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

Project Setting and Description

Yuma County, in coordination with the Arizona Department of Transportation (ADOT) is planning a roadway construction project that would provide an approximately 6.10 mile-long connection between State Route (SR) 195 and County 18th Street within and adjacent to the city of San Luis, Yuma County, Arizona (Figure 1). The proposed roadway would begin at the Avenue E and SR 195 intersection, travel northeast and pass to the east of Rolle Airfield, and then extend north to tie into the existing Avenue D roadway approximately 0.50 mile north of County 18th Street.

The portion of the project area between SR 195 and 0.30 mile north of the County 19th Street alignment is currently undeveloped. The portion of the project area from 0.30 mile north of the County 19th Street alignment to County 18th Street consists of an unpaved roadway (i.e., Avenue D) with gravel shoulders. North of County 18th Street, Avenue D is an asphalt-paved, two-lane roadway with gravel shoulders. The closest existing north south corridors in the vicinity of the project area include Avenue B located 2 miles to the east and Avenue J/US Highway 95 located 6 miles to the west. Future regional growth is anticipated within the communities of San Luis, Somerton, and Yuma, and the existing north-south corridors would not support projected traffic volumes or provide sufficient access between the local communities and the Rolle Airfield and the San Luis Port of Entry II. The purpose of the project is to improve regional mobility and traffic operations by providing a new north-south corridor between San Luis, Somerton and Yuma.

The roadway would include two 12-foot-wide travel lanes (one in each direction) and eight-foot-wide asphalt-paved shoulders throughout the project limits. Southbound left and right-turn lanes and a narrow curbed median would be constructed at the SR 195 and Avenue E intersection. Northbound and southbound left-turn lanes at the Avenue D and County 19th Street intersection and at the Avenue D and County 18th Street intersection would also be constructed.

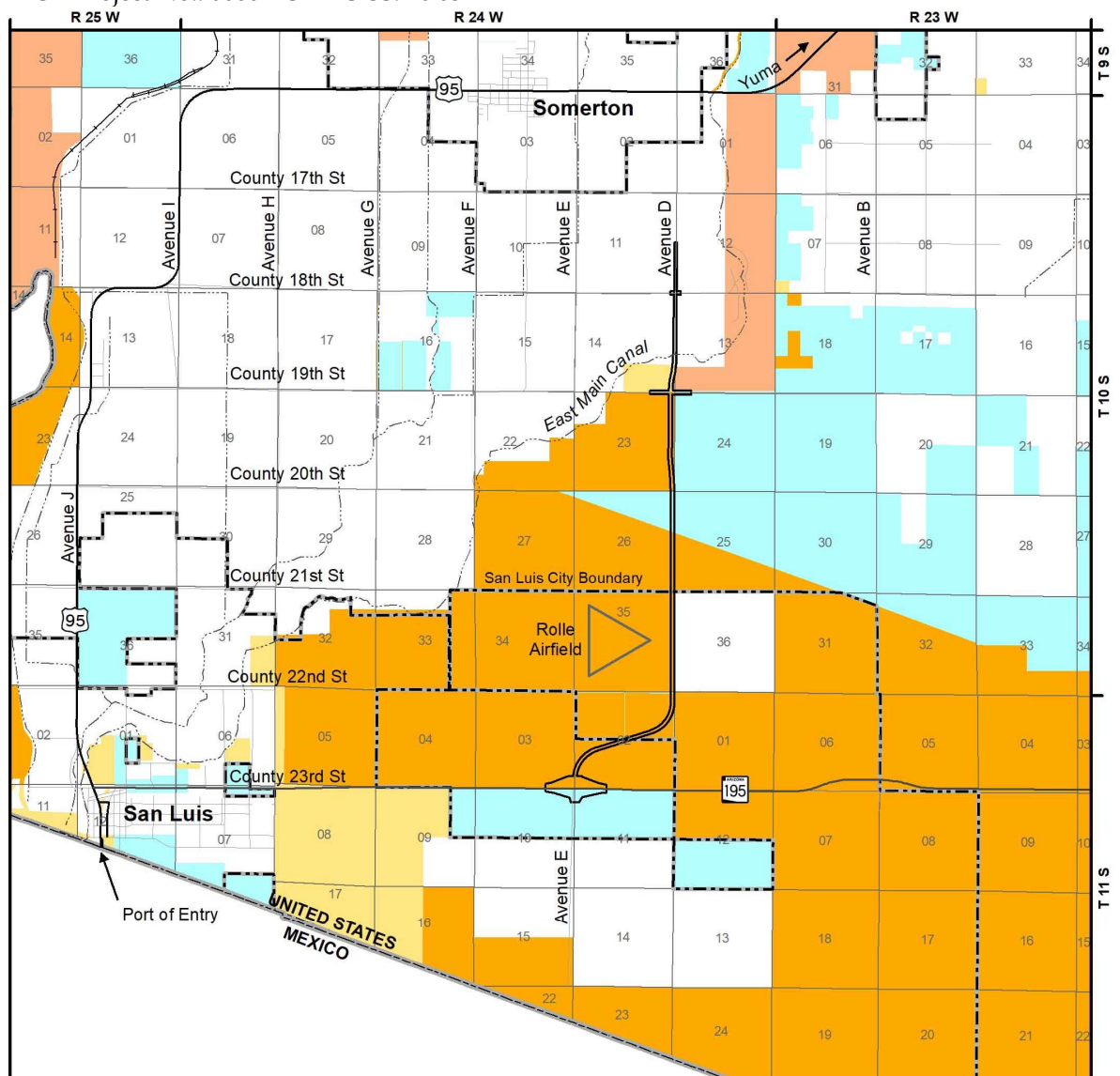
Additionally, the project scope of work includes:

- Installing riprap for approximately 750 feet along both shoulders between County 19th Street and the East Main Canal to stabilize slopes
- Widening the Avenue D crossing over the East Main Canal to accommodate the new roadway alignment, including relocating an existing pump and extending or replacing the existing reinforced concrete pipe at the canal
- Adding a westbound right-turn lane and an eastbound left-turn lane along SR 195 at the intersection with Avenue E
- Modifying the existing traffic signal at the Avenue E and SR 195 intersection to accommodate the project improvements
- Adding westbound and eastbound left-turn lanes along County 19th Street at the intersection with Avenue D
- Installing stop signs to implement four way stop control and installing four-way overhead flashing red beacons at the Avenue D and County 19th Street intersection

- Installing stop signs along County 18th Street to implement two way stop control at the Avenue D and County 18th Street intersection
- Relocating irrigation ditches and/or installing pipelines to replace irrigation ditches to accommodate project improvements
- Installing new or replacing existing signs to meet ADOT standards
- Striping/markings the new roadway and intersections
- Installing fencing along the new ROW/permanent easement boundaries
- Utility relocations as needed to accommodate project improvements

The project limits include existing County ROW and lands owned and/or managed by the Bureau of Land Management (BLM), Bureau of Reclamation (Reclamation), State of Arizona, and private landowners. The project area consists of 212.29 total acres and would require approximately 81 acres of new ROW consisting of 68.27 acres of new permanent easement from the BLM and Reclamation and approximately 12.29 acres of new ROW from ASLD and private landowners. The new ROW/permanent easement corridor would be 150 feet wide between SR 195 and the East Main Canal, and 100 feet wide between the East Main Canal and the northern limits of the project (0.50 mile north of County 18th Street). Temporary construction easements may be needed for the project for access and staging. Traffic along existing roadways and access to adjacent properties would be maintained throughout construction, and no detours would be needed. Construction is anticipated to begin as early as 2023 and last approximately 1 year. The Preferred Alternative is expected to have 7,200 vehicles per day in 2027 and would continue to increase to 9,100 vehicles per day by the year 2041.

The project is listed in the Yuma Metropolitan Planning Organization (YMPO) 2020-2024 Transportation Improvement Program (TIP), adopted on October 31, 2019. The project is also included in the YMPO 2018-2041 Regional Transportation Plan (RTP) as a recommended project in years 2023-2027 and in the ADOT Arizona-Sonora Border Master Plan, 2013. The project is listed in the YMPO 2018-2041 Regional Transportation Plan, Amendment 1 dated March 2018. The project is currently listed in the State of Arizona's State Transportation Improvement Program (STIP) for fiscal year 2023. The project is located within a non-attainment area for particulates 10-microns in diameter or less (PM₁₀) for Yuma County.



Source: Land ownership GIS coverage provided by Arizona State Land Department;
 Arizona Transportation Information System GIS Coverage (2007)

Key

- | | |
|-----------------------------|----------------------------|
| — Project Area | Cocopah Indian Reservation |
| - - - City Boundary | Private Land |
| ■ Bureau of Land Management | State Trust Land |
| ■ Bureau of Reclamation | |

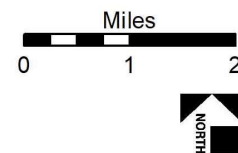


Figure 1. Project Location Map

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 PM₁₀ 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 *PM_{2.5} and PM₁₀ Hot-Spot Analyses in Project-Level Transportation Conformity Determinations for the New PM_{2.5} 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 $\geq 125,000$ annual average daily traffic (AADT) and truck volumes $\geq 10,000$ diesel trucks per day (8% of total traffic). 40 CFR 93.123(b)(i)

NO – Although this is a new highway project, projected traffic is estimated to be similar to that of SR 195 with very low traffic volumes and very low truck volumes, therefore would not have a significant number of diesel vehicles.

