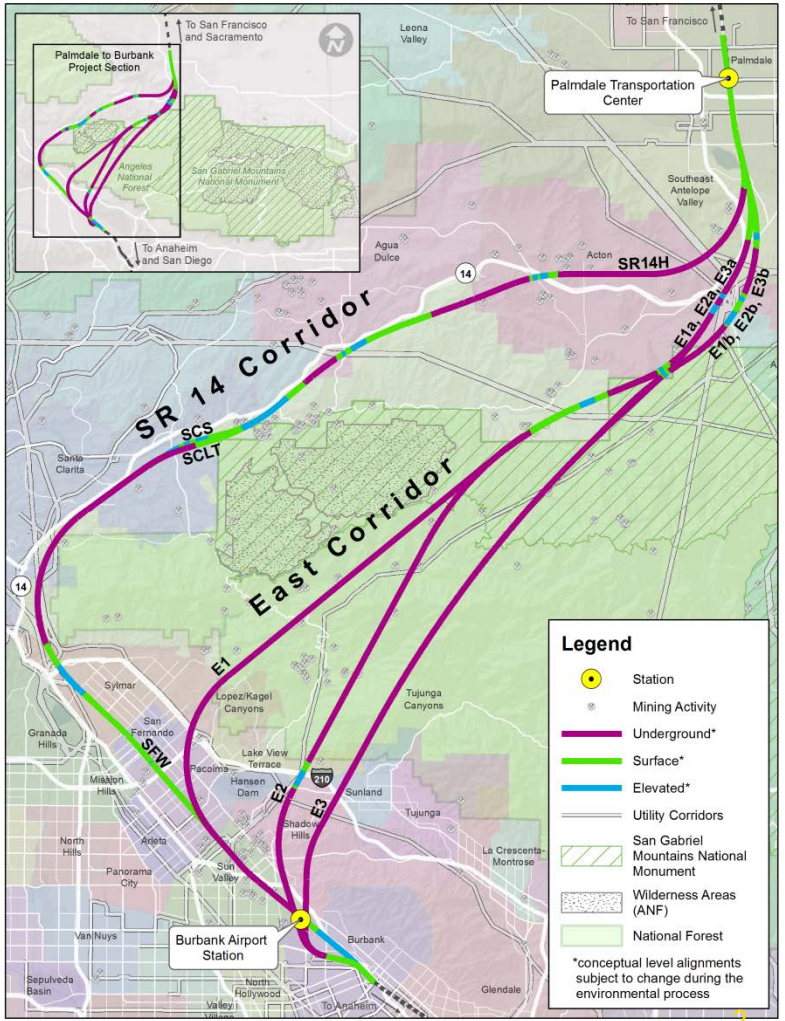
CALIFORNIA
High-Speed Rail Authority

PROJECT ELEMENTS

Palmdale to Burbank Route Concepts

- Two Corridors:
  - SR 14 Corridor
  - East Corridor
- Two Stations:
  - Palmdale (Antelope Valley)
  - Burbank (San Fernando Valley)
- Multiple Alignment Options
  - Refinement Process Ongoing



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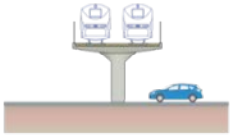
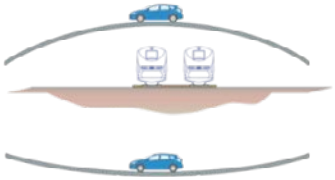
EXAMPLES: VERTICAL PROFILES

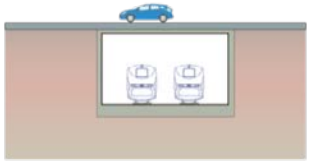
ELEVATED



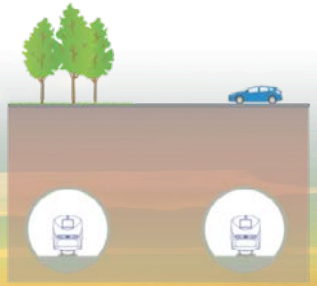
SURFACE



TRENCH/CUT & COVER



HSR DEEP TUNNEL



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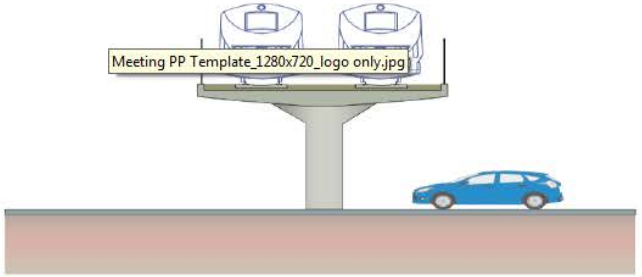
EXAMPLE: ELEVATED

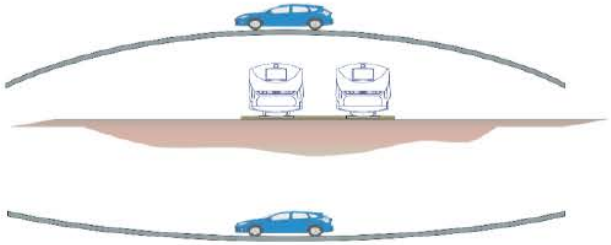
- **PROS:**
  - Narrower Width
  - Usable Space Below Structure
  - Rider Views
  - Constructability



