

Presentation to

The San Joaquin Corridor Environmental Impact Study

by **Caltrans Division of Rail**

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CALTRANS DIVISION OF RAIL

 Amtrak CaliforniaSM

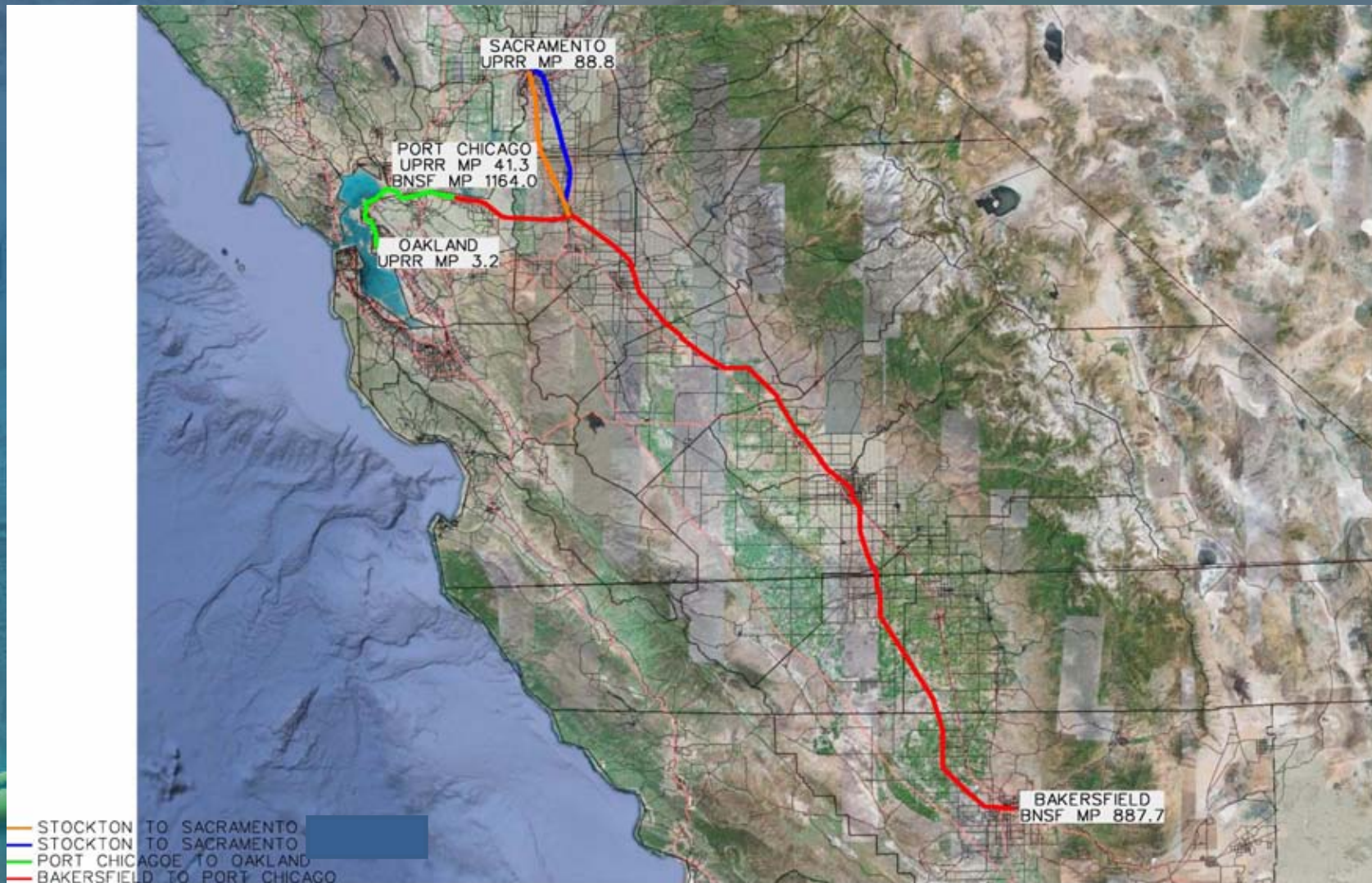


 **PATTERSON
&
ASSOCIATES, INC.**
CIVIL-TRACKWORK ENGINEERING



SAN JOAQUIN VALLEY RAIL CORRIDOR FUTURE AMTRAK INTERCITY PASSENGER RAIL OPERATIONS

- What does the future hold for the San Joaquin Valley Rail Corridor (Corridor) Intercity Passenger Rail Operations
- San Joaquin Corridor Strategic Plan
- Environmental documentation to examine the next 25 years of Corridor Amtrak passenger rail operation scenarios



SAN JOAQUIN VALLEY RAIL CORRIDOR FUTURE AMTRAK INTERCITY PASSENGER RAIL OPERATIONS

Caltrans Division of Rail initiated the preparation of a San Joaquin Corridor CEQA/NEPA Programmatic EIR/EIS in order to identify future capacity needs and be prepared to compete for intercity passenger rail funding. While there is no funding available for service improvements currently, it is critical to begin the preparation of required environmental, permitting and engineering design work.

At the request of Caltrans, in October of 2010 the BNSF Railway Company modeled potential rail corridor improvements, including increased speeds and expanded service. Union Pacific Railroad submitted a request to add an additional track along all segments where Amtrak San Joaquin train operations or speeds will be increased on their tracks

SAN JOAQUIN VALLEY RAIL CORRIDOR FUTURE AMTRAK INTERCITY PASSENGER RAIL OPERATIONS

- Define such scenarios at sufficient level of detail to compile a CEQA/NEPA Program EIR/EIS
- Program Objective: Identify a range of and select a preferred alternative operating scenario for implementation over the 25-year (2011 – 2035) planning period
- Use a Program EIR/EIS as the basis for CEQA/NEPA compliance and to lay the foundation to acquire state and federal funding for future “shovel ready” rail infrastructure improvement projects.

The State of California approached BNSF and UP March 2010 about potential changes to the San Joaquin passenger train services. There is no funding available at this time to add more train service, but the State wanted first to identify future capacity needs and second future infrastructure improvements in order to define the required environmental, permitting, and engineering design work to meet 2035 forecast passenger rail operations.

- Current San Joaquin passenger train operations:
 - 6 trains per day each way on the Bakersfield – Stockton segment (total of 12 trains).
 - 4 trains per day each way on the Stockton – Oakland segment (total of 8 trains).
 - 2 trains per day Sacramento to Stockton

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- What are the future alternatives for intercity passenger train operations within the corridor? Initial Thoughts on alternatives.

First Step: What rail operations can be improved?

- Improve current average passenger train speed
- Increase the number of daily round trip train frequencies: Increase from the current allowed 16 up to 22 trains operations per day
- Increase maximum passenger train speed:
 - From 79 mph
 - To 90 mph

Four different schedule proposals were analyzed:

5/10 Year 79 mph Plan

- 8 passenger trains per day each way on the full Bakersfield – Oakland segment (total of 16 trains) operating at a maximum speed of 79 mph.

25 year 79 mph Plan

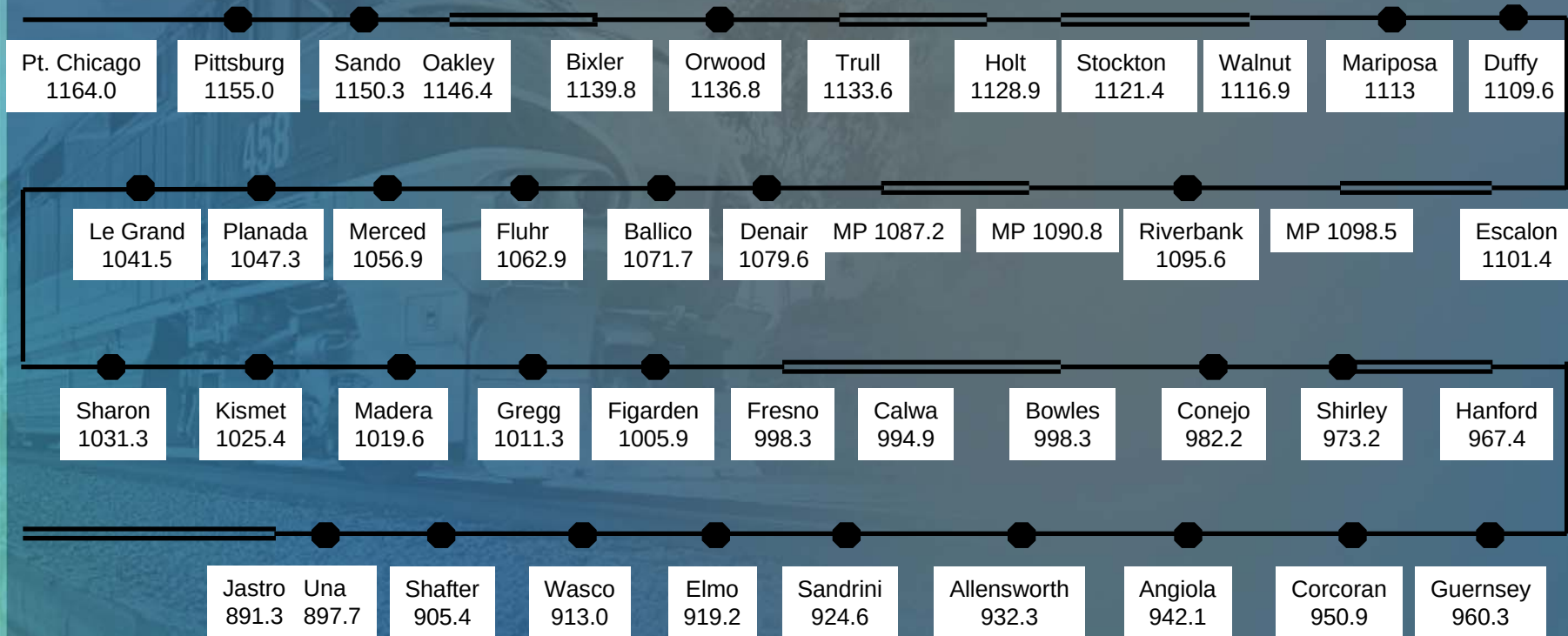
- 11 Passenger trains per day each way on the full Bakersfield – Oakland segment (total of 22 trains) operating at a maximum speed of 79 mph.

