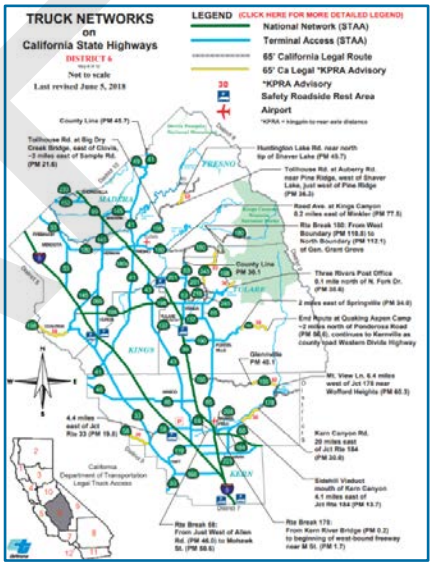
5. Freight and Goods Movement

Freight and goods movement play an integral role in the distribution of agricultural products, processed food and energy products throughout California. Additionally, companies have located large regional and national distribution centers in the San Joaquin Valley (SJV) taking advantage of reasonably inexpensive land, low cost labor and goods access to rail and interstate/highway networks.

The highway and local road system is the primary freight infrastructure for the region, and trucking is the leading freight mode. Truck movements in the SJV are centered on the main north-south arteries that include I-5 and State Route (SR) 99. Other important highways include SR-14, SR-41, SR-43, SR-65 and SR-120 along with east-west corridors like SR-58, SR-108, SR-120 and SR-180.

5.1 STAA

According to Caltrans California Truck Network Maps, SR-41 is designated as a Terminal Access (STAA) route and SR-99 is designated as a National Network (STAA) route in the RTTAP. The STAA, Federal Surface Transportation Assistance Act of 1982, allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network. These trucks, referred to as STAA trucks, are longer than California legal trucks.

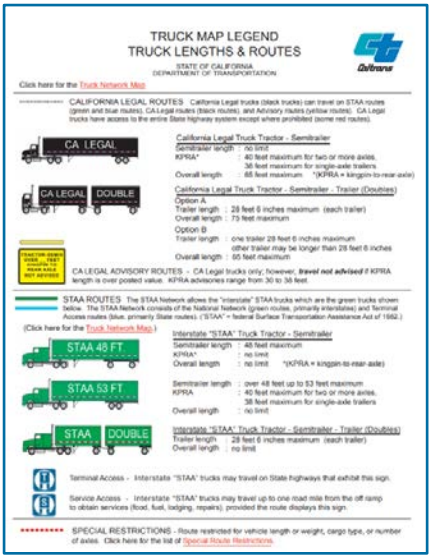


California Legal trucks can travel on STAA routes, CA legal routes, and advisory routes. CA Legal trucks have access to the entire State highway system, except where prohibited.

These truck networks allow for the movement of goods into, out of, within or through the SJV.

5.2 Study Area

The study area encompasses to two main highways, State Route 99 to the east and SR-41 to the west, along with local roads, Church Avenue to the north and Adams Avenue to the south. State Route 99 and SR-41serve as the backbone for the study area. The roadway network that serve to access SR-99 and SR-41 within the study area encompasses rural county roads and local city roads. Within the City of Fresno they include Jensen Avenue, North Avenue and Central Avenue and within Fresno County they include American Avenue, Clayton Avenue and Adams Avenue (all east-west approaches).



The following roadways provide primary circulation within the Study Area. The following roadway characteristics were attained using FCOG and Fresno County shape file attributes. Figure 2 identifies road classification, speed limit and truck routes within the Study Area.

North – South Alignment

State Route 99 (SR-99) is a major north-south freeway from Bakersfield, CA to Sacramento, CA. Within the study area, SR-99 is a 6-lane divided freeway with a 65 mph posted speed limit. SR-99 is a major good movement corridor.

State Route 41 (SR-41) is a major north-south freeway. Within the study area, SR-41 is a 4-lane divided freeway with a maximum 65 mph posted speed limit. SR-41 is a major good movement corridor.