- **CONS:**
  - Visual Impact
  - Noise Impact

EXAMPLE: SURFACE

- **PROS:**
  - Less Visual Impacts (Vs. Aerial)
  - Rider Views
  - Constructability
  - Construction Costs
  - Aesthetics (Noise Barriers)
- **CONS:**
  - Property Impacts
  - Aesthetics (Noise Barriers)



EXAMPLE: GRADE SEPARATION

Video: https://www.youtube.com/watch?v=M5hxP7HCUKc

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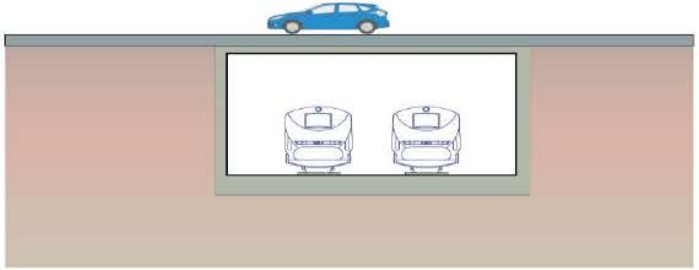
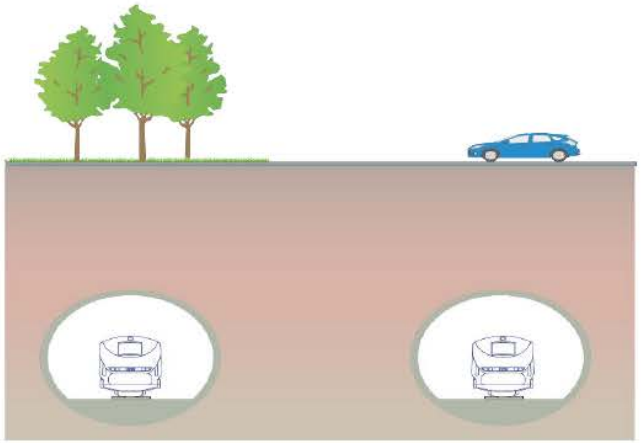
EXAMPLE: TRENCH / CUT & COVER

- **PROS:**
  - Limited Visual Impact
  - Options for Connectivity across Trench



- **CONS:**
  - Potential Impacts to Waterways and Utilities
  - Right of Way for Construction
  - Limited Rider Views
  - Cost

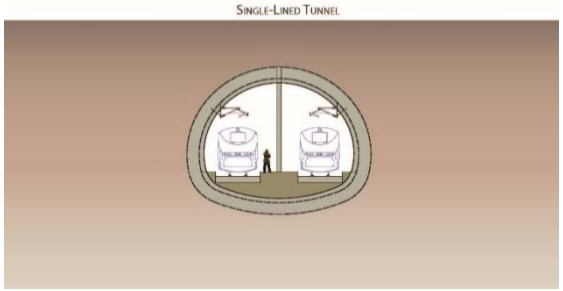
EXAMPLE: HSR DEEP TUNNEL

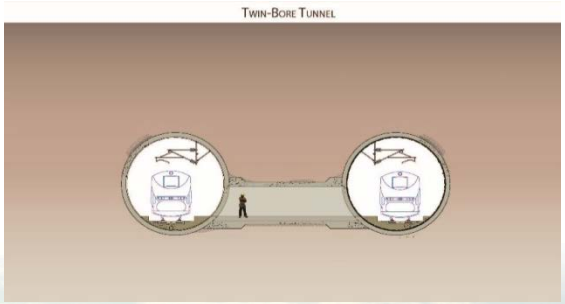


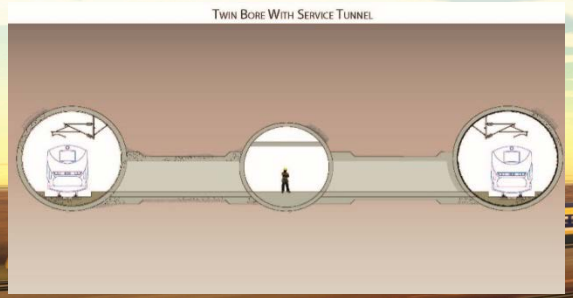
- **PROS:**
  - Least Visual and Noise Impacts
  - Reduced Surface Disruption

