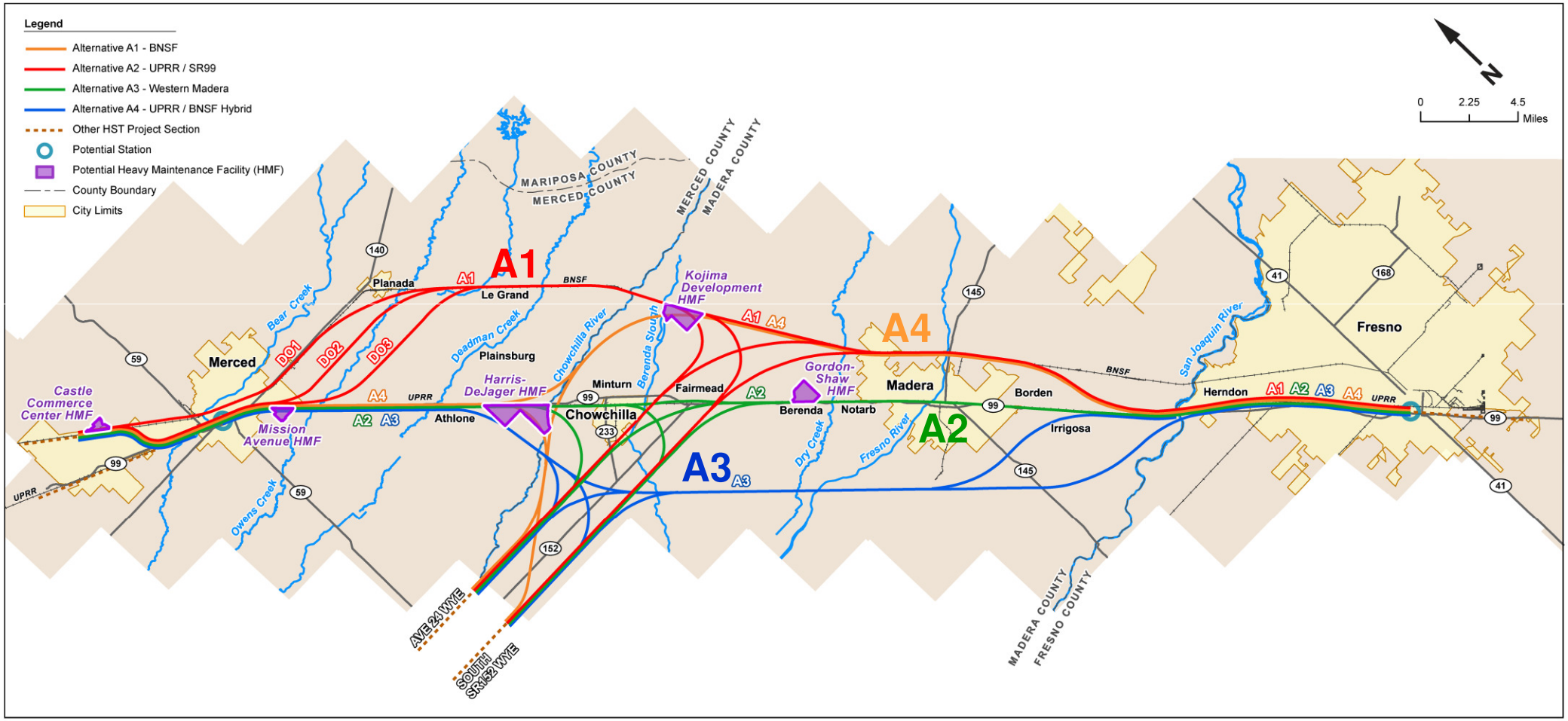
Preliminary Alternatives Analysis

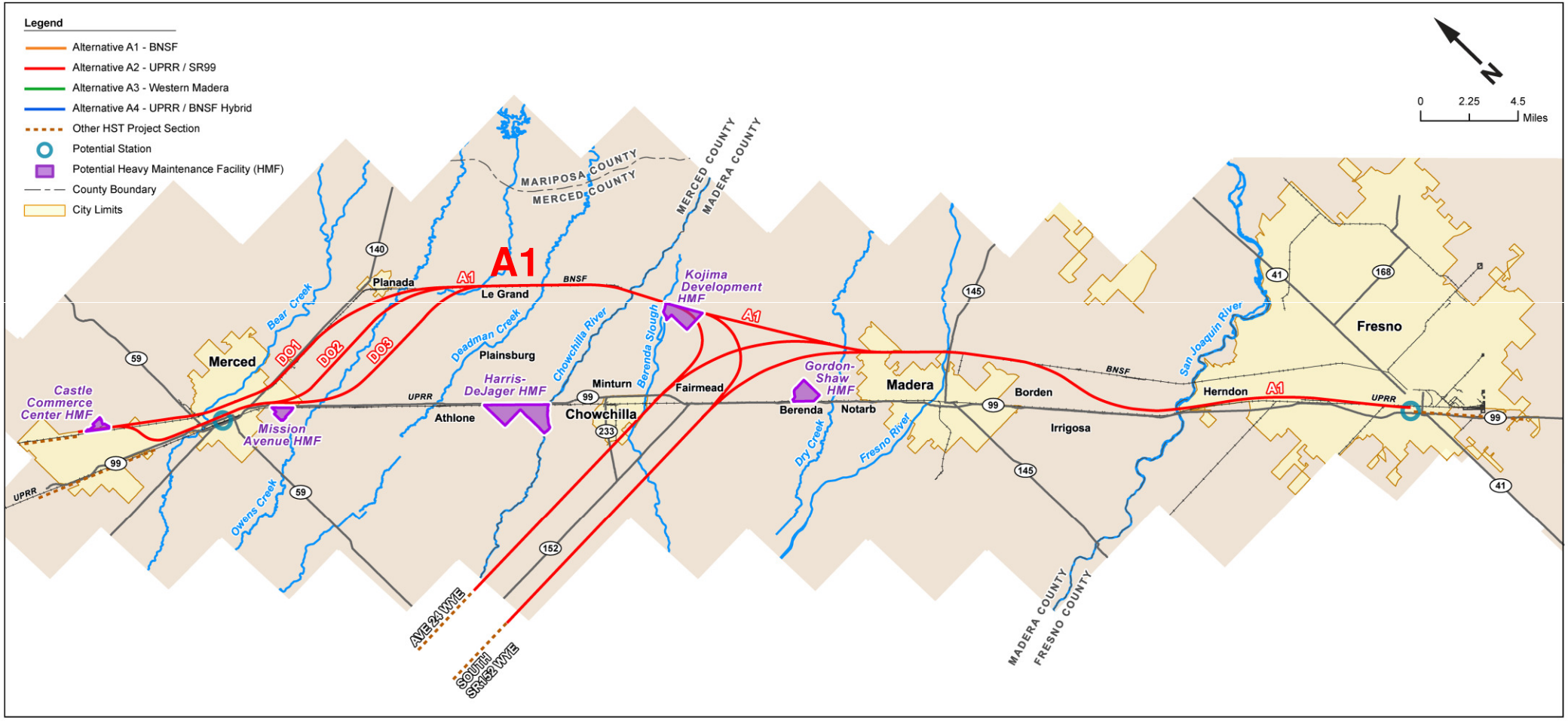
Federal Railroad Administration
California High-Speed Rail Authority