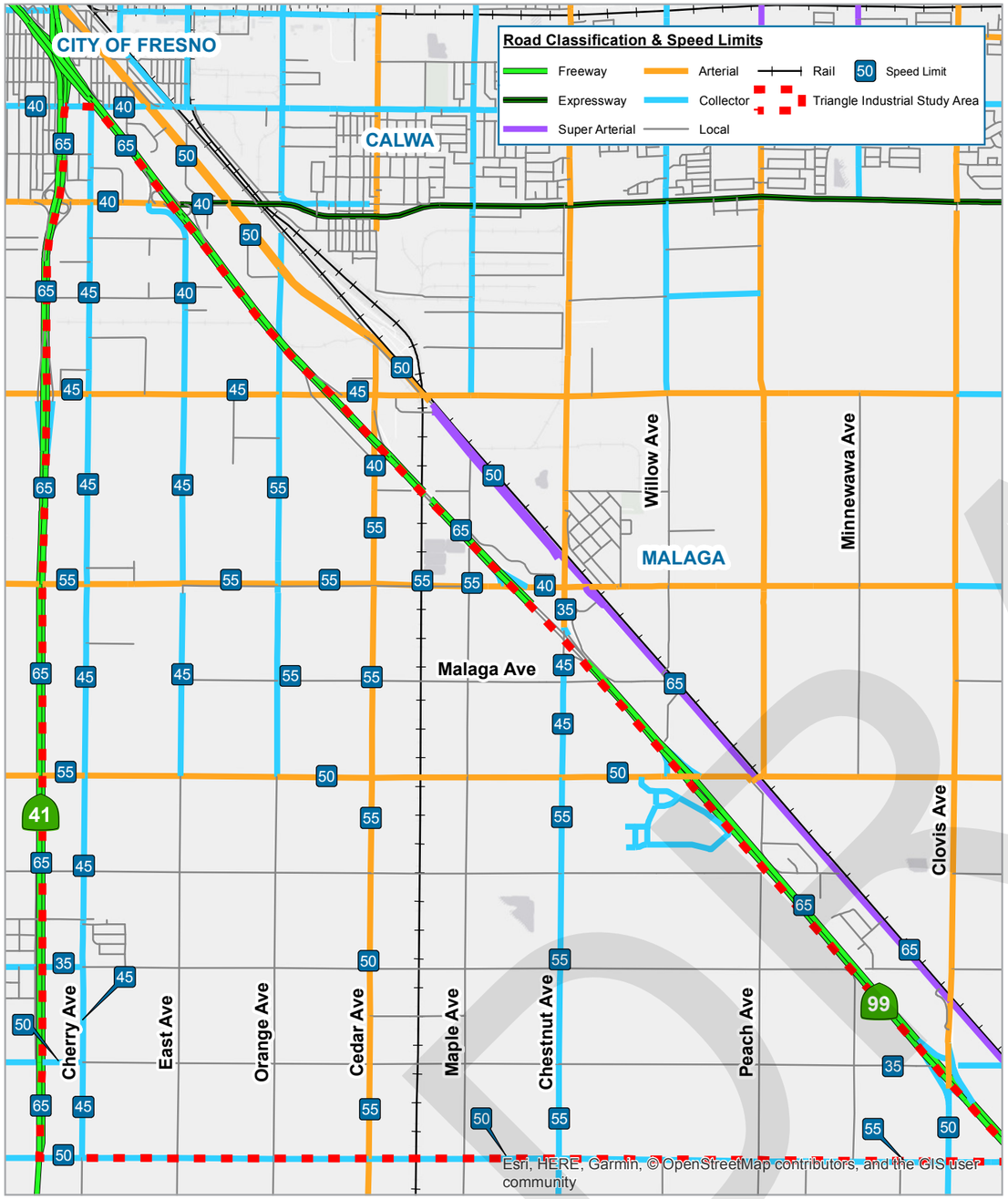
Cherry Avenue is a 2-lane collector roadway, approximately 5.5 miles in length within the study area. Speed limit is posted at 45 mph. North of Central Avenue to Church Avenue, Cherry Avenue is classified as a truck route. Additionally, Cherry Avenue is the frontage road to Orange Elementary, Cherry Avenue Auction and Fire Station #89.

Orange Center School District

East Avenue is a 2-lane local and collector roadway, approximately 5.0 miles in length within the study area. North of American Avenue to Jensen Avenue, East Avenue is a collector roadway. Speed limit ranges from 45 mph to 55 mph. North of Central Avenue to Jensen Avenue, Cherry Avenue is classified as a truck route. Additionally, Cherry Avenue is the frontage road to the Ulta Distribution Center.

Orange Avenue is a 2-lane local and collector roadway, approximately 4.5 miles in length within the study area. North of American Avenue to Jensen Avenue (study area limits), Orange Avenue is a collector roadway (and also beyond Jensen Avenue). Speed limit is posted at 55 mph. North of American Avenue to project limits, Orange Avenue is classified as a truck route. Additionally, Orange Avenue is the frontage road to the Amazon Distribution Center.