- **CONS:**
  - Cost
  - Fire & Life Safety
  - Limited Rider Views

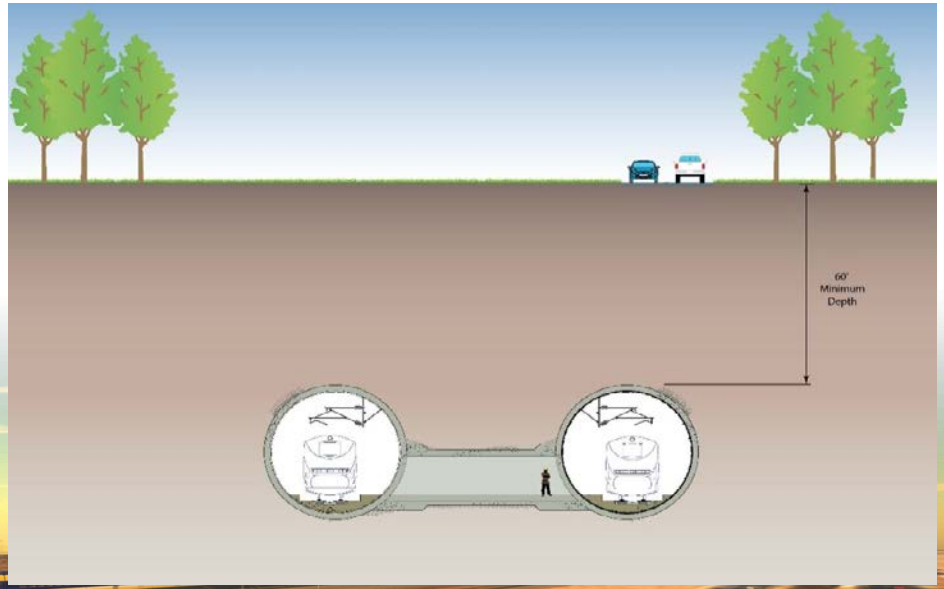
EXAMPLE: TUNNEL SCALES



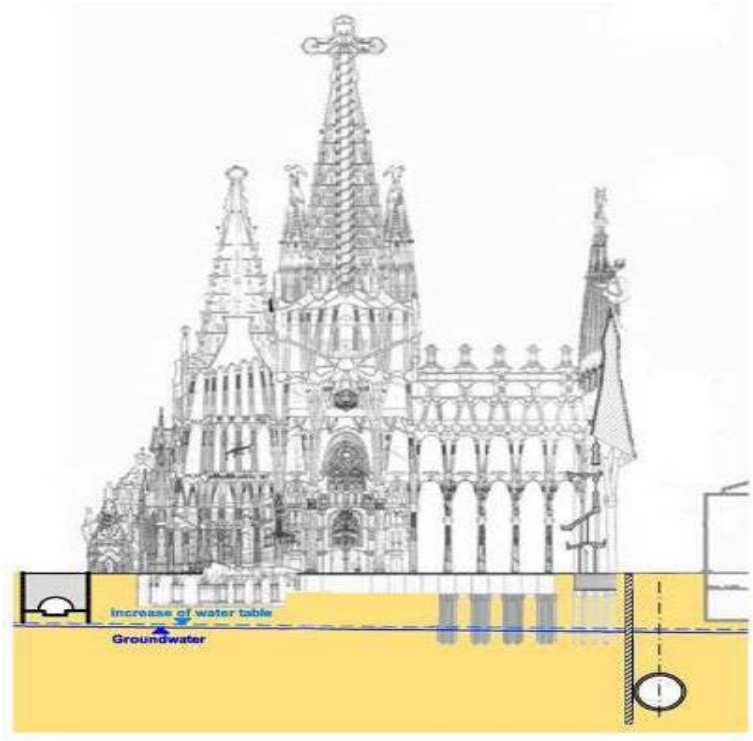




- **Depth:** Approx. 60 ft. min.
- **Width:** Approx. 120 ft.
- **Diameter:** Approx. 30-40 ft.



TUNNEL EXAMPLE - SPAIN



Architect: Gaudi

Tunnel underneath the Sagrada Familia Cathedral in Barcelona, Spain

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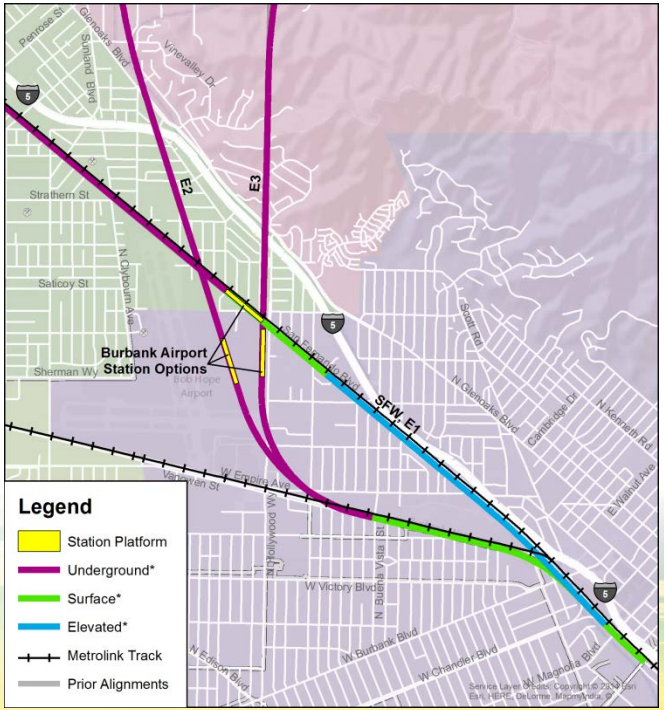
TUNNEL BORING MACHINE