5/10 Year 90 mph Plan

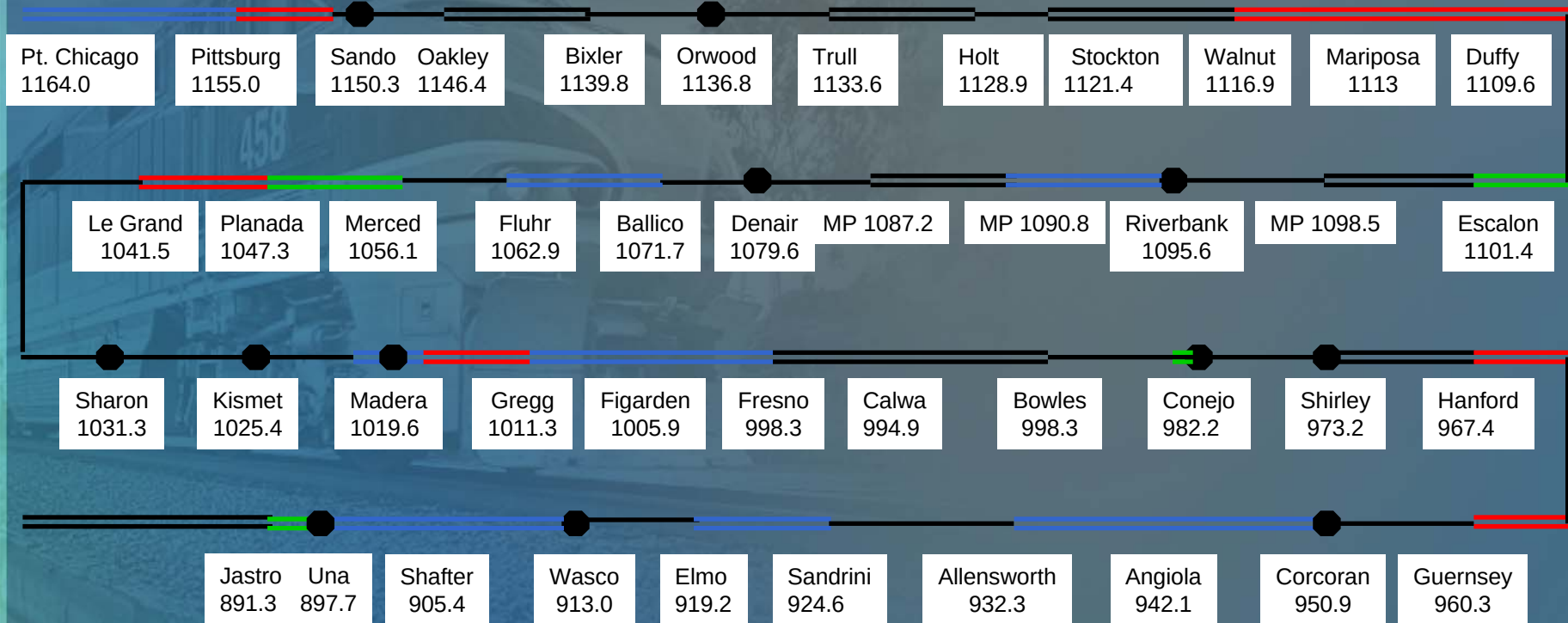
- 8 passenger trains per day each way on the full Bakersfield – Oakland segment (total of 16 trains) operating at a maximum speed of 90 mph.

25 Year 90 mph Plan

- 10 plus round trips per day between Bakersfield and Oakland (total of 20 trains) plus two trains starting at the mid-point (Merced), one north and one south, operating at a maximum speed of 90 mph.
- Each of the 5/10 year operation scenarios reflects a schedule where 1 passenger train pair is an “express” schedule, with only a Fresno intermediate stop. The other 18 train operations reflect all trains stopping at all stations.
- In the 5/10 year operational scenario the freight counts were increased by 14 trains per week (2 intermodal Z1-7, 10 intermodal Q/S and 2 unit). The freight counts were then kept at those levels for the 25 year operational scenario (in order to identify just the scope of projects needed for the changed passenger services beyond the 5/10 year plan schedule).



Current Track structure

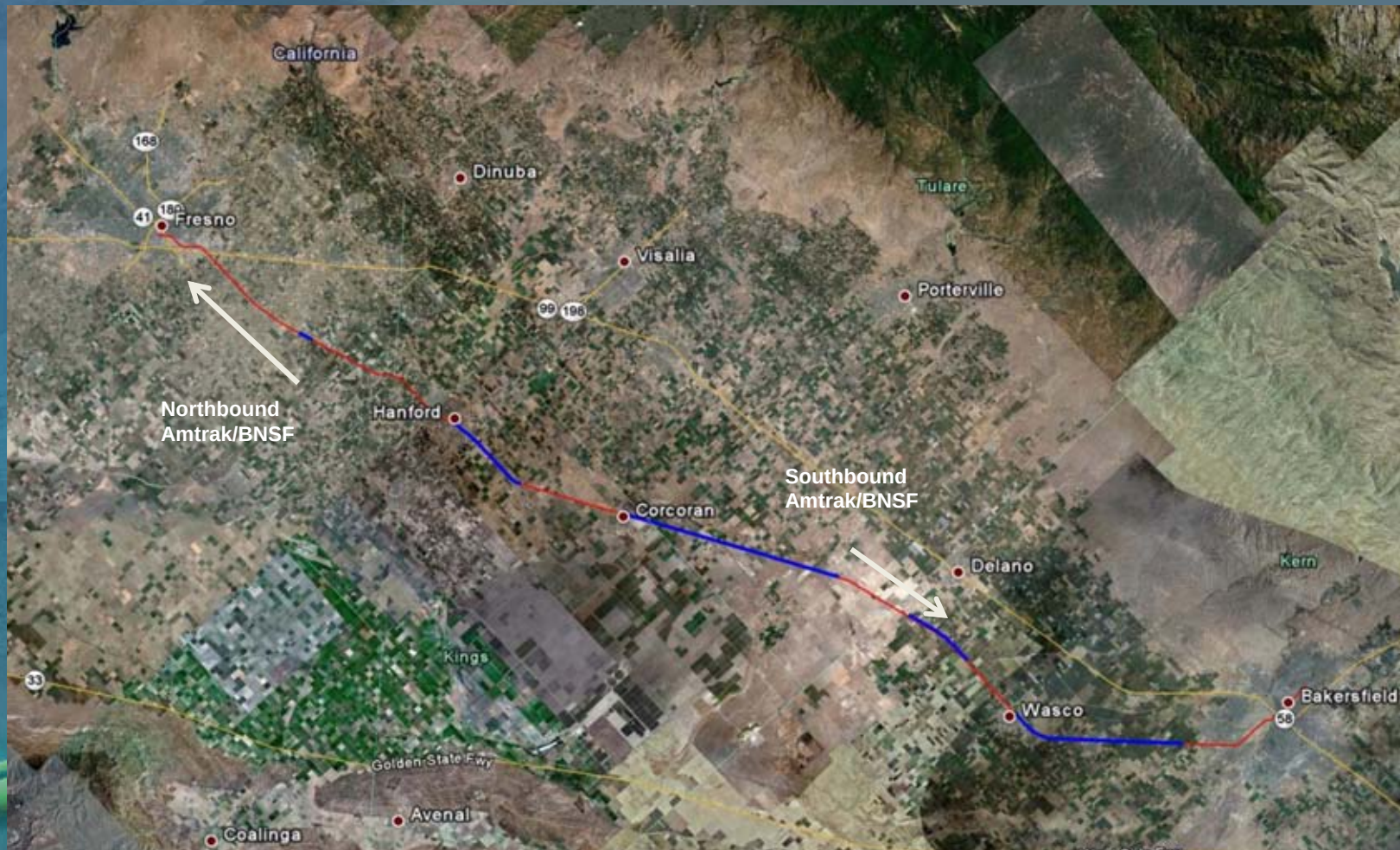


- = sidings
- == = double track
- = = single track
- == (red) = put in to base case
- == (green) = added double track (5/10 year @ 90 mph)
- == (blue) = added double track (25 year @ 90 mph)

Potential track additions to support 25 year passenger case (90 mph trains)

