

SR 710 North Study

Technical Advisory Committee Meeting No. 18– March 11, 2015

Stakeholder Outreach Advisory Committee Meeting No. 14– March 12, 2015



Agenda

- Public Outreach Activities
- Recap of TAC No. 17 and SOAC No. 13
- SR 710 North Study Draft EIR/EIS
 - Study Alternatives
 - Environmental Study Key Findings
 - Traffic Study Key Findings
- Next Steps

Ground Rules

- Q&A after each section of the presentation
- Focus questions on information presented
- General comments and Q&A at the end

Public Outreach Activities



Outreach Activities Recap

➤ Metro has conducted 334 meetings for this Study since 2011

➤ 180 Meetings were held in Northeast/East Los Angeles

- Boyle Heights
- Eagle Rock
- East Los Angeles
- El Sereno
- Glassell Park
- Highland Park
- Lincoln Heights
- Los Angeles
- Mount Washington

➤ 154 Meetings were held in the San Gabriel Valley

- Arcadia
- Alhambra
- Azusa
- Bradbury
- Burbank
- Duarte
- El Monte
- Glendale
- Irwindale
- La Canada Flintridge
- La Crescenta
- Monrovia
- Monterey Park
- Pasadena
- Rosemead
- San Gabriel
- Sierra Madre
- South Pasadena
- Temple City

Outreach Activities Recap

➤ Held 70 Briefings with Federal, State, and local elected officials

US Congress Members: Adam Schiff, Xavier Becerra, Judy Chu, Janice Hahn, Lucille Roybal-Allard

State Senators: Kevin De Leon, Ed Hernandez, Carol Liu

State Assembly Members: Mike Eng, Jimmy Gomez, John Perez, Chris Holden

Los Angeles County Board of Supervisors: Michael Antonovich, Gloria Molina, Hilda Solis

Los Angeles City Council: Jose Huizar, Gil Cedillo, Eric Garcetti, Antonio Villaraigosa

Local Elected Officials: Luis Ayala (Alhambra), John Fasana (Duarte), John Kennedy (Pasadena), Dennis Kneier (San Marino), David Lau (Monterey Park), Steve Madison (Pasadena), Barbara Messina (Alhambra), Ara Najarian (Glendale), Jacque Robinson (Pasadena), Stephen Sham (Alhambra)

Draft EIR/EIS Public Circulation

- Joint Metro/Caltrans News Release – Issued March 6, 2015
- Comment Period: March 6, 2015 to July 6, 2015 (120 days)
- Legal Public Notice published in several newspapers in Study Area
- Draft EIR/EIS Available for review at Caltrans District 7 Office and Metro Headquarters
- Online at the Caltrans website
- Draft EIR/EIS available for review at public libraries (see handout)

Public Comments & Public Hearings

- Attend Public Hearing (verbal or submit comment card)
- East Los Angeles College Ingalls Auditorium - Saturday, April 11, 2015
 - 10 AM -11 AM Map Viewing
 - 11 AM to 4 PM Public Hearing
- Pasadena Convention Center Ballroom - Tuesday, April 14, 2015
 - 5 PM- 6 PM Map Viewing
 - 6 PM to 9 PM Public Hearing
- 3rd Public Hearing – date and location are being confirmed
- Caltrans Public Comment Website
- By US Mail

Notification of Public Hearings

- SR 710 North Webpage Update: www.metro.net/sr710study
- E-blast a News Release to SR 710 North Database
- News Release Posted in Study Area City Websites
- Mailer to Businesses and Households
- Ad Placements Online and in Mainstream/Community Newspapers

Recap of TAC No. 17 and SOAC No.13

- Public Outreach Activities
- Project Report and Environmental Studies Documentation Update
 - Recap of TAC No. 16 and SOAC No. 12
 - Update on Preliminary Engineering and Environmental Technical Studies

Feedback Received During TAC No. 17/ SOAC No. 13

- Does CTC have to approve right-of-way acquisition?
- Who will approve NOD/ROD?
- Where are the soundwalls located?
- When does the preferred alternative selection process begin?
- What questions, inquiries, concerns came up during the outreach meetings?
- Will the cost estimates and funding sources be included in the Draft EIR/EIS?

