Traffic Signal at Jensen and Indianola

City of Sanger

Federal Project Number: CML-5197(044)

FTIP: LSTMP805

Overview

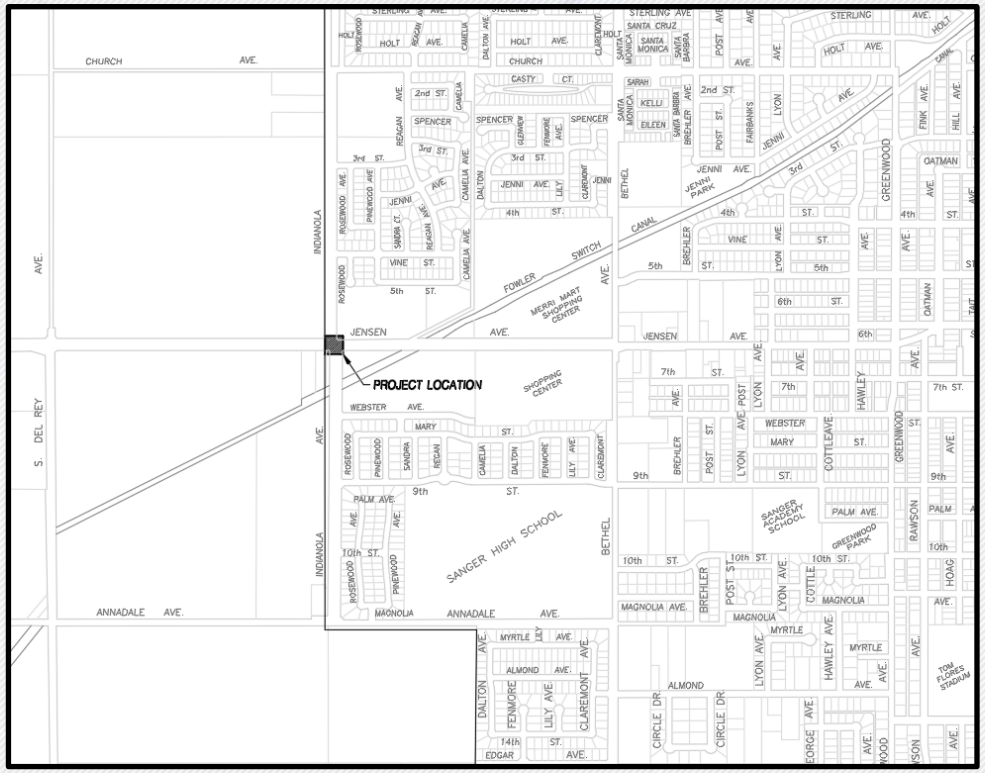
- Project Description
- Project Location
- Purpose and Need
- Project Listing in the FTIP/CTIPS
- Traffic Data
- Project Schedule
- Project-level Conformity Summary

Project Description

- At the intersection of Jensen Ave and Indianola Ave; Install a new three-phase traffic signal system.
- Currently, there are high traffic volumes on Jensen Avenue at Indianola Avenue, resulting in long queue times for southbound Indianola turning movements.
- Installing a new traffic signal at the intersection improves the level of service, reduces queues and idling time at the intersection, and provides safety improvements with protected left turns for all approaches.
- Project consists of a No-Build (no signal improvements) and One Build Scenario (with signal improvements)
- Project does not meet the criteria for an exempt project under 40 CFR 93.126 or 93.128.

Location

- City of Sanger: Intersection – Jensen Avenue and Indianola Avenue



Purpose and Need

Purpose

- Installation of a new traffic signal at the intersection of Jensen Avenue and Indianola Avenue
- Installing the traffic signal system will not only significantly reduce delay and increase the level of service but also bring about much-needed safety improvements with protected left turns for all approaches.
- New Level of Service based on existing AADT(with signal improvements) – LOS A during the AM peak hour and LOS A in the PM peak hour and new delay (with signal improvements) – 8.9 seconds and 7.6 second during AM and PM peak hours

Need

- Currently there are high traffic volumes on Jensen Avenue at Indianola Avenue, due to its location at the County of Fresno/City of Sanger boundary, resulting in long queue times for southbound Indianola turning movements.
- Currently, left turn right-of-way conflict collisions have been documented at this intersection. Four collisions were documented via Statewide Integrated Traffic Records System (SWITRS) between 2019 and 2021. All four were broadside collisions from motorists trying to make left turns.
- Existing Level of Service – LOS F during AM Peak Hour and LOS D during the PM Peak Hour and existing Delay – 71.8 seconds and 27.4 seconds during AM and PM peak hours.