Amazon Distribution Center



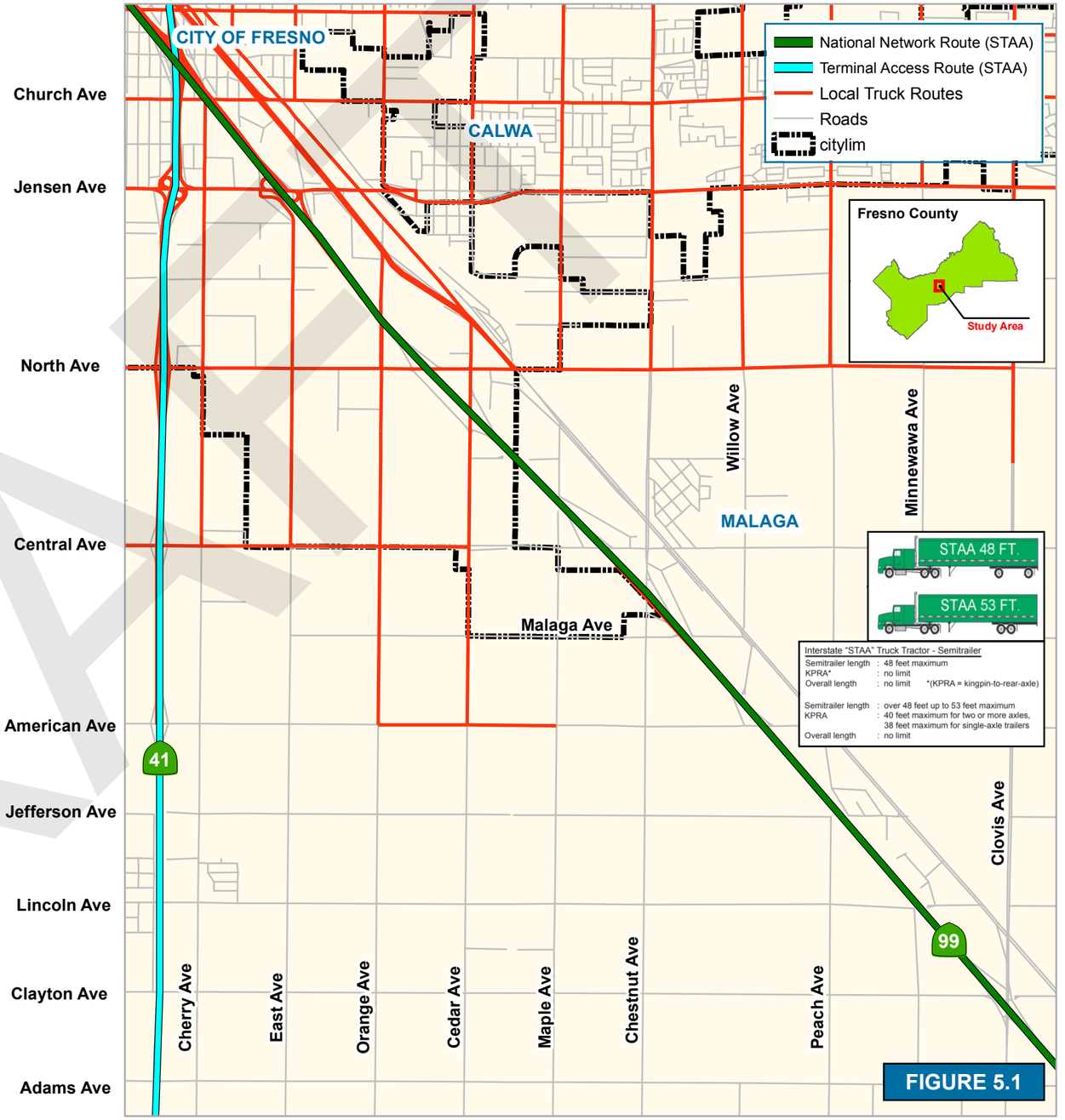


FIGURE 5.1

N

0 0.4 0.8 1.2 1.6
Miles

REVERSE TRIANGLE
TRANSPORTATION AREA PLAN

Road Classification, Speed Limits and Truck Routes

Project No. 11192258
Date 6/12/2019

Fresno Council of Governments
GHD

L:\Prj\2618\G2618\Maps\Working\Road Classification (landscape).mxd
Print date: 23 Aug 2019 - 15:52

Paper Size ANSI B (Landscape)

Data source: GHD 2019, Fresno County Public GIS data, City of Fresno Public GIS data, Caltrans Public GIS data. Created by: jramirez2

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California IV FIPS 0404 Feet

Cedar Avenue is a 2-lane arterial roadway, approximately 4.0 miles in length within the study area. Speed limit is posted at 55 mph. North of American Avenue to project limits and beyond, Cedar Avenue is classified as a truck route. Cedar Avenue assesses southbound SR-99. Additionally, Cedar Avenue is the proposed frontage road to the High Speed Rail Maintenance Facility.