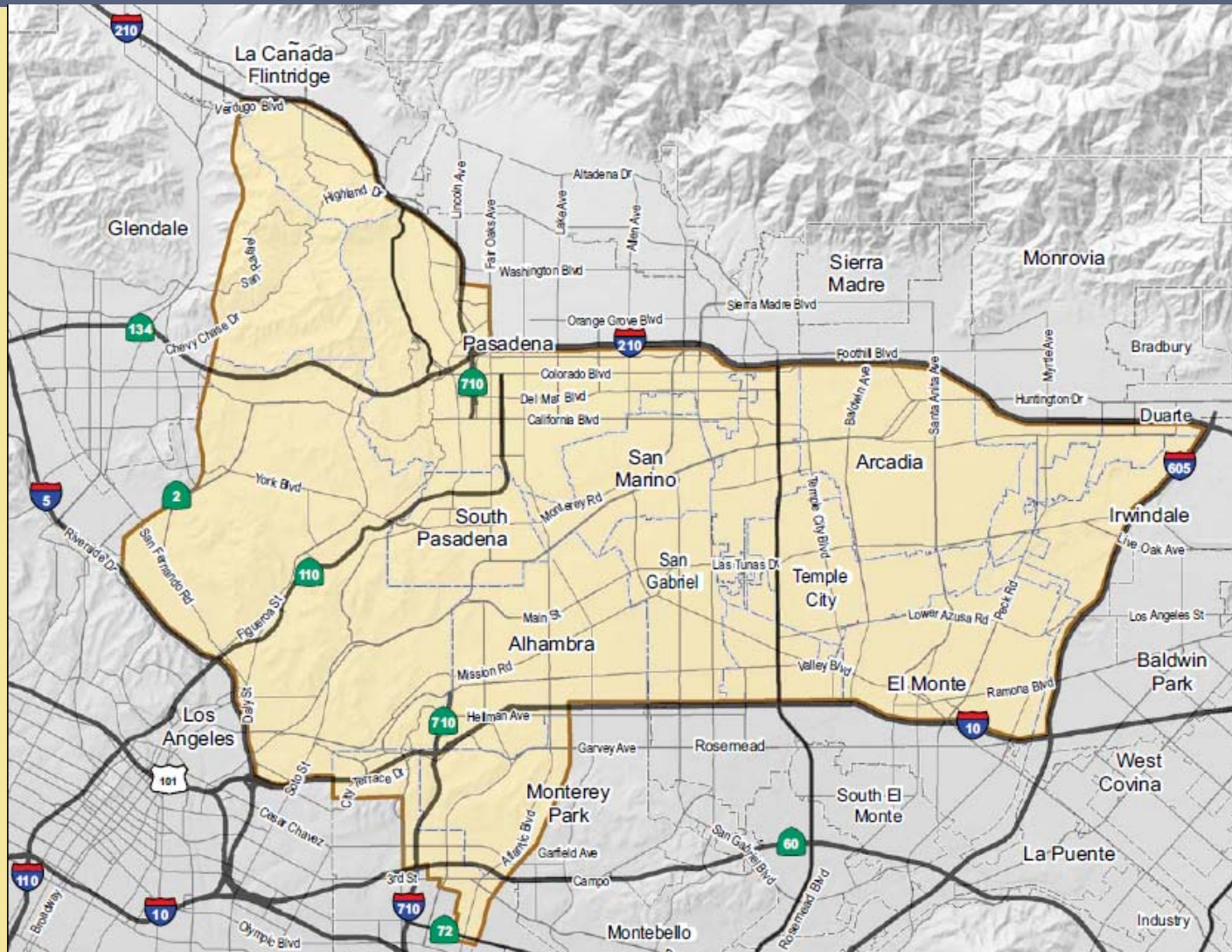
Feedback Received During TAC No. 17/ SOAC No. 13

- Will the performance measures be identified in the Draft EIR/EIS?
- Will the Cost-Benefit Analysis be included in the Draft EIR/EIS?
- We request that hard copies of DED be provided at libraries at each potential affected city.
- Has there been an example where an alternative has been removed due to public contest?
- What format is planned for the public hearings?
- Is there a mechanism to share written comments so anyone can access what was submitted?
- Would comments be available to public upon request?