Table 1. Projected Traffic Growth Along the Proposed Avenue E

	2027 (Opening Year) Preferred Alternative	2041 (Design Year) Preferred Alternative
AADT	7,200	9,100
Truck AADT	533	673
Truck %	7.4%	7.4%

Source: YMPO 2018-2041 Regional Transportation Plan, Amendment 1 – March 2018

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. 40 CFR 93.123(b)(i)*

NO – This is not an expanded highway project that has a significant number of diesel vehicles; the project involves an entirely new roadway.

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? 40 CFR 93.123(b)(ii)

NO – The project involves an entirely new roadway. It would not affect a congested intersection (LOS D or greater) that has a significant number of diesel truck, nor will this project change LOS to D or greater at any intersection because of a significant increase in diesel truck volume.

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? 40 CFR 93.123(b)(iii)(iv)

NO – This project does not involve new bus or rail terminals; therefore, this project type is not in the project area nor 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? 40 CFR 93.123(b) (iv)

NO – This project does not involve an expansion of an existing bus or rail terminals; therefore, this project type is not in the project area nor 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 PM₁₀ or PM_{2.5} applicable plan or implementation plan submissions, as appropriate, as sites of violation or potential violation? 40 CFR 93.123(b)(v)

NO – The PM₁₀ State Implementation Plans (SIPs) did not identify any specific sites or potential sites of violation. The project does not impact a monitor that is identified in the Yuma County PM₁₀ non-attainment area and will not create a possible violation of the PM₁₀ standard.

POAQC Determination

The project is not anticipated to have a significant number of diesel vehicles; the diesel truck volumes are low at max projected of 673 truck AADT in 2041. The project does not impact LOS D or worse intersections with a significant number of diesel vehicles. Since the project would involve the construction of newly paved roadway, it would result in reduced traffic wait times and reduced PM₁₀ emissions from the paving of an unpaved surface from the existing unused agricultural land.

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

ADOT presented this questionnaire to the following consultation parties, EPA, FHWA, YMPO, and the Arizona Department of Environmental Quality (ADEQ) for interagency consultation between June 3 – June 18, 2020 interagency consultation in accordance with 40 CFR 93.105 as a Project that is NOT of Air Quality Concern and that will not require a PM hot-spot analysis. There were no objections to the project determination and on June 18, 2020 ADOT concluded Interagency Consultation by notifying interested parties that this project will proceed as a project that does not require a quantitative PM₁₀ hot-spot analysis under 40CFR 93.123(b).

Re: Interagency Consultation: Determining Project of Air Quality Concern in YMPO Region

1 message

Beverly Chenausky <bchenausky@azdot.gov>

Thu, Jun 18, 2020 at 9:16 AM

To: Paul Ward <pward@ympo.org>, Transportationconformity <transportationconformity@azdeq.gov>, "Wamsley.Jerry"

<wamsley.jerry@epa.gov>, "Hansen, Alan (FHWA)" <Alan.Hansen@dot.gov>

Cc: Francisco Sanchez <francisco.sanchez@yumacountyaz.gov>, Charles Gutierrez <cgutierrez@ympo.org>, Paul O'brien

<POBrien@azdot.gov>, "Jennifer (FHWA)" <jennifer.elsken@dot.gov>, Patricia Hunter <phunter@azdot.gov>, Karina O'Conner

<oconnor.karina@epa.gov>, Clifton Meek <meek.clifton@epa.gov>, Mark Hoffman <mhoffman@azdot.gov>, ADOTAirNoise - ADOT

<adotairnoise@azdot.gov>, Olivier Mirza <omirza@azdot.gov>

As there are no objections to the project determination presented, interagency consultation is complete with the project identified as a project that does not require a quantave hot-spot analysis as listed under 40 CFR 93.123(b). Details on the associated environmental document review period for this project will be provided when available.

Beverly T. Chenausky
Air & Noise Program Manager

MD EM02, Room 41

[1611 W. Jackson St.](#)[Phoenix, AZ 85007](#)

602.712.6269

[azdot.gov](#)

On Wed, Jun 3, 2020 at 2:08 PM Beverly Chenausky <bchenausky@azdot.gov> wrote:

ADOT, in coordination with Yuma County, is presenting the following local project, **Avenue E, State Route 195 to County 18th Street**, 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 PM 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. Additional information on the County's Traffic Analysis and Design Concept Report will be provided through a separate ShareFile notification. If you have any questions or need assistance using ShareFile or additional time to review the materials please let me know.