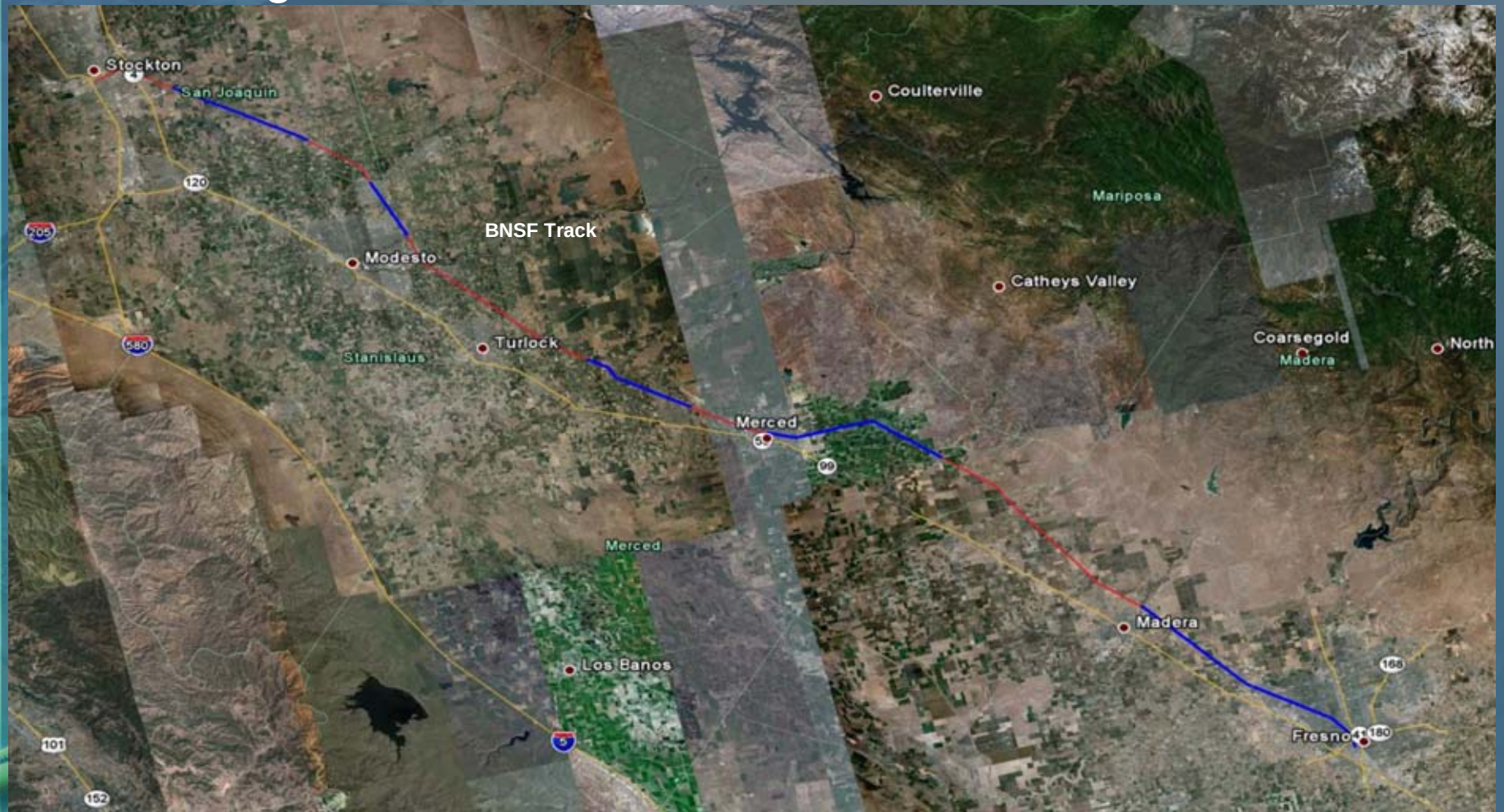


BNSF Alignment - Bakersfield - Fresno



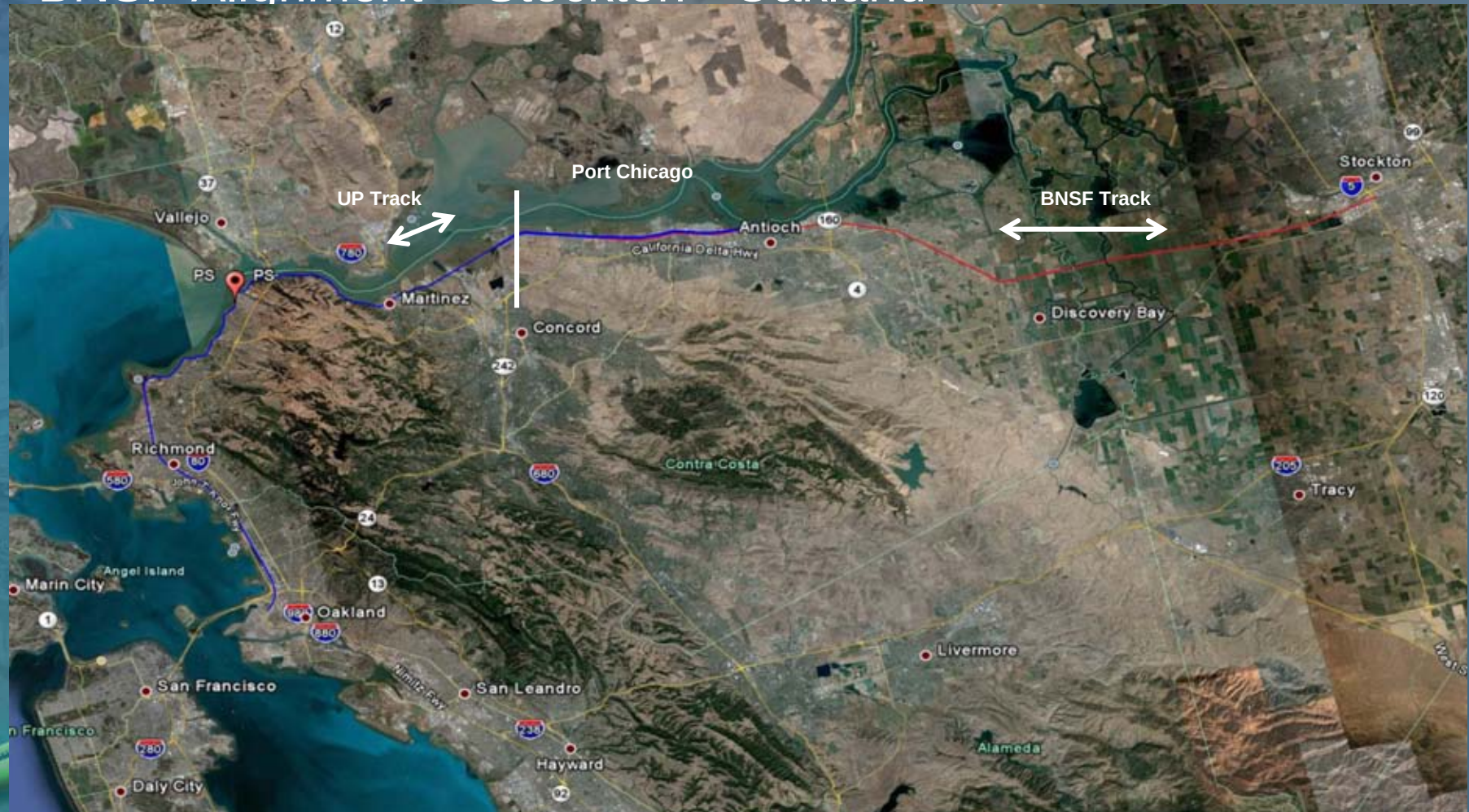
Double Track Proposed
Track Alignment

BNSF Alignment - Fresno - Stockton



Double Track Proposed
Track Alignment

BNSF Alignment - Stockton - Oakland



Double Track Proposed
Track Alignment

This is a list of the double track segments identified in the previous graphics

- The following projects were modeled for the 25 year 90 mph plan:
 - Double track Guernsey (MP 96.3) - Hanford (MP 967.4), with crossovers in between. Retains Shirley siding (Approximately 4.4 miles).
 - Convert Gregg siding to double track segment milepost 1008.9 to 1013.9 (5 miles).
 - Double track LeGrand (MP 1041.5) to Planada (MP 1047.3) with crossovers in between (Approximately 9 miles).
 - Double track milepost 1107.0 to Walnut (MP 1116.9) with associated crossover and power turnout work (Approximately 9 miles).
 - Convert Pittsburg siding (MP 1155.0) to double track and extend east to Milepost 1152.7 (Approximately 5 miles).

- Conejo drill track. (Shirley MP 973.2 to Bowles 998.3)
(A drill track is a switching lead/back track)
- Double track Jastro (MP 891.3) – Una (MP 897.7) Retains Una siding
(Approximately 6 miles).
- Double track Planada (MP1047.3) to Merced (MP 1056.10)
(Approximately 8 miles)
- Double track Escalon (MP 1101.4) – Duffy (MP 1109.6)
(Approximately 9 miles).
- Double track Una (MP 897.7) – Shafter (MP 905.4)
(Approximately 8 miles).

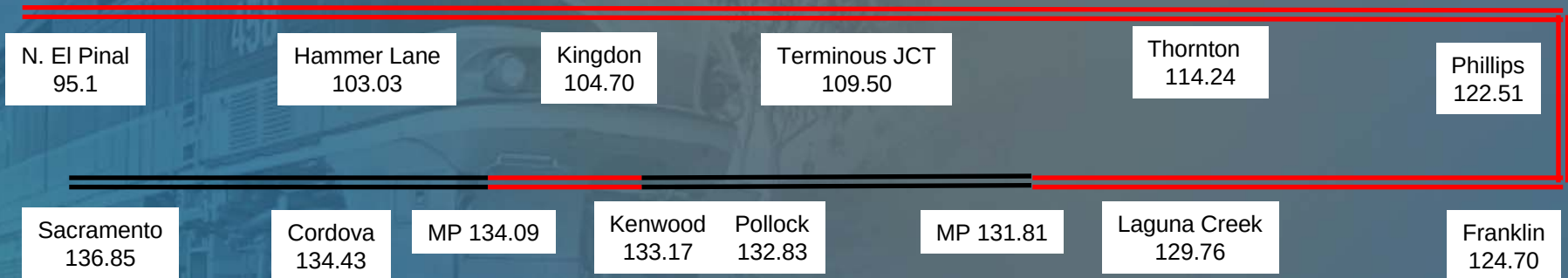
- Wasco siding extended. (MP 913.0)
- Double track Elmo – Sandrini (MP 919.2 to MP 924.6)
(Approximately 8 miles).
- Double track Allensworth (MP 932.3) – Angiola (MP 942.1) – Corcoran (MP 950.9).
Retains Corcoran siding (Approximately 22 miles).
- Double track Figarden (MP 1005.9) to Milepost 1008.6
(Approximately 5 miles).
- Double track Milepost 1013.9 – Madera (MP 1019.6). Retains Madera siding
(Approximately 6 miles).
- Double track Fluhr (MP 1062.9) – Ballico (MP 1071.7)
(Approximately 11 miles).
- Double track Pittsburg (MP 1155.0) – Port Chicago (MP 1164.0)
(Approximately 8 miles).