Authority Board Meeting
April 2010

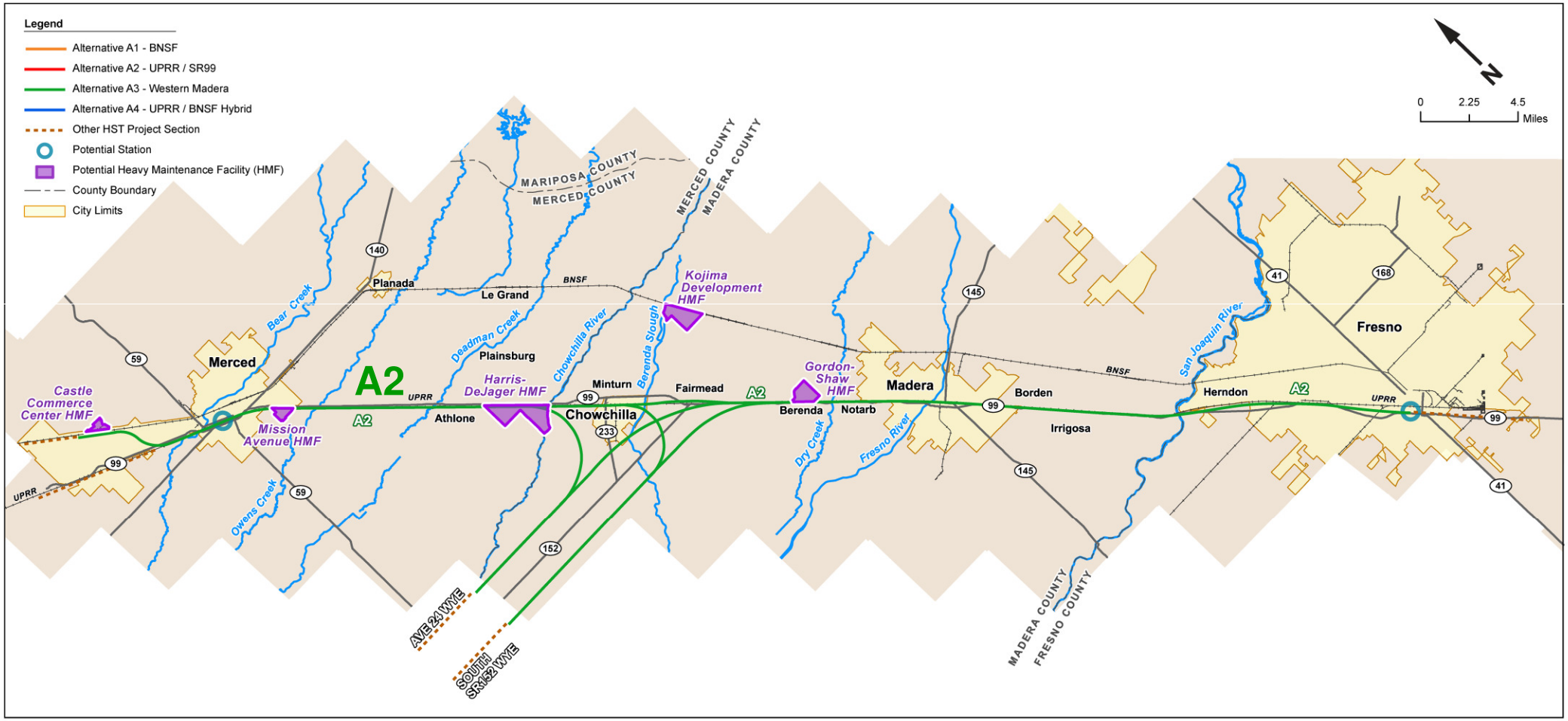
Range of Alternatives Considered



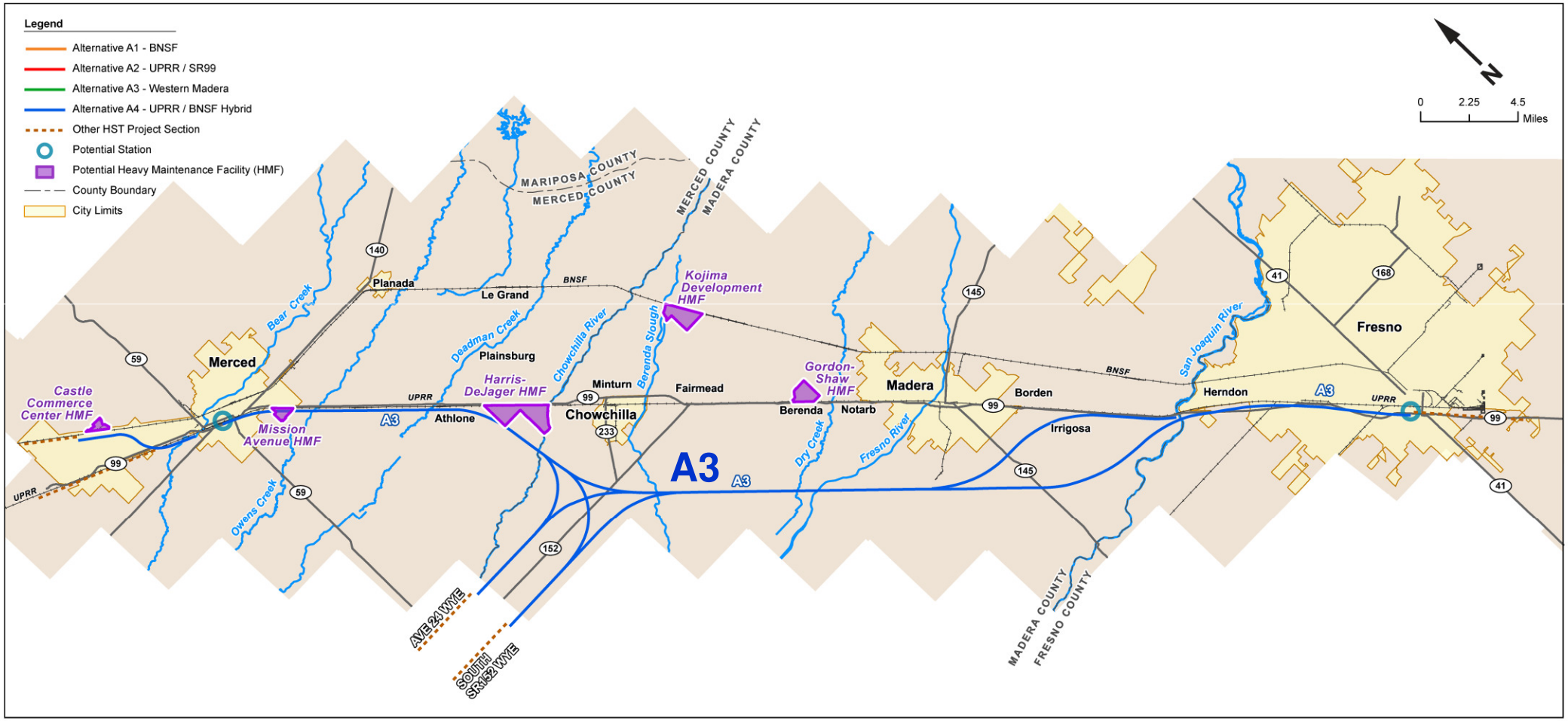
Alternative A1- BNSF



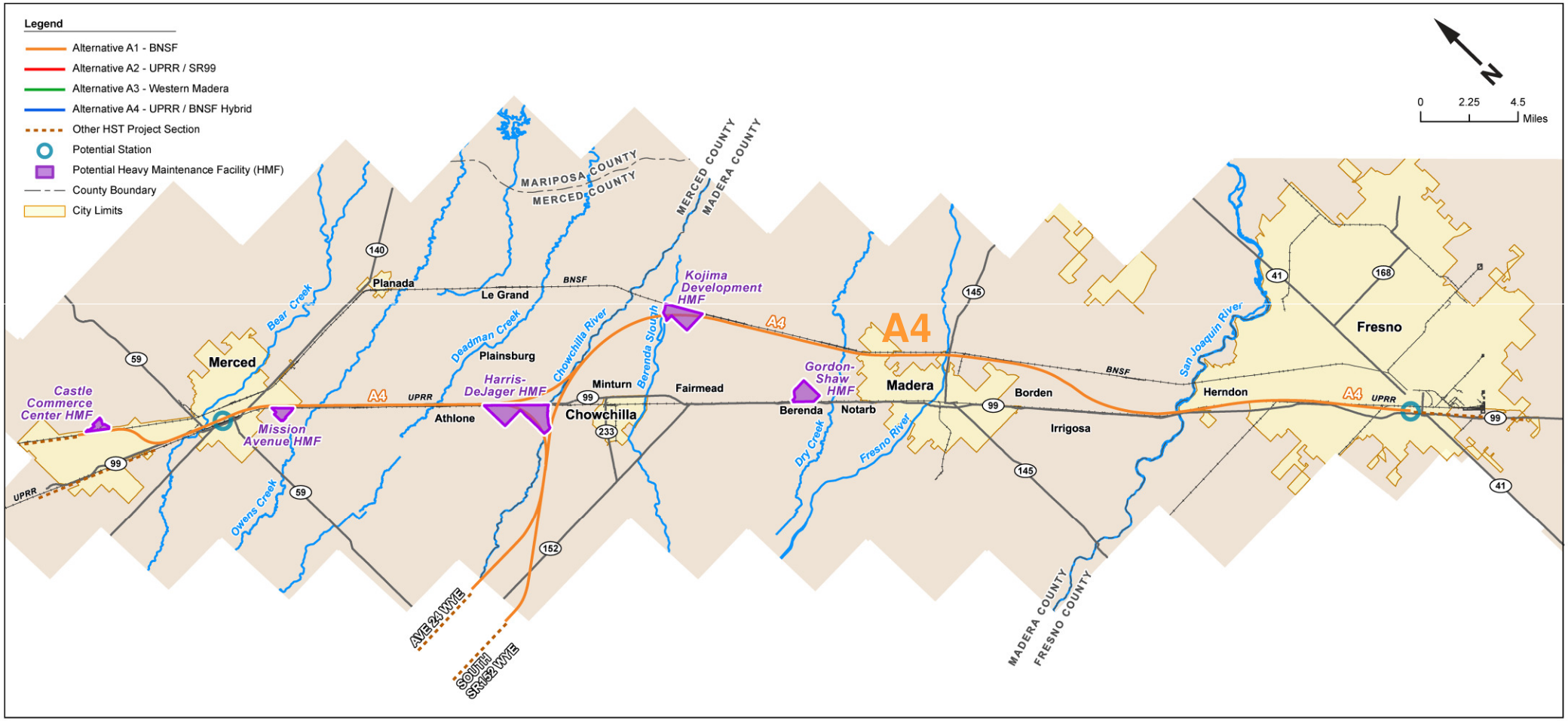
Alternative A2 – UPRR/SR99



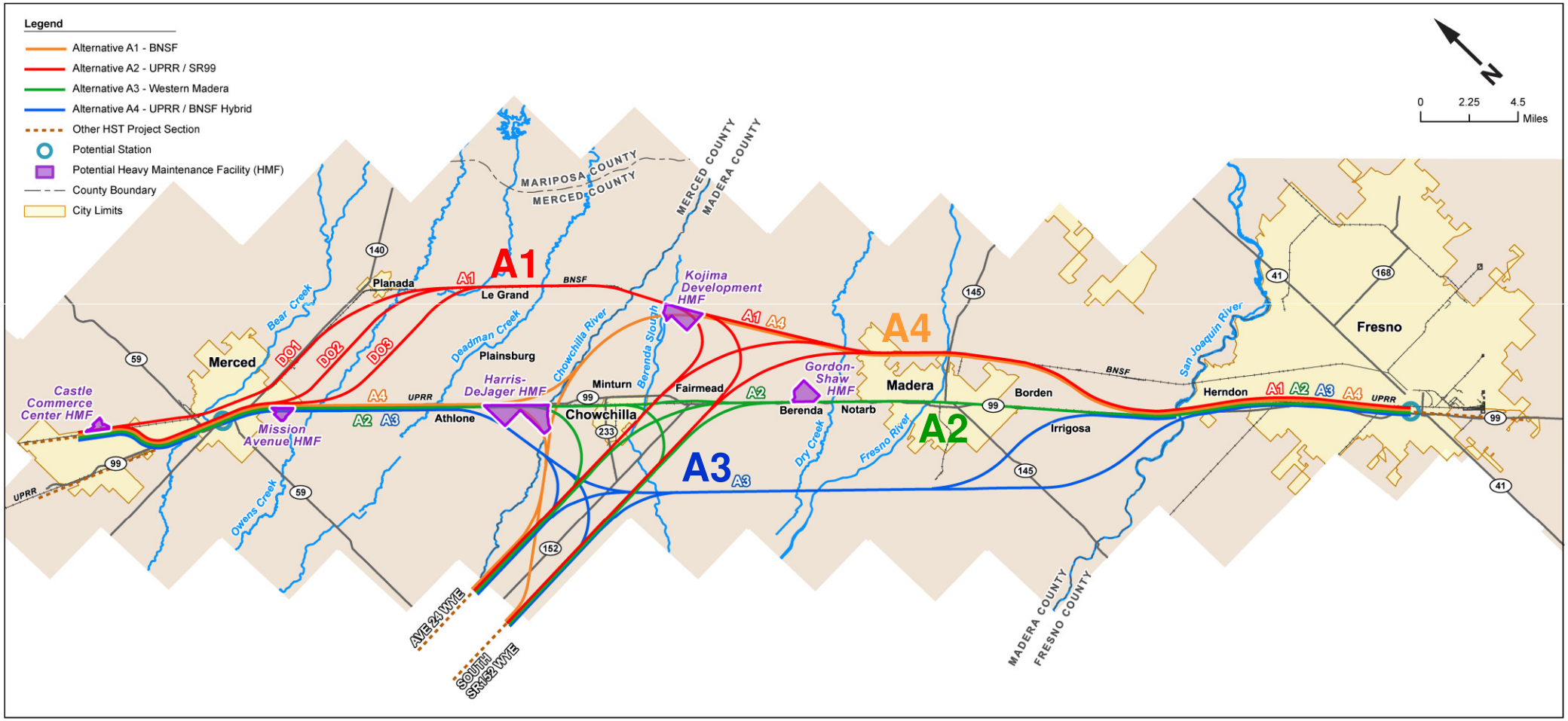
Alternative A3 – Western Madera