Project Listing in the TIP

- The proposed project (FTIP ID: LSTMP805) is listed in the 2023 Fresno Transportation Improvement Program*.
- The scope of the proposed project is consistent with the project description in the 2023 FTIP.

2023 FTIP- GROUPED PROJECT LISTING
2023 FTIP Amendment No. 16 (04-19-2024)
(DOLLARS IN $1,000)

AGENCY	FTIP	GROUPED LIST PROJECT #	PROJECT ID #	PROJECT TITLE	PROJECT DESCRIPTION	FUND	PRIOR	FY22/23	FY23/24	FY24/25	FY25/26	FUTURE	FUND TOTAL	TOTAL COST
Sanger, City of	'23-00	FRE190006	LSTMP805	Jensen and Indianola Traffic Signal	At the intersection of Jensen Ave and Indianola Ave; Install new three-phase traffic signal system	*CMAQ*	$0	$39	$36	$441	$0	$0	$516	
						Local	$0	$5	$5	$57	$0	$0	$67	$583
Sanger, City of	'23-00	FRE190006	LSTMP839	Bethel and Almond Traffic Signal	Bethel Ave at Almond Ave; Install new three-phase traffic signal system	*CMAQ*	$39	$0	$0	$235	$0	$0	$274	
						Local	$5	$0	$0	$267	$0	$0	$272	$546
Fresno County	'23-15	FRE190006	LSTMP891	Central Ave & Chestnut Ave Left-Turn Phasing and Intersection Improvements	Central Ave and Chestnut Ave Intersection Improvements - Install left-turn signals in all four directions; add right turn lanes on the west, south and east legs of the intersection; replace ADA curbs ramps and curb & gutter.	*CRP*	$0	$0	$0	$0	$149	$0	$149	
						Local	$0	$0	$0	$0	$19	$1,135	$1,154	$1,303
Selma, City of	'23-00	FRE190006	LSTMP735	McCall & Dinuba Traffic Signal	At the intersection of McCall and Dinuba; Install traffic signal (TC)	*CMAQ*	$105	$93	$749	$0	$0	$0	$947	$947

* https://fresnocog.wpenginepowered.com/wp-content/uploads/2024/04/Website-Back-up-project-List-Formal-Amendment-No.-16.pdf

Traffic Data

	2019 Existing (No Build)	2019 Existing (Build)	2035 Existing (No Build)	2035 Existing (No Build)
AADT	14,818	14,818	19,406	19,406
% Trucks	1.9%	1.9%	1.9%	1.9%
Truck AADT	285	285	373	373
LOS	AM Peak – F PM Peak - D	AM Peak – A PM Peak - A	AM Peak – F PM Peak - F	AM Peak – A PM Peak - A
Delay (sec)	AM Peak - 71.8 PM Peak - 27.4	AM Peak - 8.9 PM Peak - 7.6	AM Peak - 204.6 PM Peak - 70.8	AM Peak - 6.5 PM Peak - 5.3

Traffic Summary

- The existing traffic was developed using traffic counts collected, and a growth rate of 1.7% is assumed per the City of Sanger General Plan for developing future year traffic.
- AADT for both existing and future years are the same for no-build and build.
- There is a significant improvement in the level-of-service and reduction in delay between the no-build and build case scenarios
- Coordinated with Fresno COG on the regional travel model. Ultimately did not feel the COG regional model was representative of the likely future traffic distribution and volumes in this area of the City and at this specific intersection and could not use the data.

Project Schedule

	Preliminary Engineering	Engineering	Right-of-Way	Construction
Start	2022	2022	2023	2024
End	2023	2023	2024	2025

Project-level Conformity Conclusion

- Project does not meet the criteria for a POAQC as defined in the final rule by 40 CFR 93.123(b)(1). The project is listed as one of the non-exempt project examples that are not a local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii) stated as
  - **"Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM emissions"**
- Additional reasons why the project is not a POAQC are:
  - Project will significantly improve the LOS of the intersection
  - Queues and idling times will be significantly reduced and in turn will reduce emissions
  - Signalization will help reduce left turn right-of-way conflict collisions that have been documented at this intersection

Questions?

<u>Contact Information</u>

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City of Sanger

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