Cedar Avenue/High Speed Rail

Maple Avenue is a 2-lane local roadway, approximately 3.25 miles in length within the study area. Speed limit is considered 55 mph, no posted speed limits signs were observed. This roadway is not part of the truck route system.

Chestnut Avenue is a 2-lane collector roadway, approximately 3.0 miles in length within the study area. Speed limit is posted at 55 mph. Chestnut Avenue assesses southbound SR-99. This roadway is not part of the truck route system.

Peach Avenue is a 2-lane local roadway, approximately 2.0 miles in length within the study area. Speed limit is considered 55 mph, no posted speed limits signs were observed. This roadway is not part of the truck route system.

Minnewawa Avenue is a 2-lane local roadway, approximately 2.0 miles in length within the study area. Speed limit is considered 55 mph, no posted speed limits signs were observed. This roadway is not part of the truck route system.

Clovis Avenue is a 2-lane collector roadway, approximately 0.5 miles in length within the study area. North of State Route 99, Clovis Avenue is an arterial 4-lane arterial roadway. Speed limit within project area is posted at 50 mph. Clovis Avenue accesses SR-99.

East – West Alignment

Church Avenue is a 2-lane collector roadway, approximately ¼ of a mile in length within the study area. Speed limit is posted at 40 mph. This roadway is part of the truck route system.

Ulta Distribution Center

Jensen Avenue is a 4-lane arterial roadway with two-way left-turn lane (TWLTL), approximately 1.0 mile in length within the study area. Speed limit is posted 40 mph. Jensen Avenue accesses both SR-99 and SR-41. This roadway is part of the truck route system.

North Avenue is a 4-lane arterial roadway with two-way left-turn lane (TWLTL), approximately 2.0 miles in length within the study area. Speed limit is posted 45 mph. North Avenue connects to SR-41. This roadway is part of the truck route system.

Central Avenue is a 2-lane arterial roadway, approximately 2.5 miles in length within the study area. Speed limit ranges from 40 mph to 55 mph. Central Avenue accesses SR-41. West of Cedar Avenue, this roadway is part of the truck route system.

American Avenue is a 2-lane arterial roadway, approximately 2.5 miles in length within the study area. Speed limit ranges from 50 mph to 55 mph. American Avenue accesses northbound SR-99 and is partially included in the truck route system (between Orange Avenue and Maple Avenue).

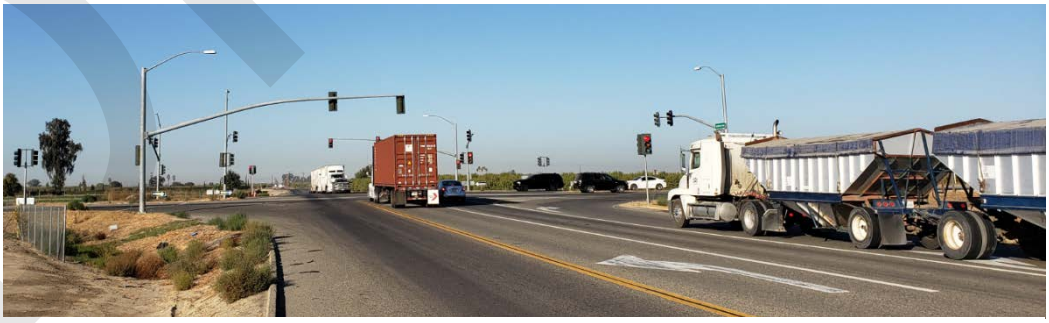
Jefferson Avenue, Lincoln Avenue and Clayton Avenue are 2-lane local roadways, ranging in approximately 2.5 to 3.5 miles in length within the study area. Speed limit is considered 55 mph, no posted speed limits signs were observed. These roadways are not part of the truck route system.