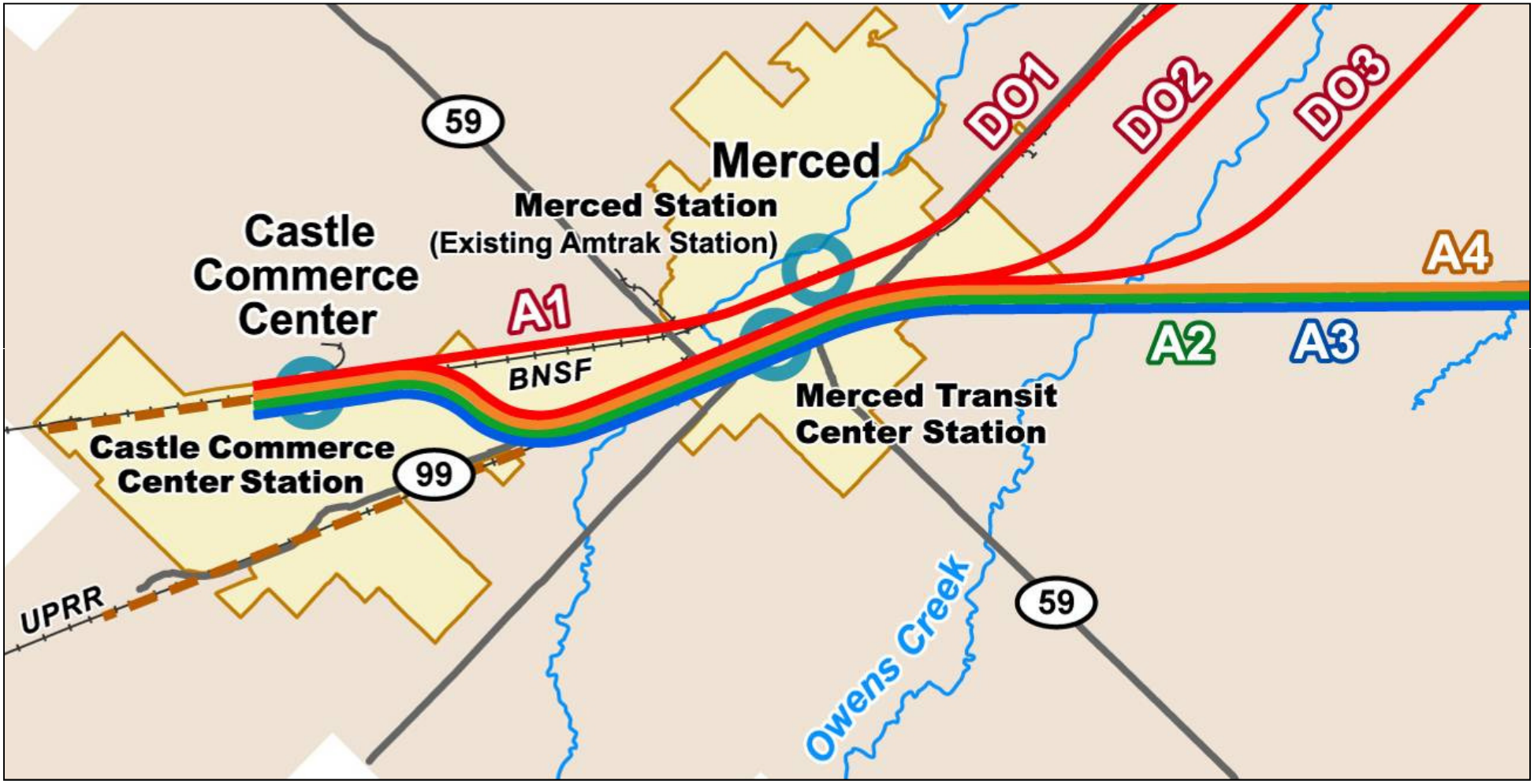
Alternative A4 – UPRR/SR99



Range of Alternatives Considered



Merced Station Locations

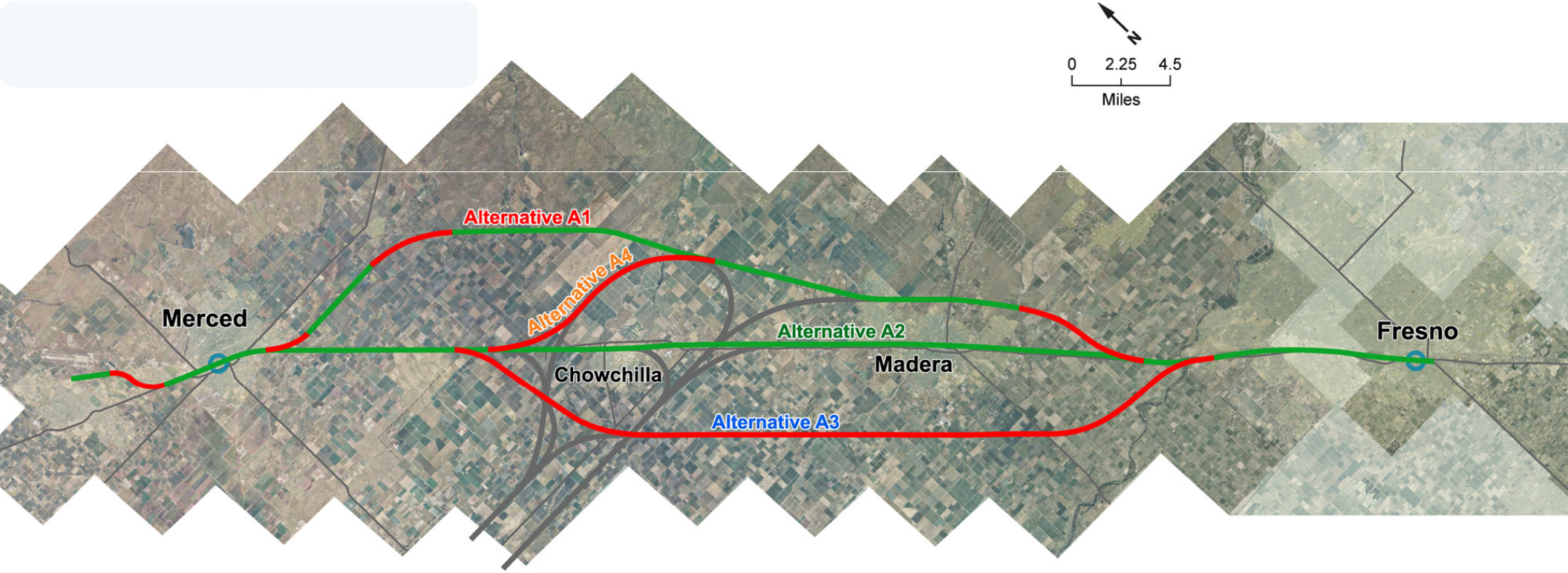


Merced Station Selection

- ☑ Downtown Transit Center - connects with all alternatives
- ☒ Amtrak Station on BNSF - only connects with Alternative A1
- ☒ Castle Commerce Center - connects with all alternatives but outside of Merced Downtown

Adjacent to Existing Corridors

Adjacent to Existing Corridor
Not Adjacent to Existing Corridor



Alternative A1 - BNSF

- Statewide Program EIR/EIS 2005, Preferred Alternative
- BNSF MOU established
- Least constraints with UPRR
- Supported by Madera County and the Cities of Chowchilla and Madera

Alternative A2 – UPRR/SR99

- Bay Area Program EIR/EIS 2008, Preferred Alternative
- Possible challenges with UPRR
- Broad base of support

Alternative A3 – Western Madera

- "Green Field Alternative"
  - Bifurcates large number of small farms
  - Least adjacent to Existing transportation facilities
- Unwanted development patterns
- Strong opposition from region

Alternatives A4 – UPRR/BNSF Hybrid

- Longest travel time between SF and LA
- Less adjacent to existing transportation corridors
- Long portions of elevated profile
- Most river crossings (19)