Although not initially modeled, BNSF recommends that the following double track segments be addressed from an environmental and permitting standpoint:

- In addition to the Jastro – Shafter (MP 905.4) double track, extend double track out to Wasco (MP 913.0) instead of the Wasco siding (Approximately 7 miles).
- In addition to the Gregg and Figarden double track projects, extend double track Figarden to Fresno, and double track Milepost 1008.6 to 1008.9, requiring new bridge across San Joaquin river (Approximately 6 miles).
- Extend double track west from Milepost 1090.8 to Riverbank (MP 1095.6) (Approximately 5 miles).

- Union Pacific track segments
- Double track from Port Chicago to Martinez
- Triple track Martinez to Oakland
- Multiple track from Stockton to Sacramento – on one of the two alignments

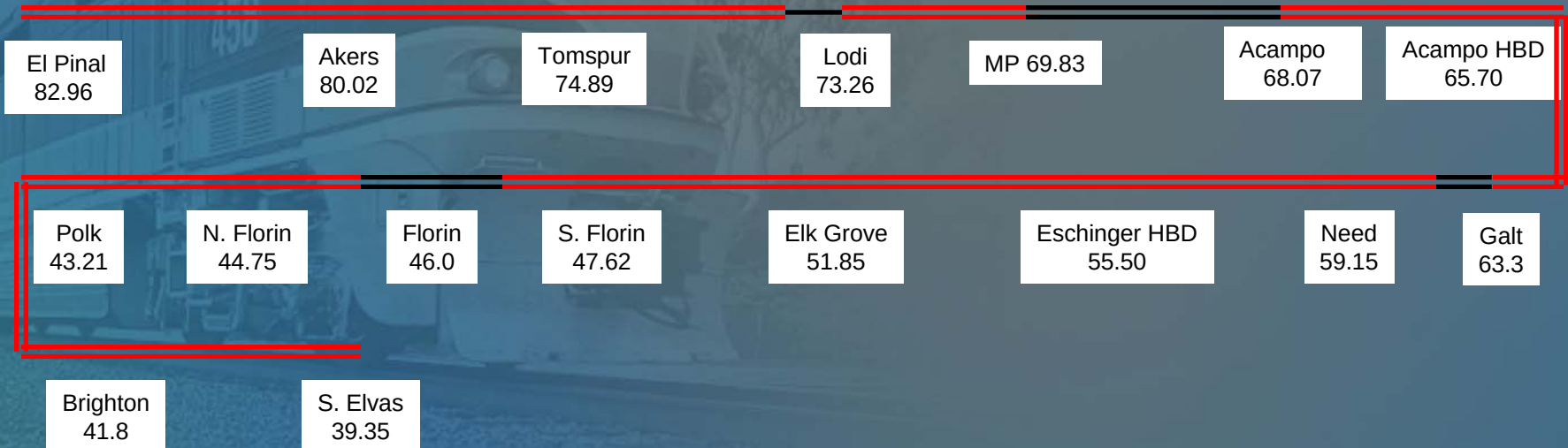
SACRAMENTO SUBDIVISION - UPRR



 = added double track (25 year @ 90 mph)
 = upgrade existing siding

Potential track additions to support 25 year passenger case (90 mph trains)

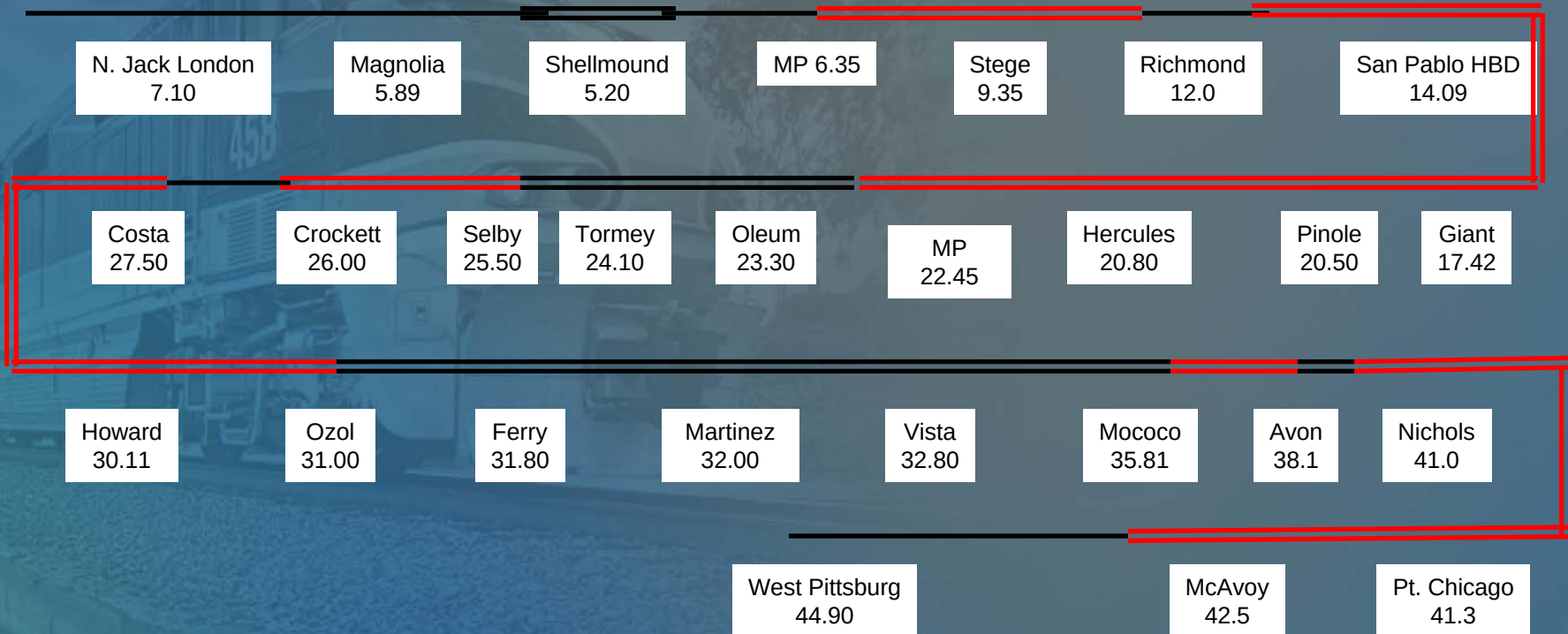
FRESNO SUBDIVISION - UPRR



- = added double (25 year @ 90 mph)
- = upgrade existing siding
- = existing track

Potential track additions to support 25 year passenger case (90 mph trains)

NILES – TRACY SUBDIVISIONS - UPRR



- = added double (25 year @ 90 mph)
- = upgrade existing siding
- = existing track

Potential track additions to support 25 year passenger case (90 mph trains)

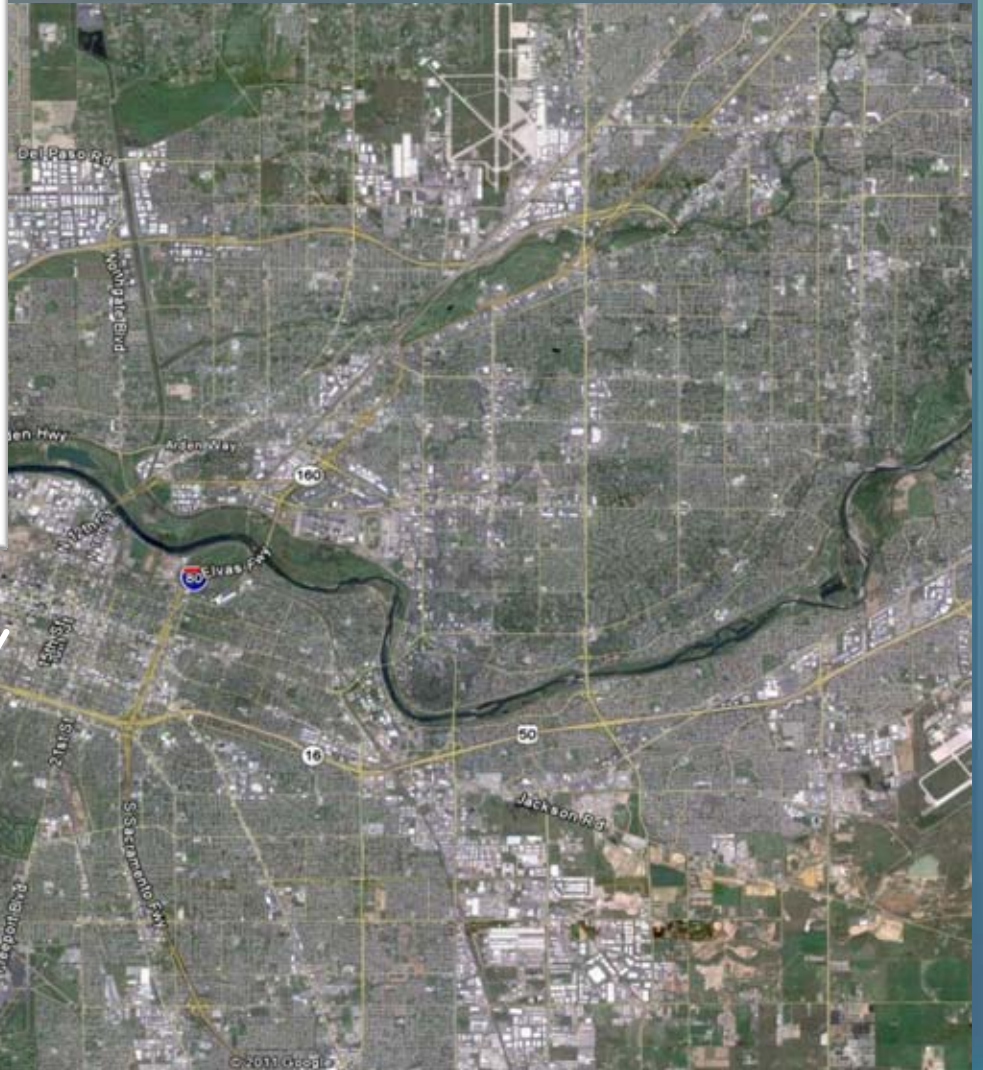
SAN JOAQUIN VALLEY RAIL CORRIDOR FUTURE AMTRAK INTERCITY PASSENGER RAIL OPERATIONS