Video: https://www.youtube.com/watch?v=Ie6KncOeZlE&list=PLs98D7m5XXEH_HP0Yc5mks1elozV2KXA-&index=35

Palmdale Transportation Center Station
Creating Multi-Modal Hubs & Great Public Spaces

Burbank Airport Station
Creating Multi-Modal Hubs & Great Public Spaces



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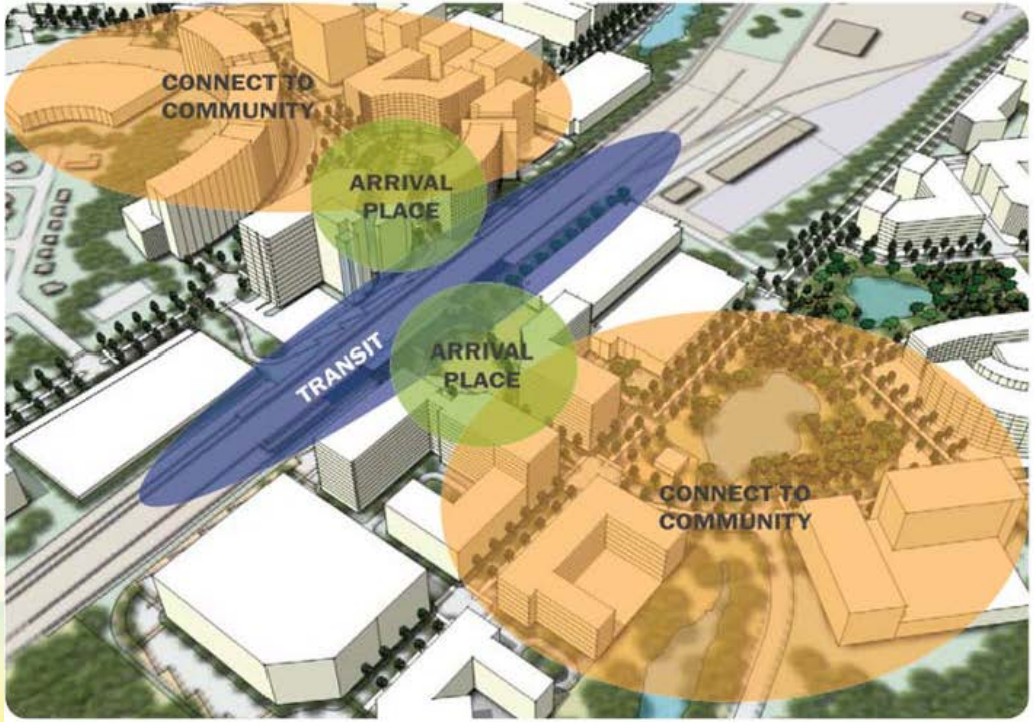
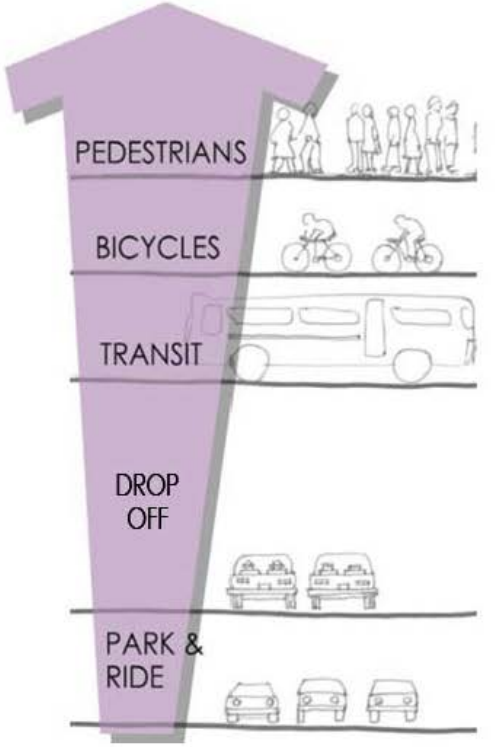
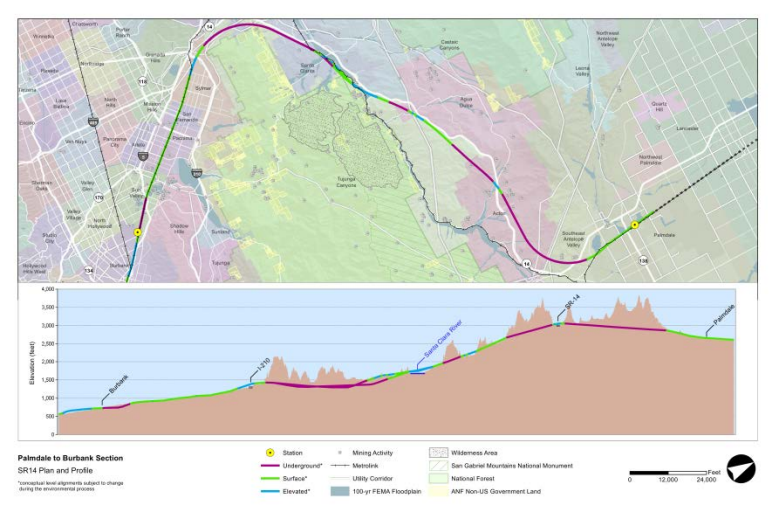
Station Access