Evaluation Results – Carry Forward

☑ Alternative A2 - UP/SR99

- Competitive travel time
- Adjacent to UPRR
- Fewest resident/habitat impacts
- strong community/regulatory support

☑ Alternative A1 – BNSF

- Meets travel time
- Potential for sharing BNSF ROW
- Fewest commercial impacts

Evaluation Results – Do Not Carry Forward

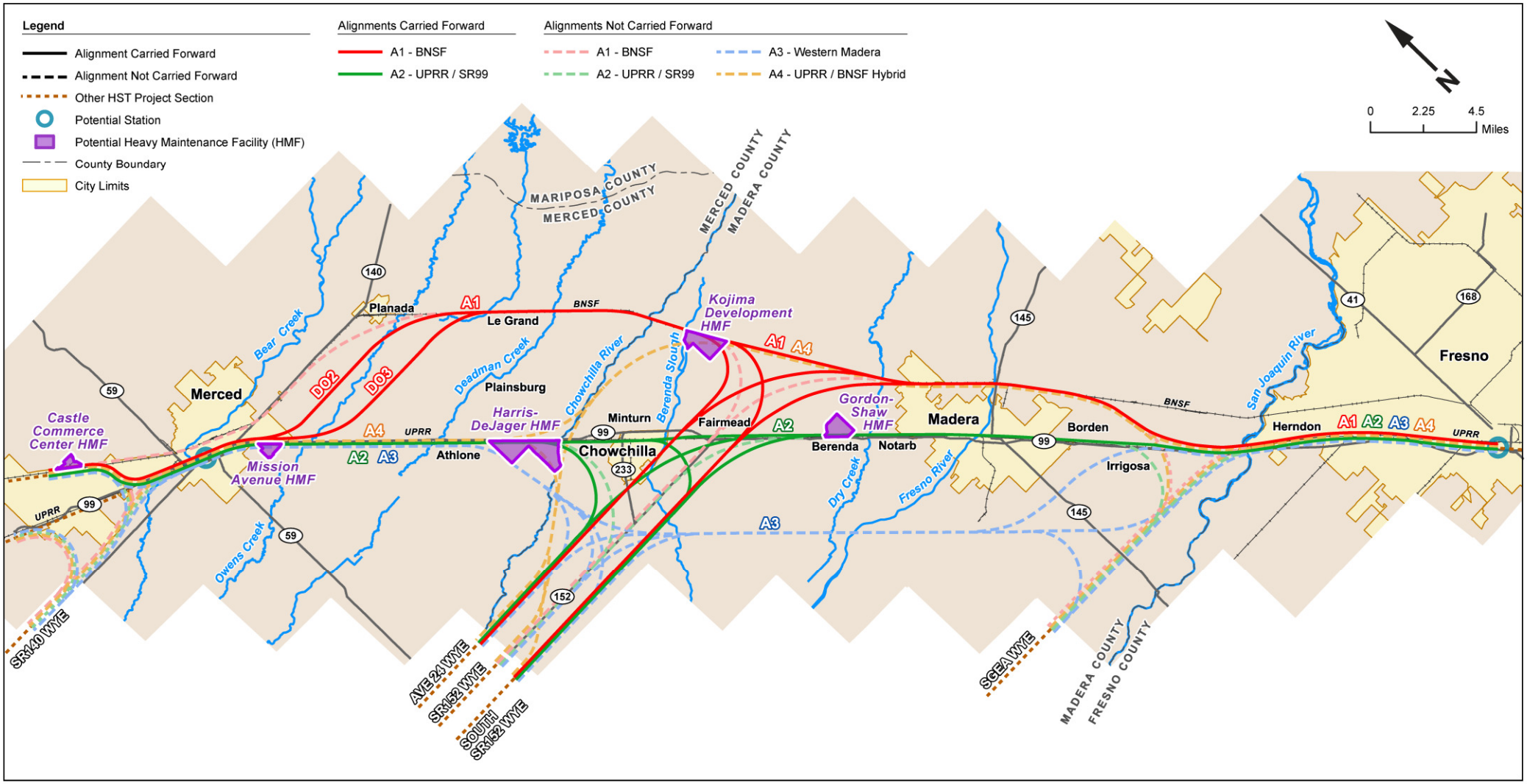
☒ Alternative A3 - Western

- Green field alternative
- Not adjacent to existing transportation corridors
- Bifurcates large number of small farms
- Opposed by Merced, Madera County

☒ Alternative A4 – UP/BNSF Hybrid

- Slower travel time
- Less adjacent to existing transportation corridors
- Bifurcates small farms
- Residential and critical habitat impacts
- Low agency support

