineering and supplemental analysis provided by MAG. This project will add a maximum additional 148 trucks, the percentage remains the same from the no-build to build scenario.

**Table 1. Traffic Projections for Ocotillo Road**

	2017	2040	2040	<b>Difference No-Build/Build</b>
	Existing	No-Build	Build	
<b>Gilbert Road to Lindsay Road</b>				
<b>ADT</b>	6000	13,169	20,800	<b>7,631</b>
<b>Truck ADT</b>	84	184	291	<b>107</b>
<b>Truck %</b>	1.4%	1.4%	1.4%	<b>0.0%</b>
<b>Lindsay Road to 148th Street Road</b>				
<b>ADT</b>	3739	13,599	19,272	<b>5,673</b>
<b>Truck ADT</b>	60	218	366	<b>148</b>
<b>Truck %</b>	1.6%	1.6%	1.9%	<b>0.3%</b>

### 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 increase traffic volumes for significant number of diesel trucks related to the project?

NO - As shown in Tables 1 and 2, the 2040 Build condition for this project will not affect a congested intersection (LOS D or greater) that has a significant number of diesel trucks, nor will this project change the LOS to D or greater at any intersection because of a significant increase in diesel truck traffic volumes. The only Intersection with LOS D is Gilbert Road Ocotillo and as noted in Table 1, the increase in trucks is not significant.

**Table 2. LOS for Ocotillo Road Intersections**

	2017	2040	2040
	Base	No-Build	Build
<b>Gilbert Road</b>	D	D	D
<b>Lindsay Road</b>	D	C	C

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### **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 involve new bus or rail terminals; therefore, project types (iii) and (iv) are not addressed in the project assessment.

### **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 involve new bus or rail terminals; therefore, project types (iii) and (iv) are not addressed in the project assessment.

### **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<sub>10</sub> or PM<sub>2.5</sub> applicable plan or implementation plan submissions, as appropriate, as sites of violation or potential violation?

NO - The PM<sub>10</sub> and PM<sub>2.5</sub> State Implementation Plans (SIPs) did not identify any specific sites or potential sites of violation. Therefore, no specific sites or potential sites of violation are identified.

### **POAQC Determination**

The proposed project complies with and will not interfere with the implementation of any control measures included in the ADOT 2017-2021 Statewide Transportation Improvement Program (STIP) or the MAG 2018-2022 Transportation Improvement Program (TIP). The project is not anticipated to create LOS D conditions or worsen such conditions at intersections caused from a significant number of diesel vehicles, and the project would not significantly increase the number of diesel vehicles in the 2040 design year.

Therefore, ADOT is presenting this project for interagency consultation in accordance with 40 CFR 93.105 as a Project that is NOT of Air Quality Concern and thereby will not require a PM hot-spot analysis.

### **Interagency Consultation Results**

On June 27th, 2018 ADOT provided a copy of this questionnaire, to the following consultation parties, EPA, MAG, Arizona Department of Environmental Quality (ADEQ), and Maricopa County Air Quality Department as the local air agencies in Maricopa County. There were no objections to the project determination and on July 13th, 2018 ADOT concluded Interagency Consultation by notifying interested parties that this project will proceed as a project that does not require a quantitative PM<sub>10</sub> hot-spot analysis under 40CFR 93.123(b).

**From:** [Beverly Chenausky](#)  
**To:** "[Lindy Bauer](#)"; "[Jerry Wamsley](#)"; "[Hether Krause](#)"; "[ADEQ Conformity](#)"  
**Cc:** "[Clifton Meek](#)"; "[Karina O'Conner](#)"; [ADOTAirNoise](#); [Farhana Jesmin](#); [Eric Prosnier](#)  
**Subject:** RE: Interagency Consultation City of Chandler Ocotillo Road Gilbert Road to 148th T0103  
**Date:** Friday, July 13, 2018 10:05:20 AM  
**Attachments:** [image001.png](#)

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As there are not objections to the project determination presented, interagency consultation is complete with the project identified as a project that does not require a quantitative hot-spot analysis as listed under 40 CFR 93.123(b).

Thank you,  
Beverly

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**From:** Beverly Chenausky  
**Sent:** Wednesday, June 27, 2018 9:47 AM  
**To:** 'Lindy Bauer'; 'Jerry Wamsley'; 'Hether Krause'; 'ADEQ Conformity'  
**Cc:** 'Clifton Meek'; 'Karina O'Conner'; ADOTAirNoise; Farhana Jesmin; Eric Prosnier  
**Subject:** Interagency Consultation City of Chandler Ocotillo Road Gilbert Road to 148th T0103

To Interested Parties:

ADOT is presenting the following project, **Ocotillo Road Improvements: Gilbert Road to 148th Street Road**, for interagency consultation per 40 CFR 93.105 as a potential project that is not a project of Air Quality Concern and thereby will not require a PM10 hot-spot analysis. If through interagency consultation it is determined that this project will not require a hot-spot analysis, other conformity provisions apply and will be addressed in the air quality section of the environmental clearance. ADOT is requesting responses to the attached questionnaire within **10 business 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 PM 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.

**Beverly T. Chenausky**  
**Air & Noise Program Manager**

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*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. 326** and a Memorandum of Understanding dated [January 3, 2018](#), and executed by FHWA and ADOT.*

**From:** Wamsley, Jerry  
**To:** [Beverly Chenausky](#)  
**Cc:** [Lee, Anita](#); [OConnor, Karina](#)  
**Subject:** RE: Interagency Consultation City of Chandler Ocotillo Road Gilbert Road to 148th T0103  
**Date:** Monday, July 9, 2018 5:30:24 PM  
**Attachments:** [image001.png](#)

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Hello Beverly,

Thank you for the opportunity to review the Arizona Department of Transportation's (ADOT) Project of Air Quality Concern (POAQC) Questionnaire for the Ocotillo Road/Gilbert Road to 148<sup>th</sup> project within the City of Chandler, dated June 27, 2018.

We concur that this project is not a project of air quality concern and does not require a particulate matter hot-spot analysis.

Sincerely,  
Jerry Wamsley

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