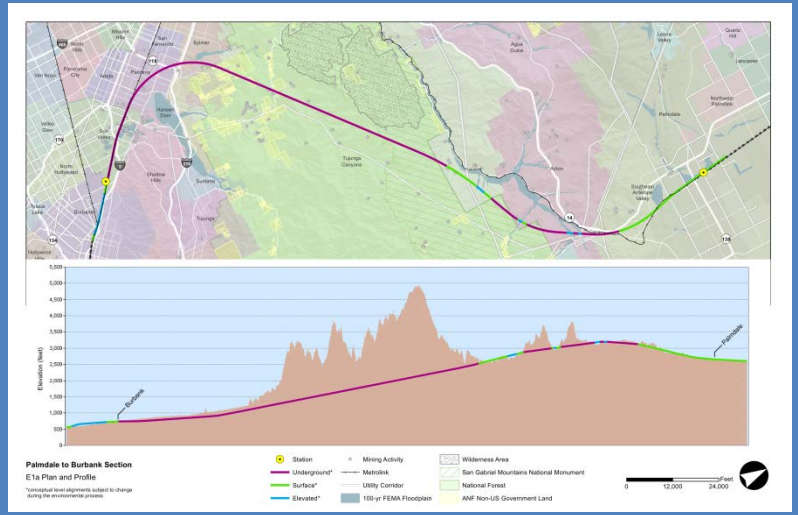




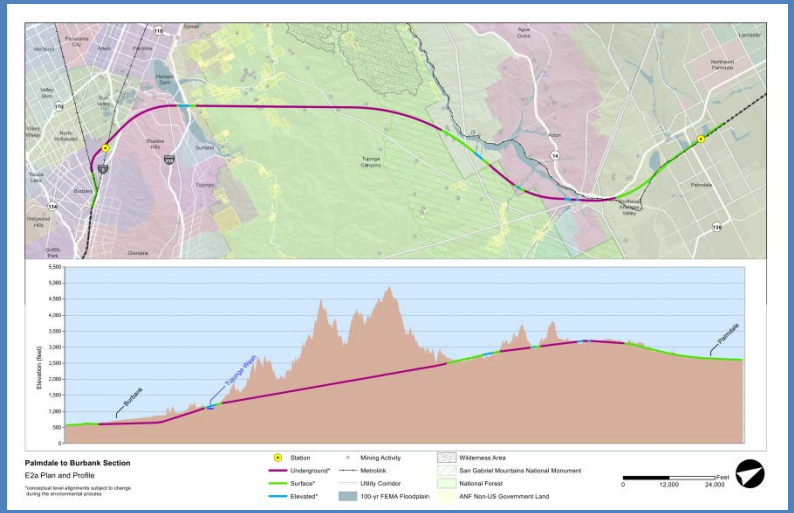
SR 14 Plan & Profile



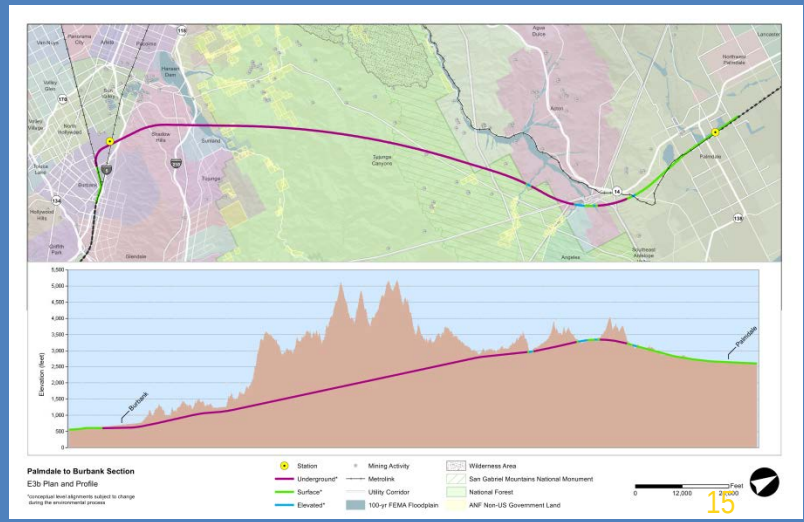
E1a Plan & Profile



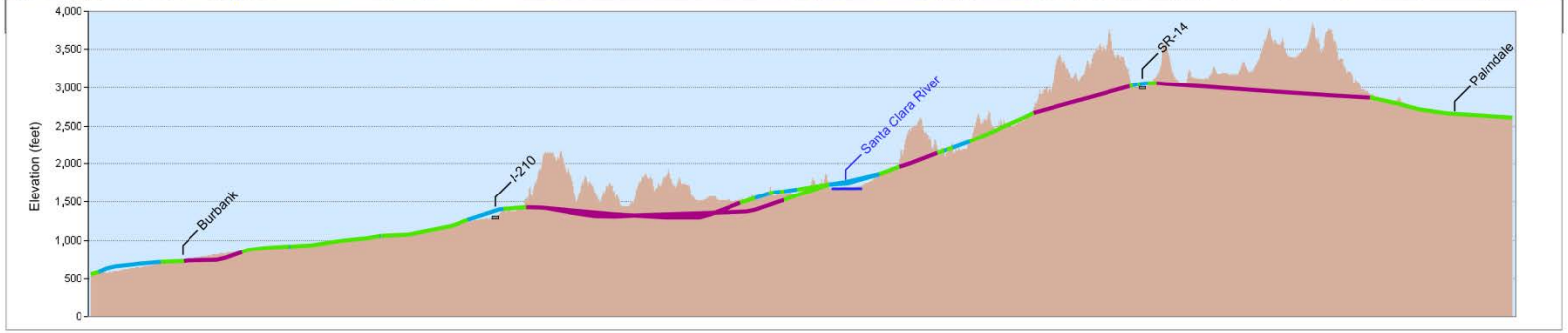
E2a Plan & Profile



E3b Plan & Profile