Adams Avenue is a 2-lane collector roadway, approximately 5.25 miles in length within the study area. Speed limit ranges from 50 mph to 55 mph. Adams Avenue accesses northbound SR-99. Adams Avenue is not part of the truck route system.

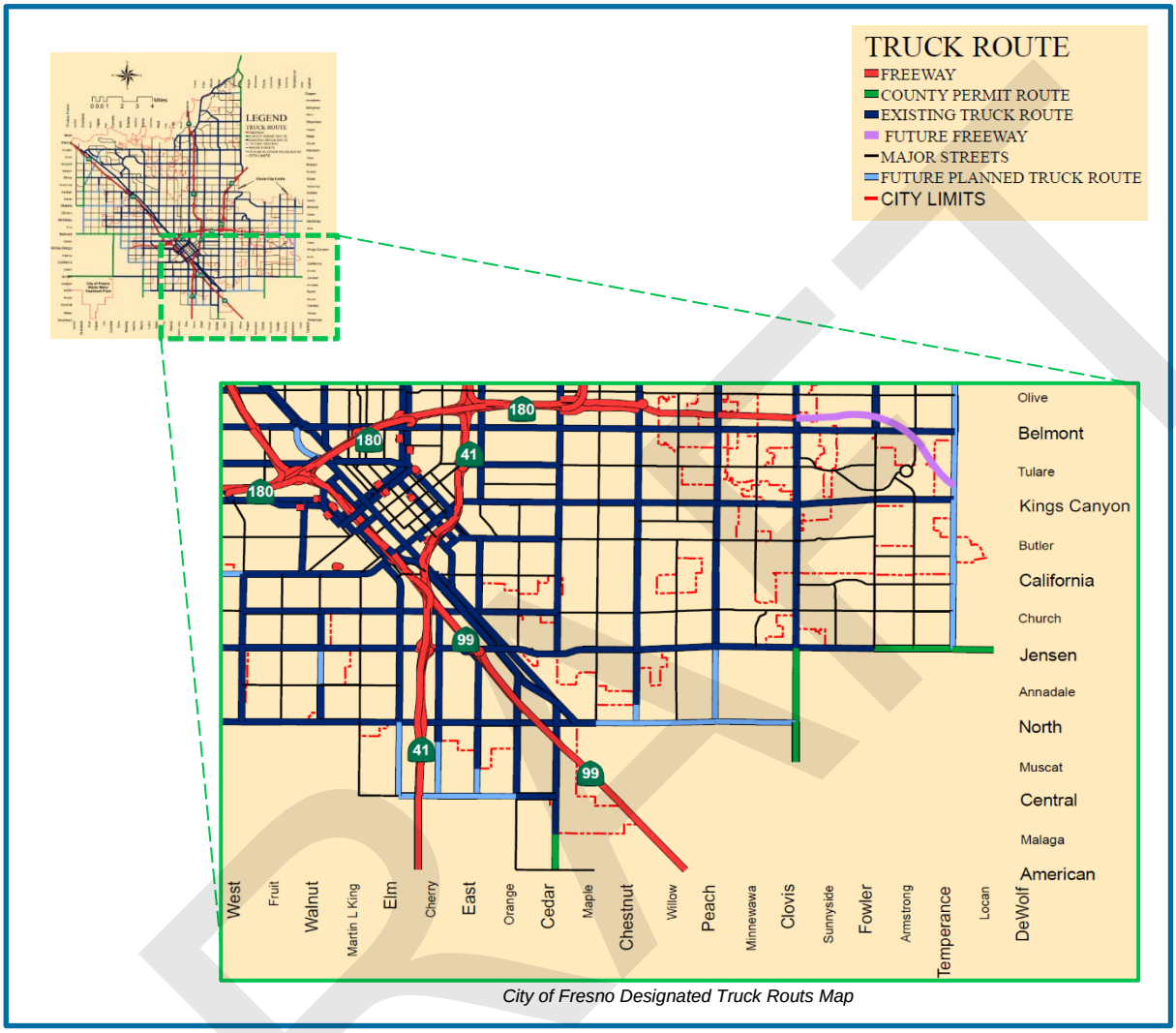
5.3 Commerce – Local Truck Routes

The project area encompasses a myriad of commercial business of which include Ulta Distribution Center, Amazon Distribution Center, Pepsi Bottling Group, Valley Wide Beverage, Mission Foods, FedEx Ground, FedEx Freight, UPS Freight and several trucking sales and service companies among others.