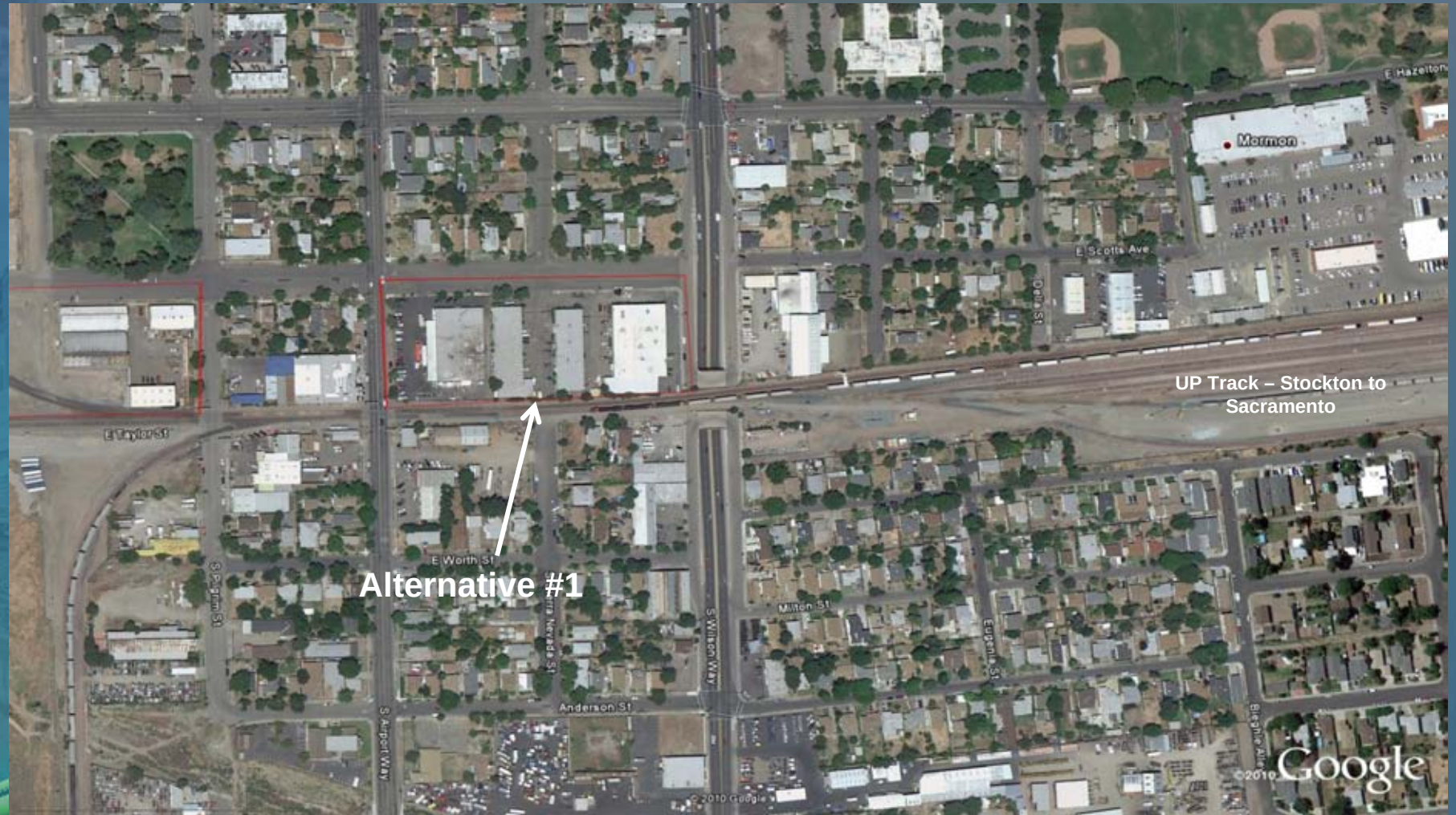
- Second Step: define the rail infrastructure system improvements needed to support each future rail operational scenario
 - Double track, including all infrastructure improvements
 - New Amtrak maintenance facility
 - New rolling stock (replacement equipment and new equipment)
 - New Amtrak station for Stockton
 - New layover facility
 - Bus system modifications
- Third Step: Define/Clarify future role of intercity passenger rail service vis-a-vis proposed future high speed rail operations. How can they be integrated?