SR 14
Plan & Profile



Palmdale to Burbank Section

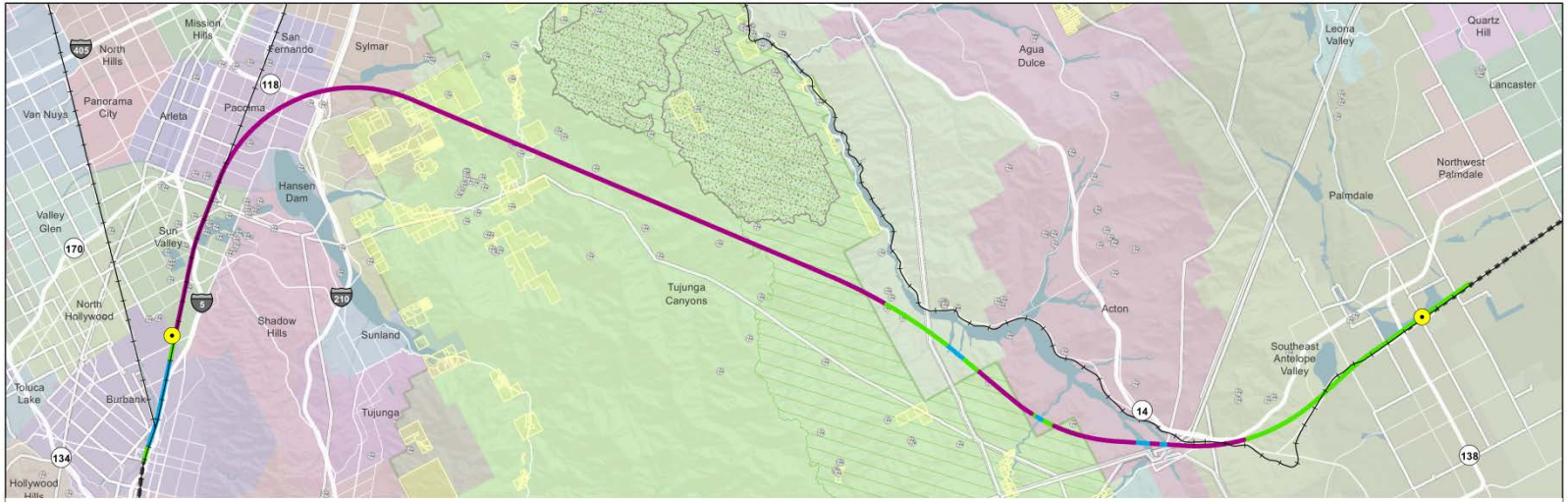
SR14 Plan and Profile

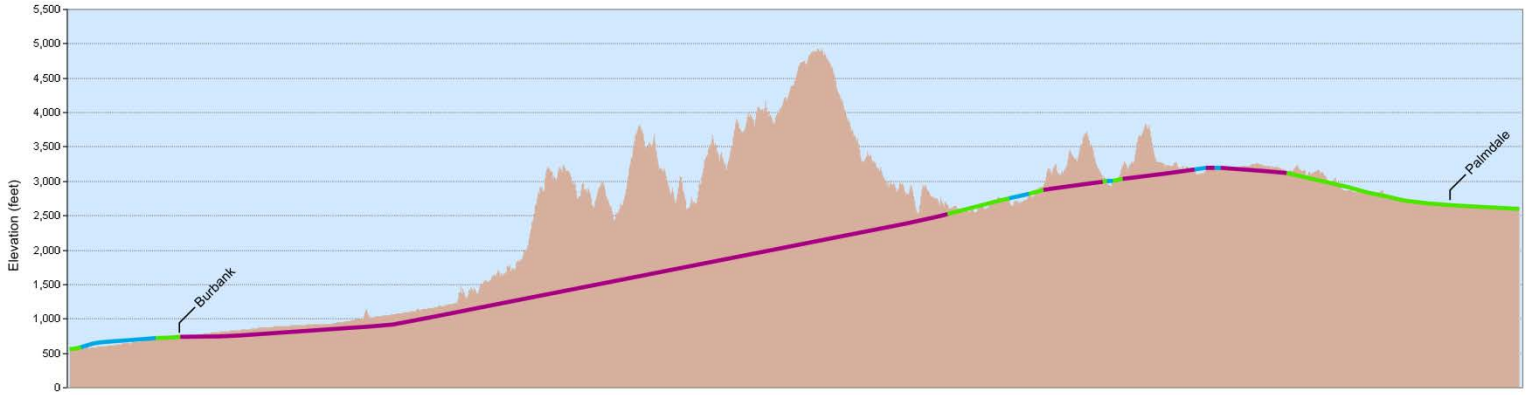
*conceptual level alignments subject to change during the environmental process