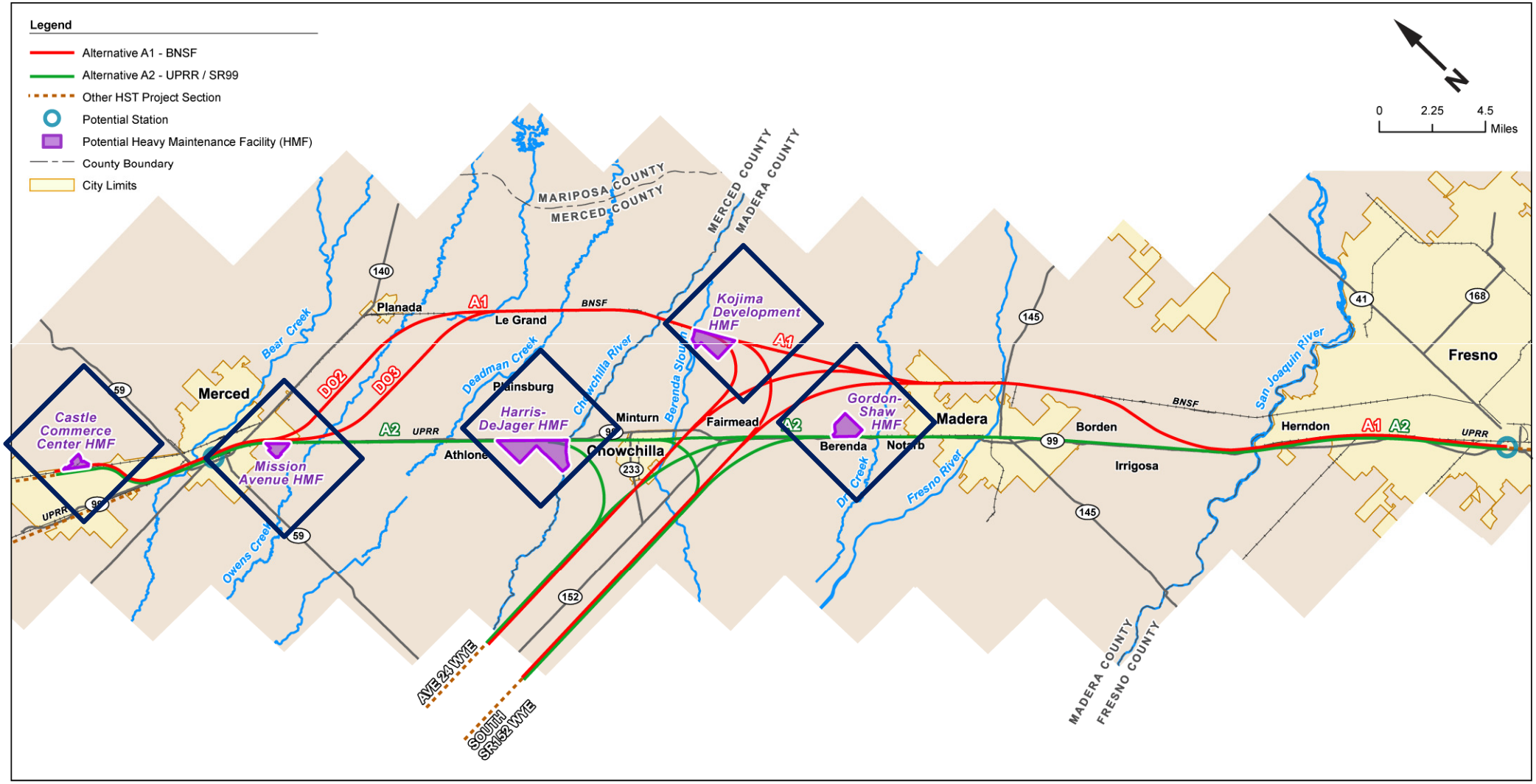
Alternatives A2 & A1 Advanced



Next Steps for the AA Process

- Board Action to accept recommendations
- Meet with Tech Working Groups
- Meet with Members of the Public/Stakeholders
- Complete technical studies
- According to current schedule - circulate Draft EIR/EIS – December 2010

Merced to Fresno Heavy Maintenance Facilities Sites



Merced to Fresno HMF Sites

Site and Proposer	Location /Compatibility	Property Characteristics
Castle Commerce Center HMF Site, Merced HSR Committee	• 164 acres • Compatible with A1-BNSF and A2-UPRR	• Economic incentives: • State Route access • Utilities readily available • Low environmental resources impact • Outside of floodplain
Merced Mission HMF Site, Merced HSR Committee	• 222 acres • Southeast Merced • Compatible with A1-BNSF and A2-UPRR	• Economic incentives • State Route access • Utilities readily available • Potential environmental impacts • Within floodplain
Harris/ DeJager HMF Site, Chowchilla & property owners	• 155 acres • North of Chowchilla. • Compatible with A2 -UPRR	• Conditionally offered at no cost to the Authority • Joint Powers Authority financing • State Route access • Possible Environmental impacts • Within floodplain
Kojima HMF Site, Chowchilla, Madera & property owners	• 400 acres • Southeast of Chowchilla • Compatible with A1-BNSF	• Conditionally offered at no cost to the Authority & financing available • Possible Environmental impacts • Within floodplain
Gordon Shaw Property HMF Site, Madera County	• 451 acres • South of Chowchilla. • Compatible with A2 - UPRR.	• Joint Powers Authority financing available • State Route access • Possible Environmental impacts • Partially in 100-year floodplain