Overview of Build Alternatives



Project Location



SR 710 Build Alternatives

1. TSM/TDM
2. BRT with TSM/TDM
3. LRT with TSM/TDM
4. Freeway Tunnel with TSM/TDM
 - Dual Bore Operational Variation
 - No Tolls
 - No Tolls and No trucks
 - With Tolls
 - Single Bore Operational Variation
 - With Tolls
 - With Tolls and No Trucks
 - With tolls and Express Bus

TSM/TDM Overview

➤ **Local Street Improvements:**

- 17 intersections
- 7 street segments
- 3 other improvements:
 - T-1: Valley Blvd to Mission Rd Connector Rd
 - T-2: Arroyo Seco Parkway Hook Ramps
 - T-3: St John Ave Extension from Del Mar Ave to California Blvd

➤ **Active Transportation**

- Class III Bike Routes

➤ **ITS Improvements**

- Signal Optimization
- Signal synchronization
- Transit signal prioritization
- Arterial CMS
- Speed data collection

➤ **Transit Refinement**

- To existing bus routes

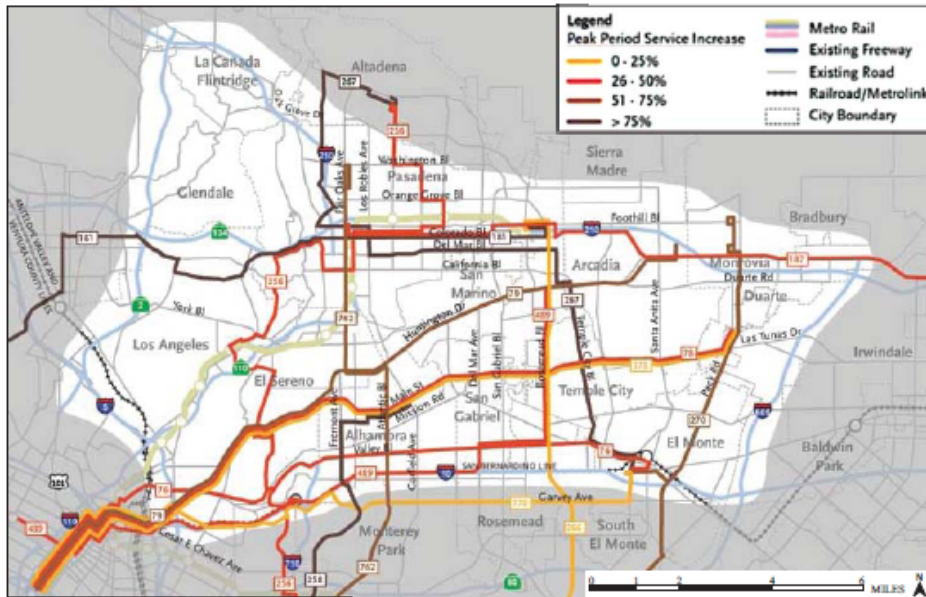
- Construction cost: \$105 M
(2014 dollars)