Sacramento Amtrak Station - Potential Track Relocation

Sacramento Amtrak Station Potential Track Relocation



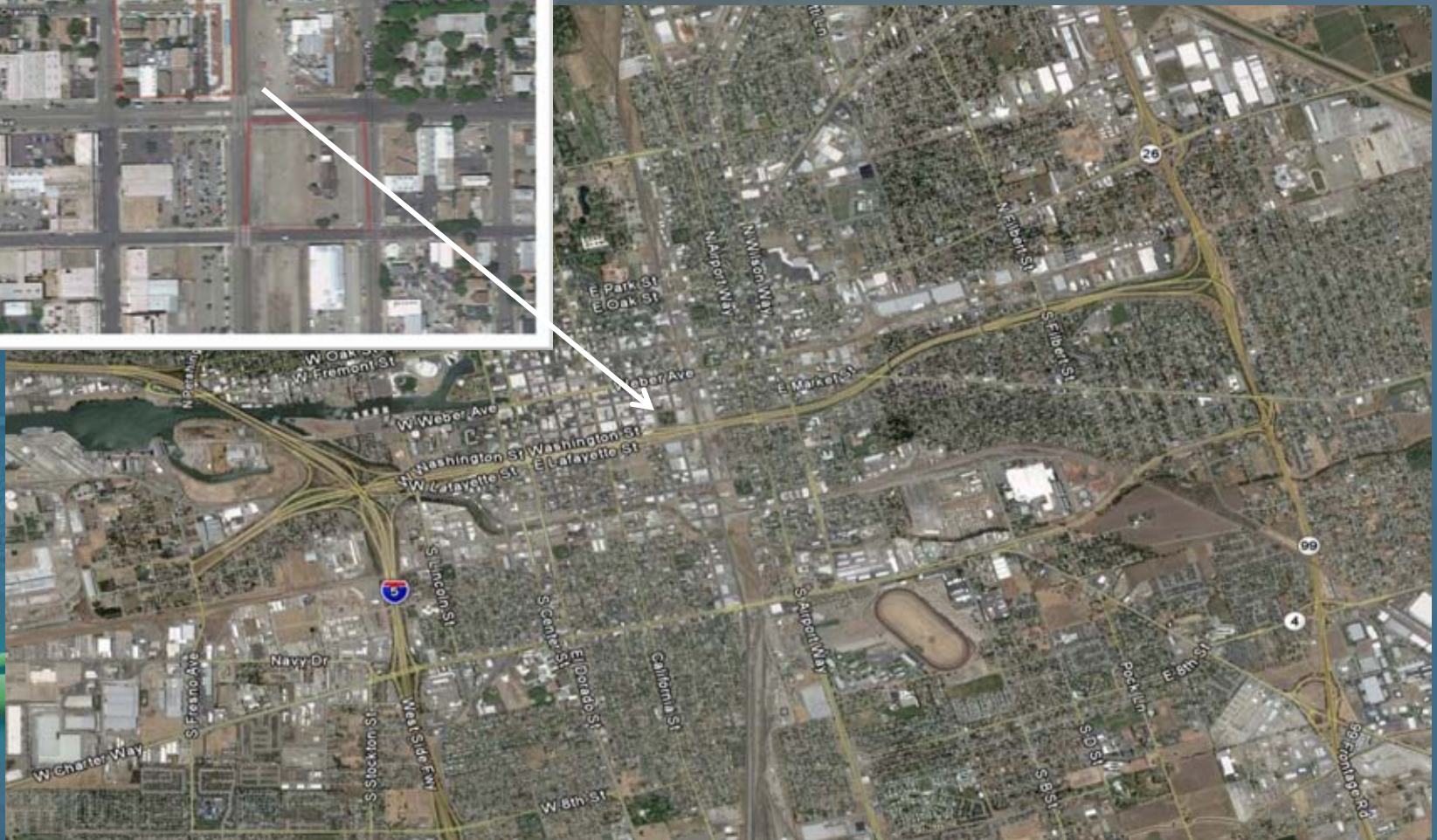


Alternative #1 – Stockton Amtrak Station Relocation



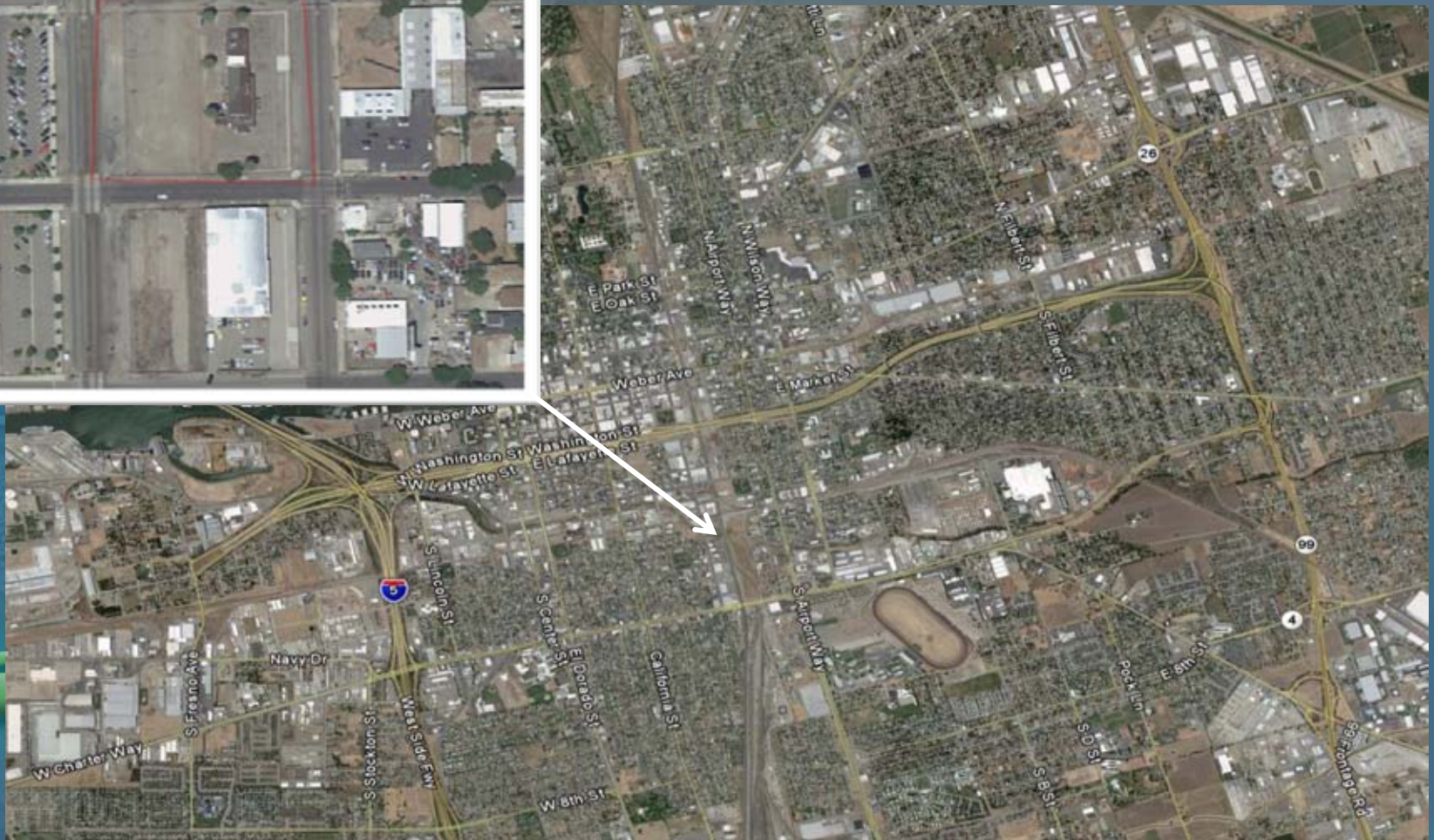
Alternative #2 – Stockton Amtrak Station Relocation
(ACE Station)

Alternative #2 – Stockton Amtrak Station Relocation (ACE Station)





Alternative #3 – Stockton Amtrak Station Relocation





Alternative #4 – Stockton Amtrak Station Relocation “The Interlock”

Alternative #4 – Stockton
Amtrak Station Relocation
“The Interlock”





Alternative #5 – Stockton Amtrak Station Rehabilitation

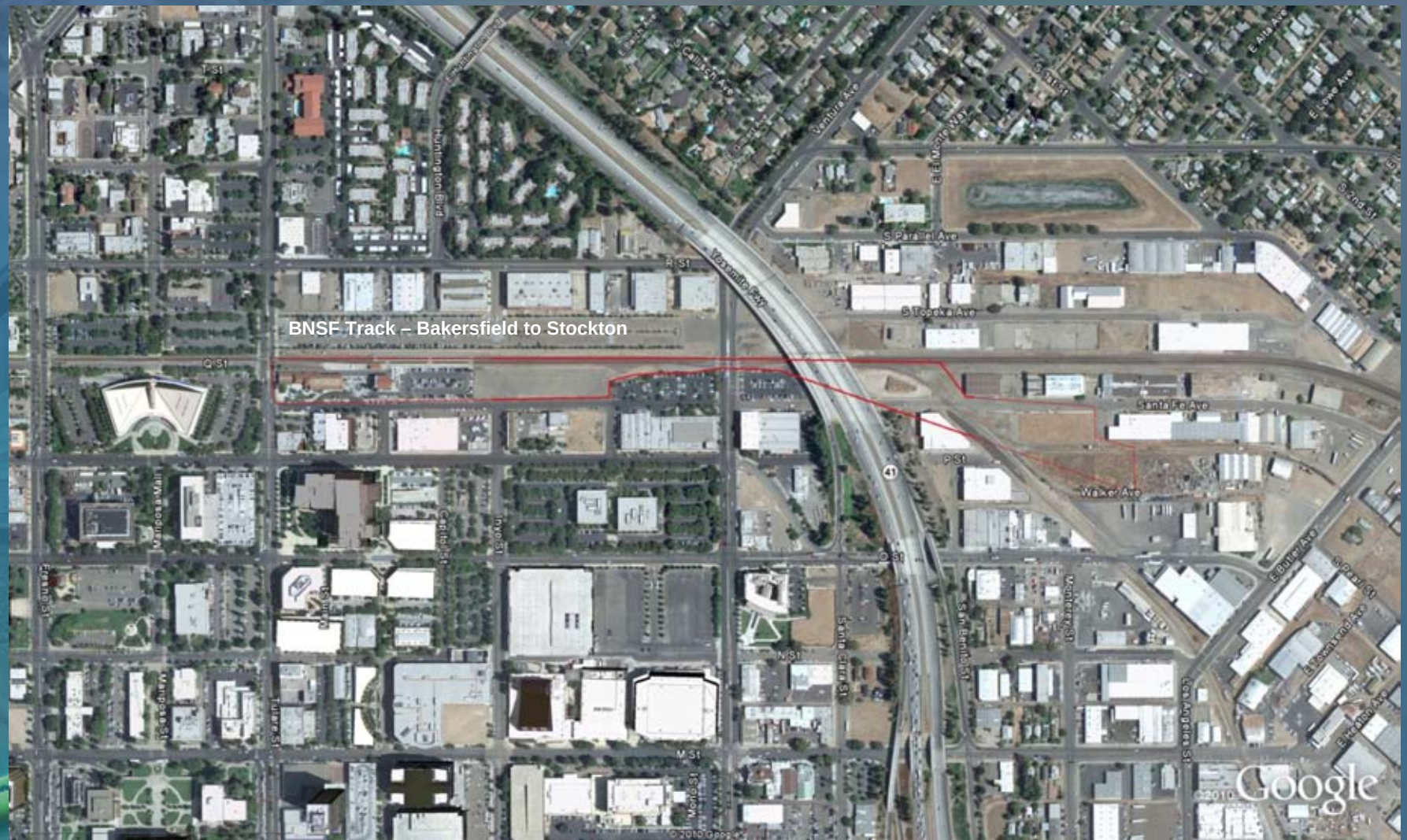
Alternative #5 – Stockton Amtrak Station Rehabilitation





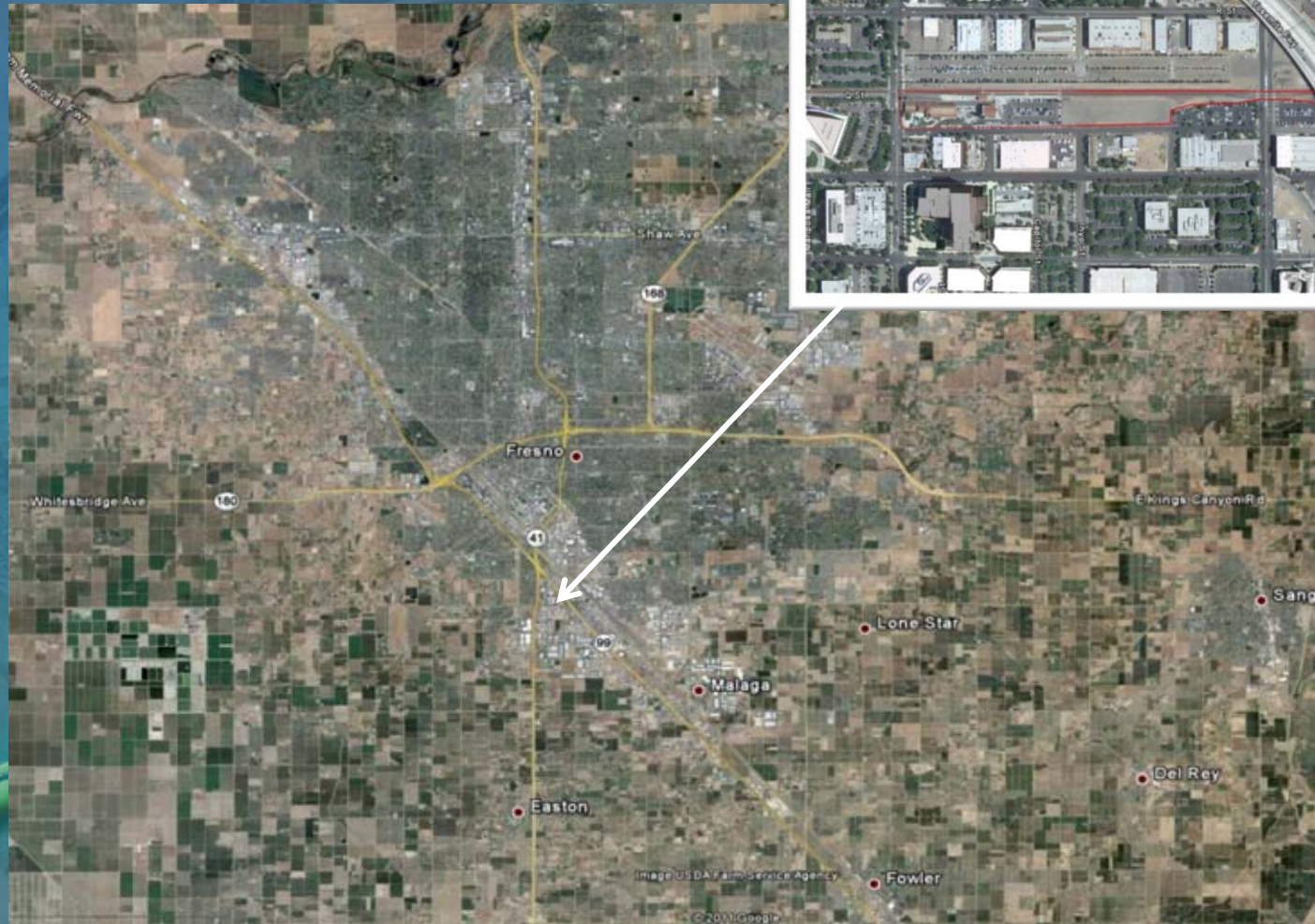
An aerial photograph of a residential neighborhood. A red outline highlights a specific area, likely the subject of the case study. The area is bounded by a street on the left, a street on the right, and a street at the bottom. The area contains several buildings, including a large, light-colored building that appears to be a school or a large commercial building. The surrounding area is densely packed with residential houses and streets.