Station
Underground*
Surface*
Elevated*
Mining Activity
Metrolink
Utility Corridor
100-yr FEMA Floodplain
Wilderness Area
San Gabriel Mountains National Monument
National Forest
ANF Non-US Government Land

0 12,000 24,000 Feet

E1a
Plan & Profile





Palmdale to Burbank Section

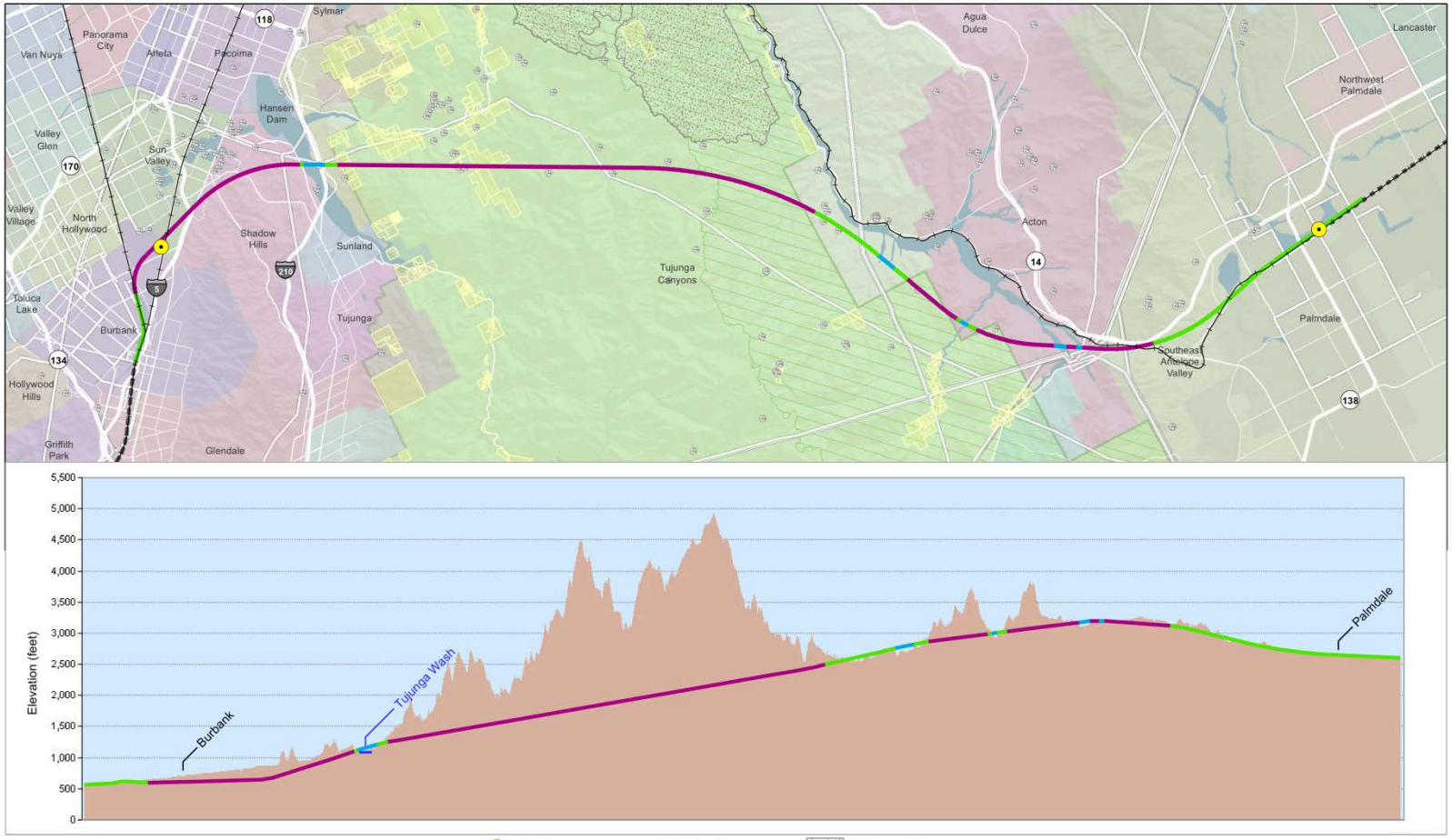
E1a Plan and Profile

*conceptual level alignments subject to change during the environmental process

Station
Underground*
Surface*
Elevated*
Mining Activity
Metrolink
Utility Corridor
100-yr FEMA Floodplain
Wilderness Area
San Gabriel Mountains National Monument
National Forest
ANF Non-US Government Land