TSM/TDM Alternative

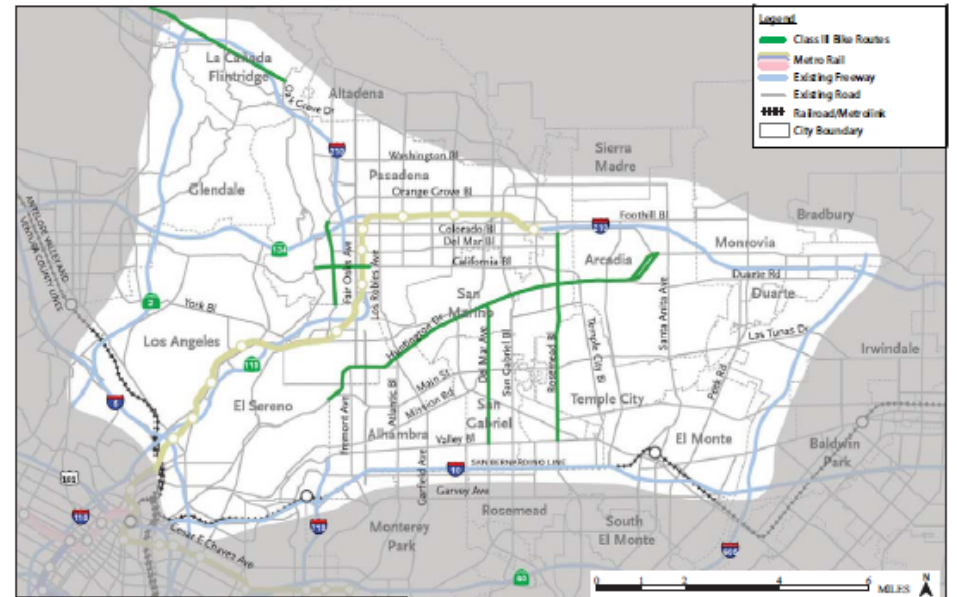
ITS Improvements



Local Street and Intersection Improvements



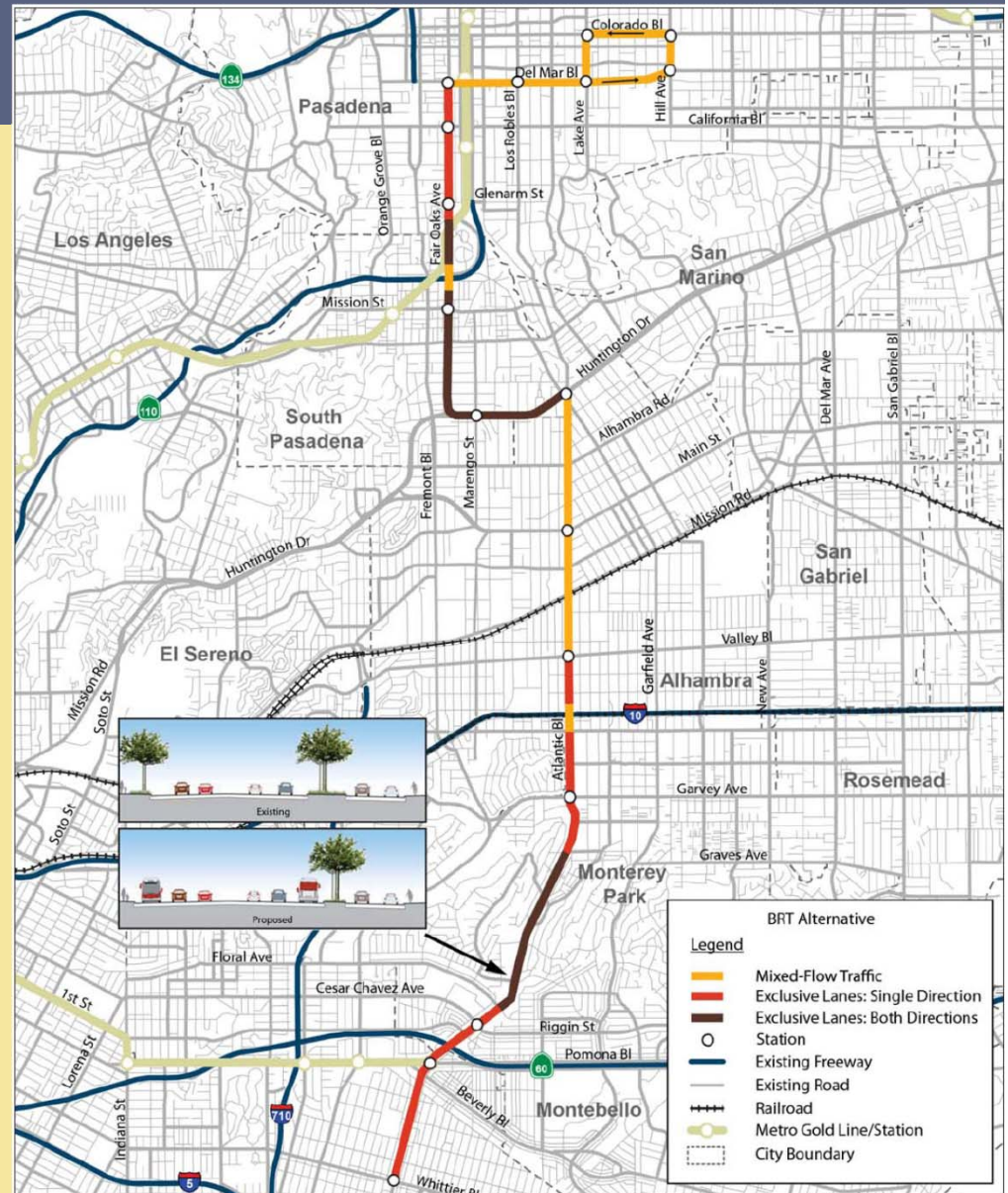
Transit Refinement



Active Transportation

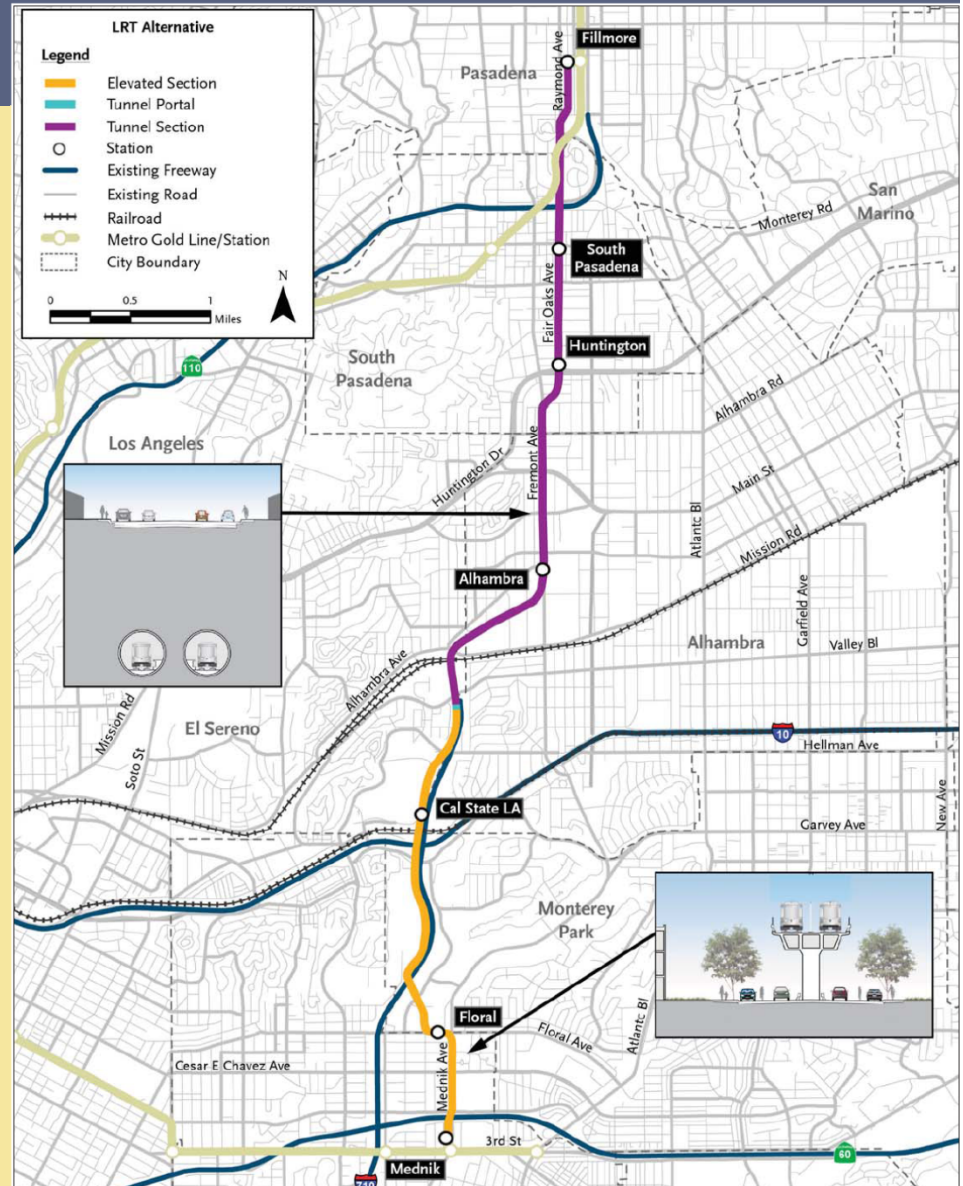
BRT + TSM/TDM Overview

- High-speed, high-frequency service between East Los Angeles and Pasadena
- 12-mile route; 17 stations
- Mixed-flow and exclusive lanes (single and both directions)
- 10 minutes during peak hours and 20 min during off-peak
- Replaces existing Route 762
- Amenities included to attract riders
- Two Bus feeder services
 - Connects to El Monte Bus station
 - Connects to Commerce and Montebello Metrolink Stations
- Construction cost: \$241 M (2014 dollars)