In order to sustain the movement of goods and services for these sectors, truck route designations were developed. As noted above, the truck route network for highway routes are identified in the Caltrans California Truck Network Maps which align with the project area boundary, SR-99 (to the east) and SR-41(to the west). Additionally, the City of Fresno also identifies a network of truck routes within the city limits as classified in the City of Fresno Designated Truck Routs Map as illustrated on the following page.



Central Avenue and Highway 41



City of Fresno Designated Truck Routs Map

The City of Fresno truck route designation categorizes their system as follows:

- Freeway
- County Permit Route
- Existing Route
- Future Freeway
- Major Streets
- Future Planned Truck Route

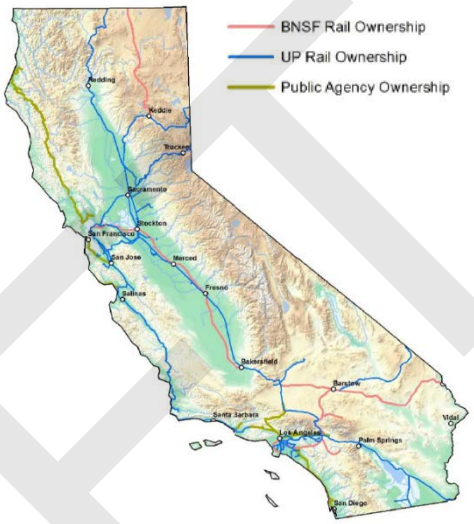
As noted in the City of Fresno Designated Truck Routs Map, truck route access points to SR-99 and SR-41 along east-west corridors include Jensen Avenue and North Avenue. In addition, north-south truck routes consist of Cherry Avenue, East Avenue, Orange Avenue and Cedar Avenue.

Indicated also are future planned truck routes, that look to connect with the existing truck route system. As a note, commercial vehicles exceeding twelve thousand pounds maximum gross weight are restricted to designated truck routes.

5.4 Rail (Freight and Passenger)

Freight

In addition to the highway and local road system as being the primary freight infrastructure for the region, the San Joaquin Valley is also served by two major Class I railroads, BNSF Railway (BNSF) and the Union Pacific Railroad (UP) along with short line and regional railroads including Sierra Northern Railway, California Northern Railroad, Stockton, Terminal and Eastern, Central California Traction, Modesto and Empire Traction Company, San Joaquin Valley Railroad Company and West Isle Line[1]. In total, according to the 2018 California State Rail Plan there are approximately 5,418 of freight rail route miles compared to 175,818 of highway/roadway miles.



2018 California State Rail Plan: Exhibit 2.5

Within the study area, BNSF and Union Pacific are the main lines that provide the primary railway connections between SJV and the national rail network. While trucking is by far the dominant freight transportation mode in the SJV, rail plays a critical role for long-haul movement. One of the biggest advantages of freight rail is the lessening of environmental impacts by removing heavy truck traffic from roadways.

Passenger

Passenger rail service is an alternative mode of travel that provides transportation between metropolitan areas, rural areas and to points of California's borders. Amtrak operates all intercity rail services in the state which are divided into two groups, one, Amtrak long-distance routes and two, state supported routes.

According to 2018 California State Rail Plan, in the SJV Amtrak operates the San Joaquin Route which is a state supported service. The route extends 316 miles between Oakland and Bakersfield and has seen a decrease in ridership since 2013 at 1,195,898 to 2016 at 1,135,424.

Google image: Amtrak – Fresno Area

Within the project area, Amtrak shares the BNSF rail line which connects the Fresno Amtrak station to the Hanford Amtrak station. According to a Fresno Bee article written by Tim Sheehan (November 2018), the 30 mile train ride is

[1] San Joaquin Valley Interregional Goods Movement Plan – Task 9: Final Report, August 2013

the busiest station pair on the San Joaquin Route. Within the project area, the rail line runs north-south between Cedar Avenue and Maple Avenue.

High Speed Rail

According to California High Speed Rail Authority's BuildHSR.com website, the goals of high-speed rail is reducing congestion and pollution, improve mobility, job creation and affordable housing. As California's population continues to increase and the economy continues to grow, high-speed rail is an essential mode of transportation to help facilitate the transportation system. The system would require 4,300 new highway lane miles, 115 additional airport gates and four new airport runways from San Francisco to Los Angeles as additional capacity over the next 50 years, therefore high speed rail would lesson also lesson environmental impacts by removing the additional vehicles on the transportation network.

Recently (early 2019), the Governor scaled back this project to focus on completion of the 171-mile segment between Bakersfield and Merced, which includes the RTTAP study area.