Potential Fresno Layover Facility

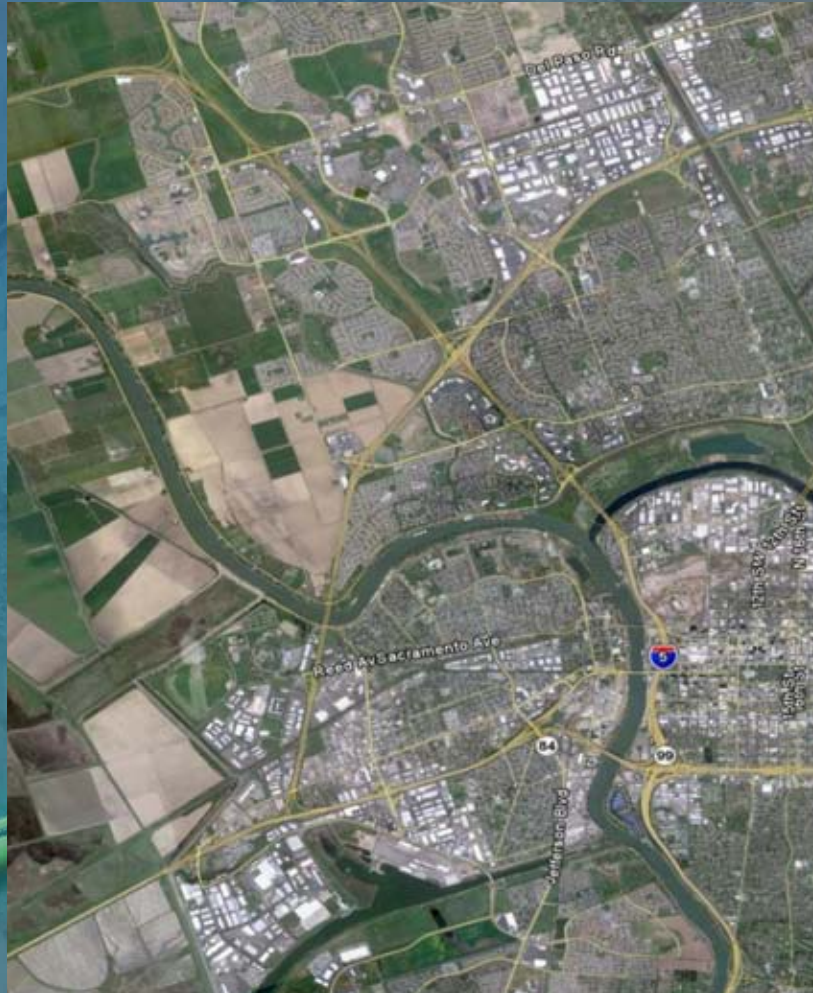
Potential Fresno Layover Facility





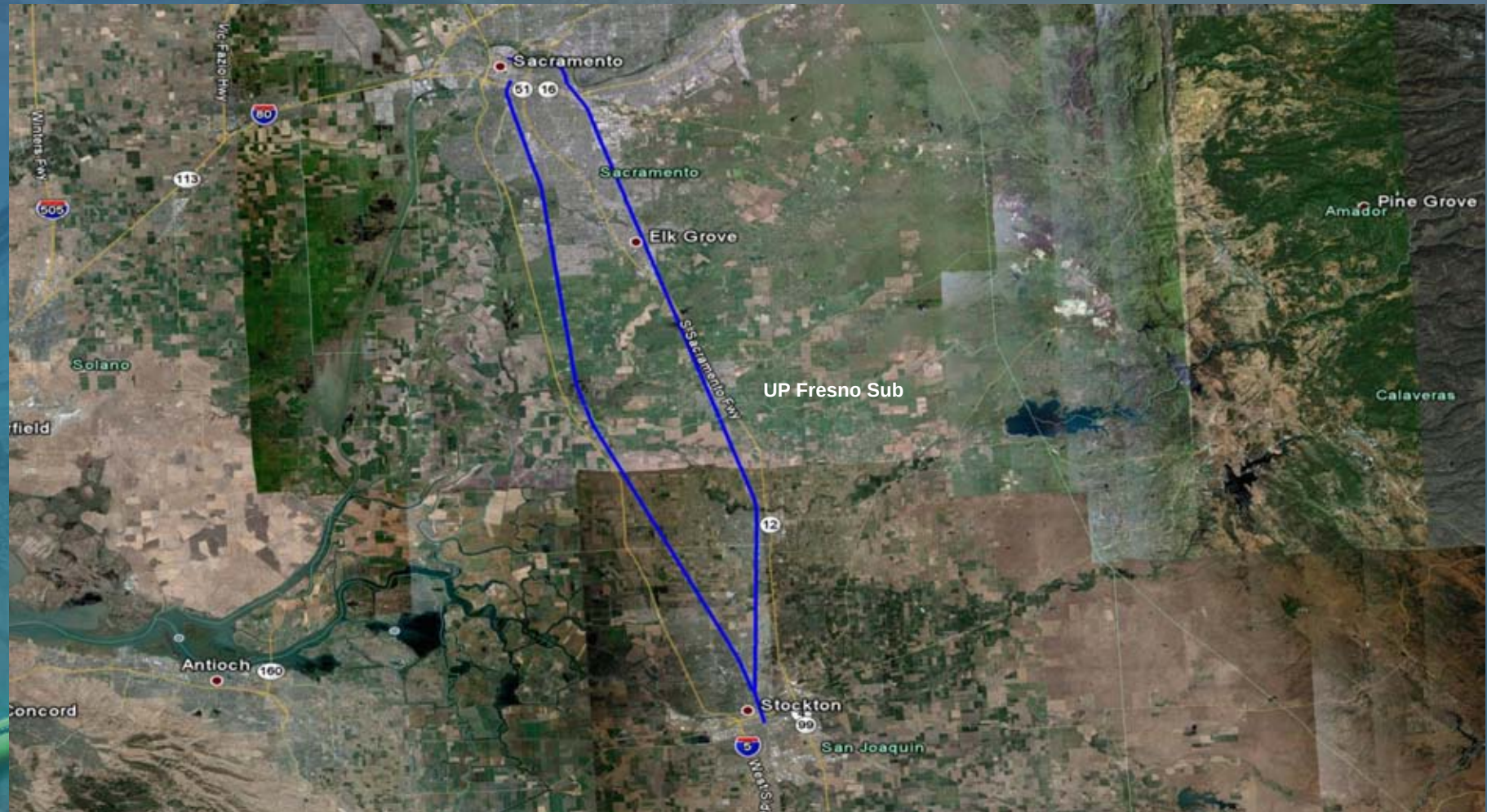
Proposed Sacramento Maintenance Facility

Proposed Sacramento Maintenance Facility



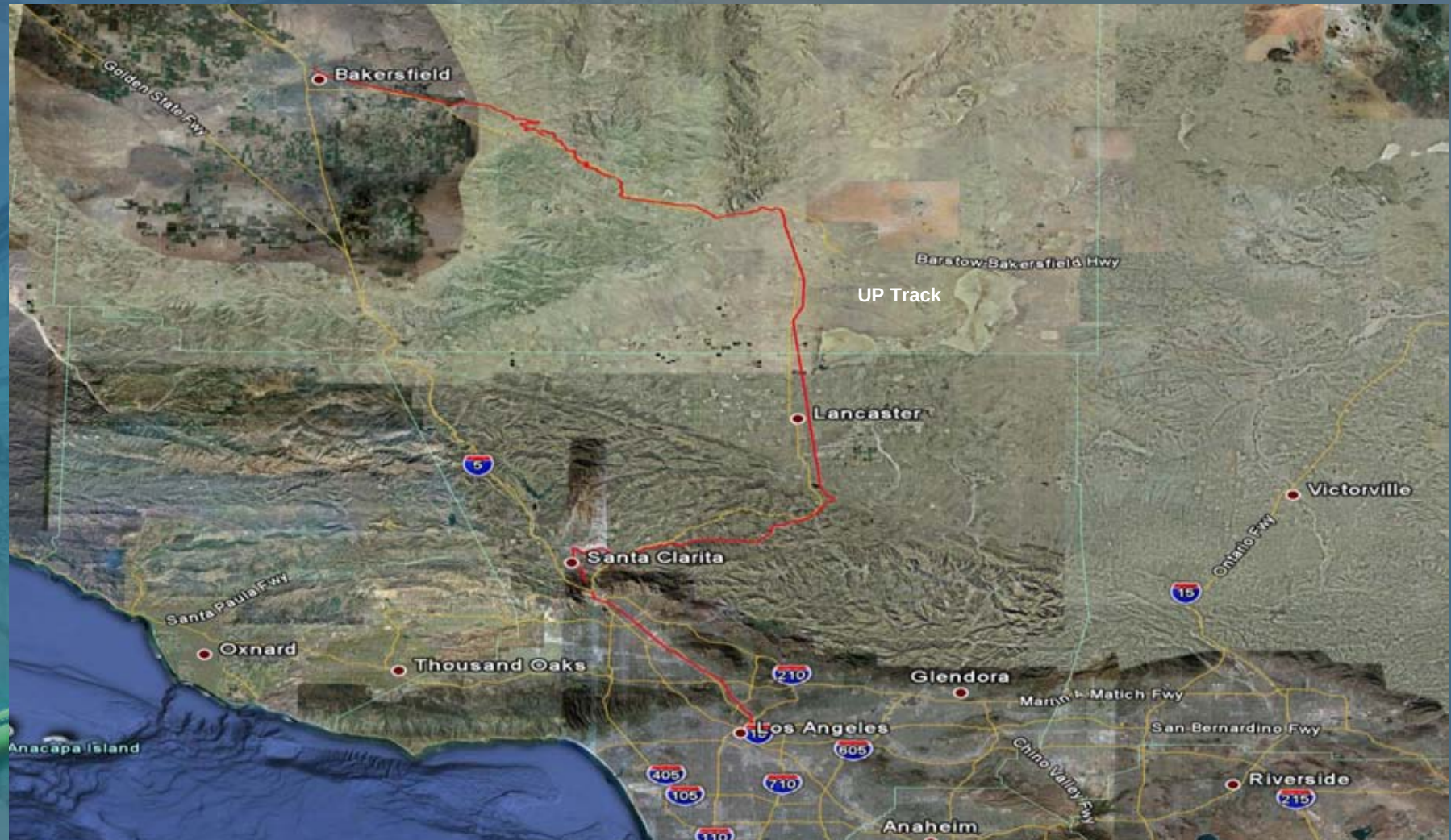
- Fourth Step: Primary routes of travel
 - Bakersfield to Oakland (Port Chicago to Oakland via UP and BNSF)
 - Bakersfield to Sacramento: Via Stockton (Fresno Subdivision or Western Pacific routes)
- Fifth Step: Examine secondary routes
 - Fresno to Visalia or Porterville
 - Bakersfield to Wheeler Ridge
 - Bakersfield to Los Angeles via Lancaster