LRT + TSM/TDM Overview

- Between East Los Angeles and Pasadena
- 7.5 mile route; Two 20-foot diameter tunnels
- Includes 3 miles of aerial segment and 4.5 miles of tunnels
- 3 aerial and 4 underground stations
- The tunnels are expected to be constructed using pressurized Tunnel Boring Machine (TBM)
- Tunnels would be advanced from south end
- Design including safety elements follows Metro guidelines
- Two feeder services
 - Connects to El Monte Bus Station
 - Connects to Commerce and Montebello Metrolink stations
- Construction cost: \$2,420 M (2014 dollars)

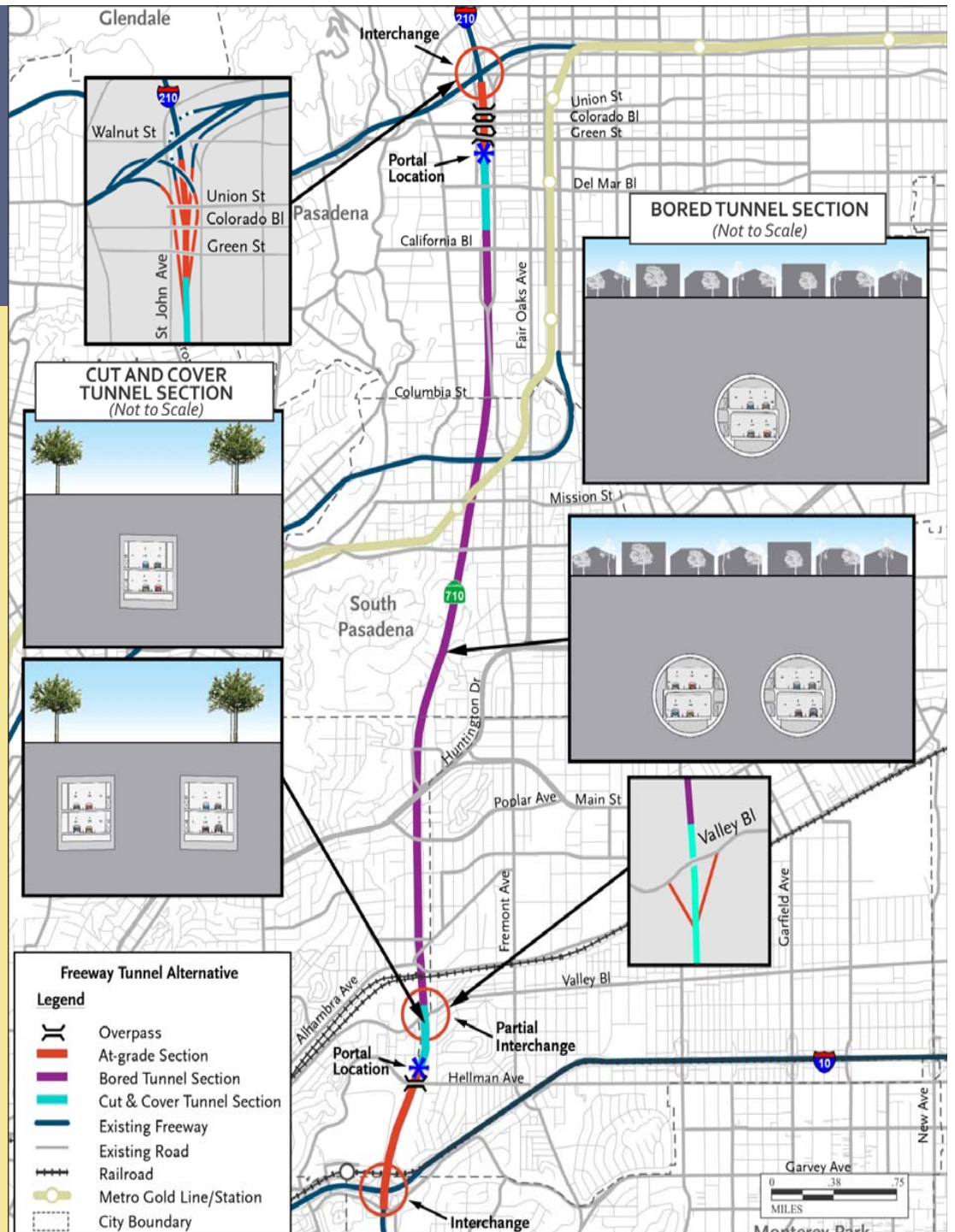


Freeway Alternative + TSM/TDM Overview

- Connects the two SR 710 stubs (north of I-10 to south of I-210)
- Tunnels expected to be advanced using pressurized TBM
- Excavation expected from both ends
- Design and safety elements follows Caltrans and National Fire Protection Agency (NFPA) guidelines
- Ventilation system provided for normal and emergency operations
- Ventilation structures provided near north and south portals
 - No intermediate ventilation structures
- Operations and Maintenance Control (OMC) Building provided at both portals
 - Will also house first responders
- Construction cost:
 - Dual Bore – \$5,650 M (2014 dollars)
 - Single Bore – \$3,150 M (2014 dollars)

Freeway Alternative Overview

- 6.3 mile route
 - 4.2 miles of bored tunnel
 - 0.7 miles of cut-and-cover tunnel
 - 1.4 miles of at-grade segments
- Approx. 60-foot tunnel diameter(s)
- Tunnel depth of 20 to 280 ft



Draft Environmental Documentation Update