0 12,000 24,000 Feet

E2a
Plan & Profile



Palmdale to Burbank Section

E2a Plan and Profile

*conceptual level alignments subject to change during the environmental process

Station
Underground*
Surface*
Elevated*
Mining Activity
Metrolink
Utility Corridor
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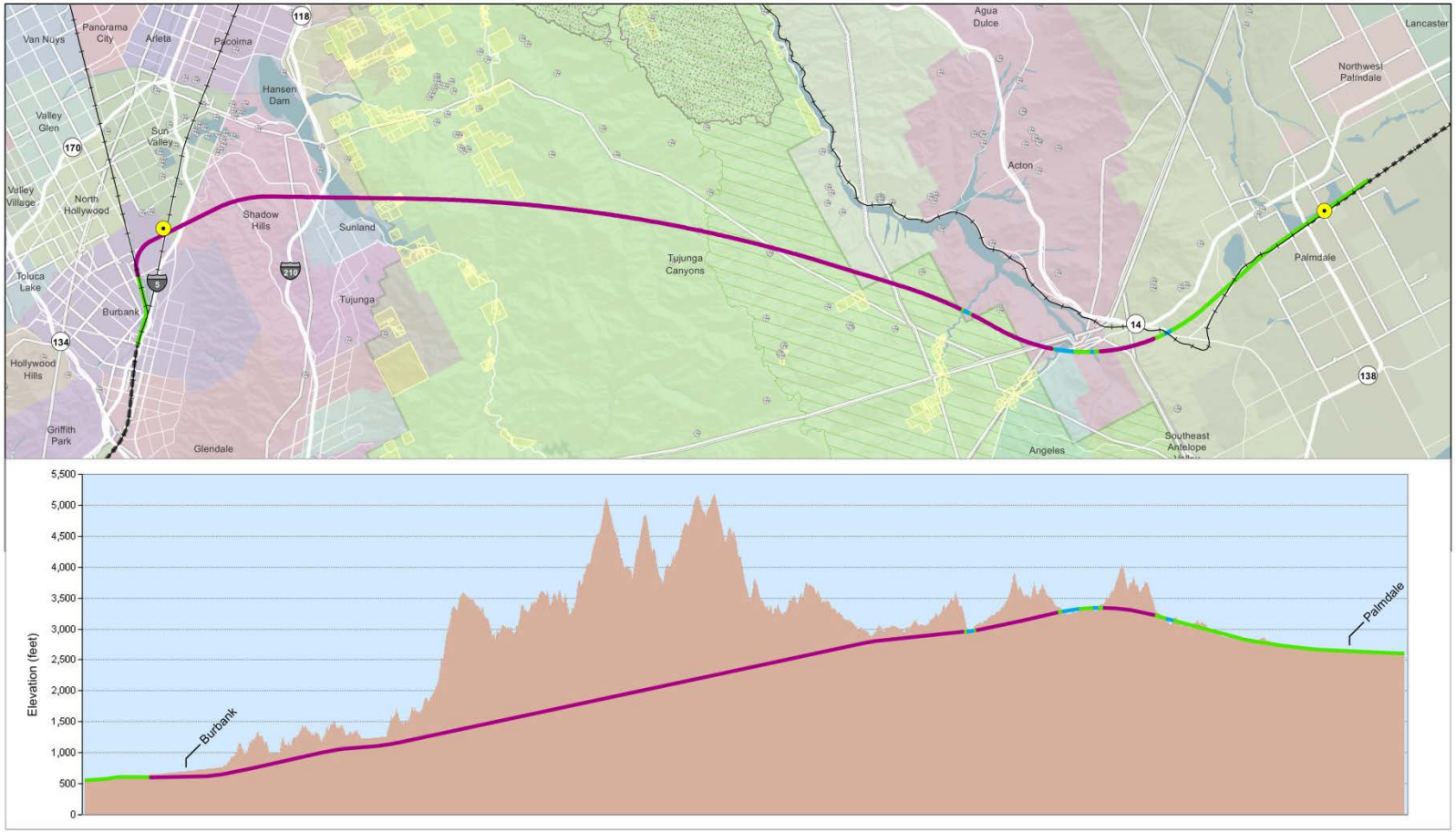
Wilderness Area
San Gabriel Mountains National Monument
National Forest
ANF Non-US Government Land

0 12,000 24,000 Feet

E3b
Plan & Profile



Palmdale to Burbank Section

E3b Plan and Profile

*conceptual level alignments subject to change during the environmental process

Station
Underground*
Surface*
Elevated*
Mining Activity
Metrolink
Utility Corridor
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0 12,000 24,000 Feet