Beverly T. Chenausky
Air & Noise Program Manager

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 **SS976_Avenue E to SR195 POAQC_06032020.pdf**
919K



Beverly Chenausky <bchenausky@azdot.gov>

RE: Interagency Consultation: Determining Project of Air Quality Concern in YMPO Region

1 message

Wamsley, Jerry <Wamsley.Jerry@epa.gov>

Tue, Jun 16, 2020 at 11:14 AM

To: Beverly Chenausky <bchenausky@azdot.gov>

Cc: "OConnor, Karina" <OConnor.Karina@epa.gov>, "Meek, Clifton" <meek.clifton@epa.gov>, "Lee, Anita" <Lee.Anita@epa.gov>

Hello Beverly,

Thank you for the opportunity to review and comment on the Project of Air Quality Concern Questionnaire for the Avenue E, State Route 195 to County 18th Street project in Yuma County. We have no comments or suggestions for your review.

Sincerely,

Jerry Wamsley

From: Beverly Chenausky <bchenausky@azdot.gov>

Sent: Wednesday, June 3, 2020 2:09 PM

To: Paul Ward <pward@ympo.org>; Transportationconformity <transportationconformity@azdeq.gov>; Wamsley, Jerry <Wamsley.Jerry@epa.gov>; Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>

Cc: francisco.sanchez@yumacountyaz.gov; Charles Gutierrez <cgutierrez@ympo.org>; Paul O'brien <POBrien@azdot.gov>; Jennifer (FHWA) <jennifer.elsken@dot.gov>; Patricia Hunter <phunter@azdot.gov>; OConnor, Karina <OConnor.Karina@epa.gov>; Meek, Clifton <meek.clifton@epa.gov>; Mark Hoffman <mhoffman@azdot.gov>; ADOTAirNoise - ADOT <adotairnoise@azdot.gov>; Olivier Mirza <omirza@azdot.gov>

Subject: Interagency Consultation: Determining Project of Air Quality Concern in YMPO Region

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Beverly Chenausky <bchenausky@azdot.gov>

RE: Interagency Consultation: Determining Project of Air Quality Concern in YMPO Region

1 message

Elsken, Jennifer (FHWA) <jennifer.elsken@dot.gov>

Mon, Jun 8, 2020 at 4:09 PM

To: "bchenausky azdot.gov" <bchenausky@azdot.gov>

Cc: "francisco.sanchez@yumacountyaz.gov" <francisco.sanchez@yumacountyaz.gov>, Charles Gutierrez <cgutierrez@ympo.org>, Paul O'brien <POBrien@azdot.gov>, Patricia Hunter <phunter@azdot.gov>, Karina O'Conner <oconnor.karina@epa.gov>, "Wamsley.Jerry" <wamsley.jerry@epa.gov>, Clifton Meek <meek.clifton@epa.gov>, Mark Hoffman <mhoffman@azdot.gov>, Paul Ward <pward@ympo.org>, ADOTAirNoise - ADOT <adotairnoise@azdot.gov>, Olivier Mirza <omirza@azdot.gov>, "Hansen, Alan (FHWA)" <Alan.Hansen@dot.gov>, Transportationconformity <transportationconformity@azdeq.gov>

Hi Beverly,

Thanks for providing the air quality information for the Avenue E, State Route 195 to County 18th Street Project for review.

Based on the information provided, FHWA agrees with ADOT's assessment that the Avenue E, State Route 195 to County 18th Street Project is not a project of Air Quality Concern and will not require a PM10 hot-spot analysis. Any changes to the project scope (including changes to projected traffic volumes) will warrant additional review by FHWA to determine if this assessment is still appropriate.

Please let me know if you need anything else.

Thanks, Jennifer.

Jennifer Elsken

Environmental Program Manager

FHWA, Arizona Division

Office: 602-382-8974

Cell: 801-644-0322

jennifer.elsken@dot.gov

From: Beverly Chenausky [mailto:bchenausky@azdot.gov]

Sent: Wednesday, June 3, 2020 2:09 PM

To: Paul Ward <pward@ympo.org>; Transportationconformity <transportationconformity@azdeq.gov>; Wamsley.Jerry <wamsley.jerry@epa.gov>; Hansen, Alan (FHWA) <Alan.Hansen@dot.gov>

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