UPRR - Stockton-Sacramento (East and West) Existing and Proposed Routes

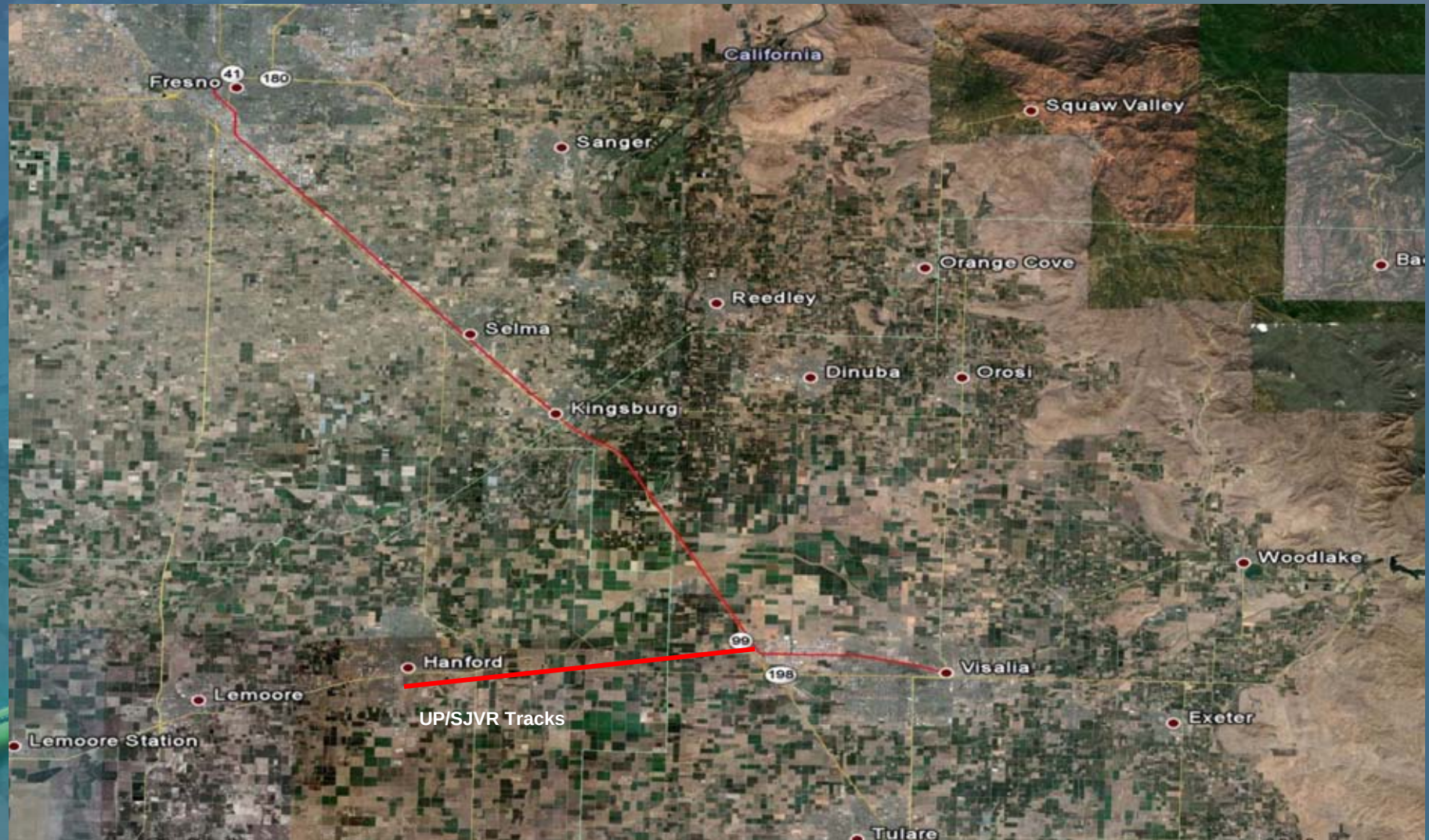


Double Track Proposed

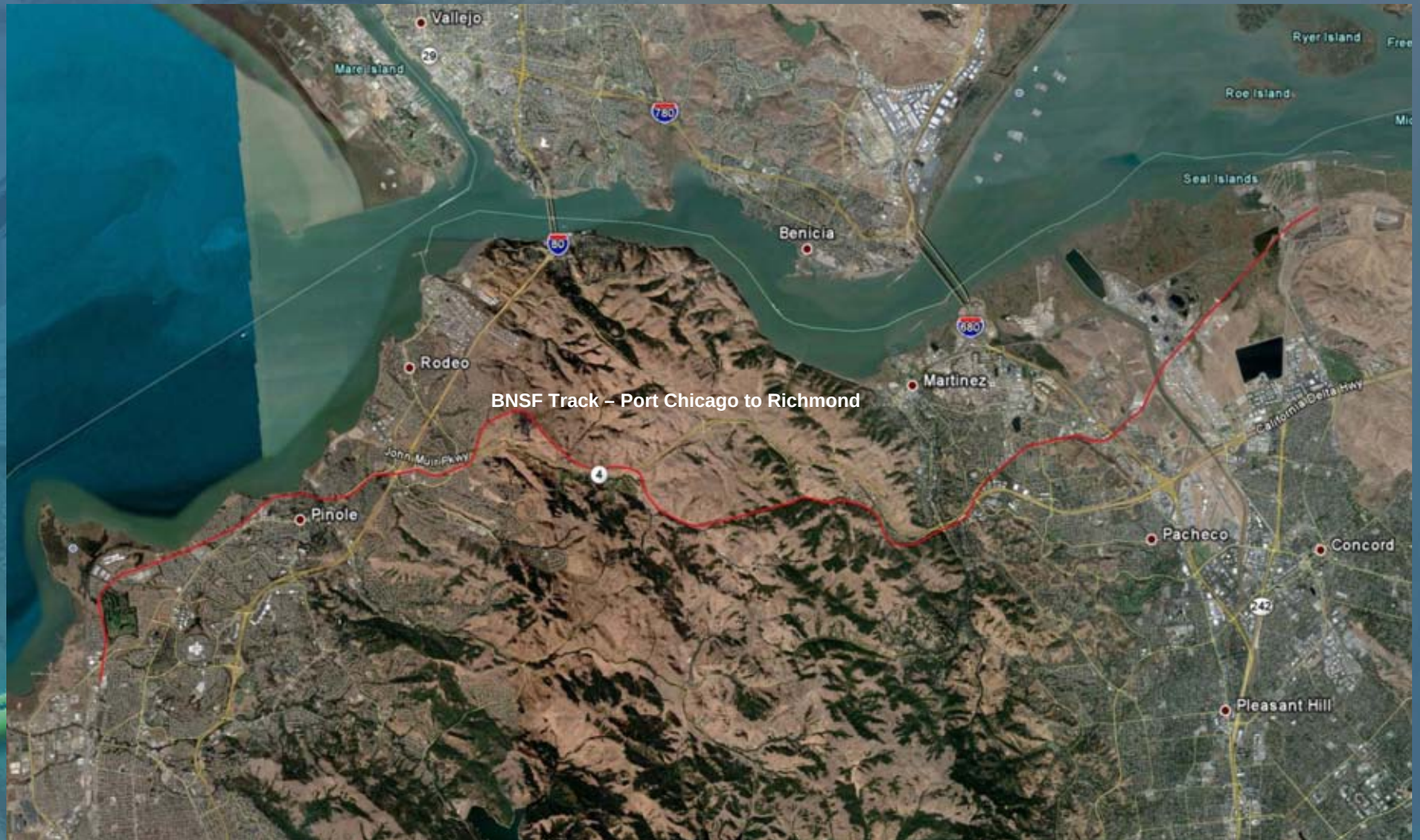
Alternative Project – Los Angeles to Bakersfield



Alternative Project – Fresno - Visalia



Alternative Project – PT Chicago – Oakley on BNSF



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Anticipated Process

- Define alternatives in sufficient detail to permit environmental evaluation
- Conduct scoping process with all stakeholders and interested public
- Make presentations to community elected officials and planning
- Professionals and interested community organizations

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- Assemble input from outreach/scoping process, select final alternatives; prepare the EIR/EIS
- Distribute EIR/EIS for public review and comment
- Collect comments on the EIR/EIS from stakeholders and public
- Finalize the EIR/EIS for certification/approval
- Use documentation to support acquisition of funding for preferred alternative corridor infrastructure improvements

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Questions?

Comments?