Purpose and Need Statement

- The purpose of the proposed action is to effectively and efficiently accommodate regional and local north-south travel demands in the study area of the western San Gabriel Valley and east/northeast Los Angeles, including the following considerations:
 - Improve the efficiency of the existing regional freeway and transit networks;
 - Reduce congestion on local arterials adversely affected due to accommodating regional traffic volumes;
 - Minimize environmental impacts related to mobile sources

EIR/EIS Environmental Topics

- **Land use**
- **Growth**
- **Community Impacts**
 - **Community Character/Cohesion**
 - **Relocations**
 - **Environmental Justice**
- Utilities/Emergency Services
- **Traffic/Transportation**
- **Visual/Aesthetics**
- **Cultural/Historical Resources**
- Hydrology/Floodplains
- Water Quality
- **Geology/Soils**
- Paleontological Resources
- **Hazardous Waste**
- **Air Quality**
- **Noise and Vibration**
- Energy
- Biological Resources
 - Natural Communities
 - Wetlands and Waters
 - Plant Species
 - Animal Species
 - Threatened & Endangered Species
 - Invasive Species
- **Construction Impacts**
- Cumulative Impacts
- **Health Risk Assessment**
- Climate Change

Land Use

- All Build Alternatives

- Inconsistent with policies, objectives, or program goals of various General Plans

- De Minimis Section 4(f) impacts

- Cascades Park (BRT only)
 - Construction ~0.02 ac
 - Permanent ~0.011 ac



Growth/Environmental Justice

➤ Growth

➤ The Build Alternatives are not expected to result in unplanned growth since:

➤ The study area is largely built out

➤ No new access to undeveloped or underdeveloped areas

➤ Environmental Justice

➤ No disproportionate impacts on environmental justice populations

Community Character and Cohesion

LRT Alternative

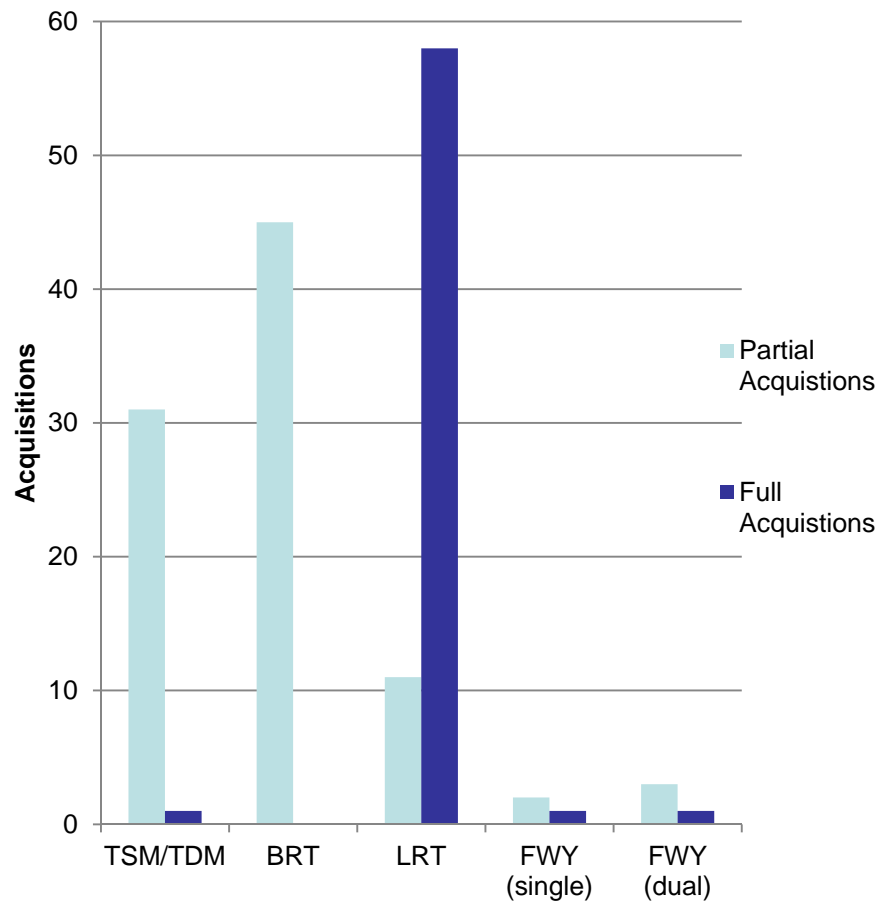
- Adverse impacts to community character and cohesion from the displacement of 15 neighborhood-oriented businesses along Mednik Avenue

Other Alternatives

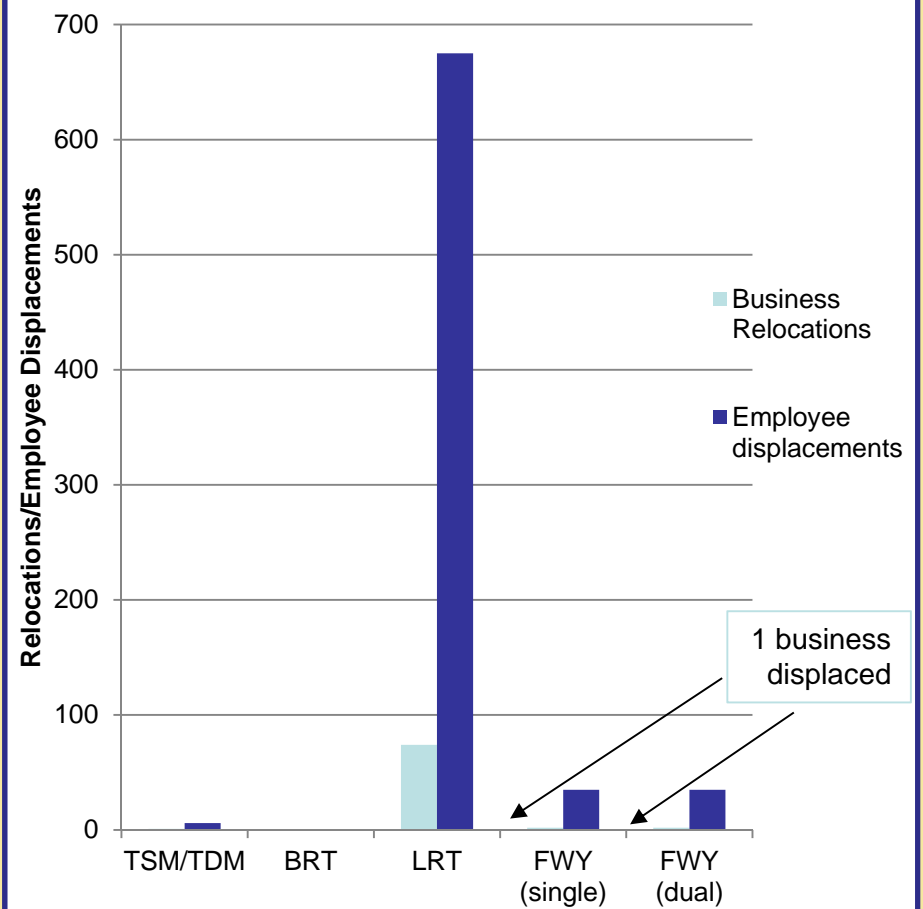
- No adverse impacts to community character and cohesion

Property Acquisitions/Relocations

Acquisitions

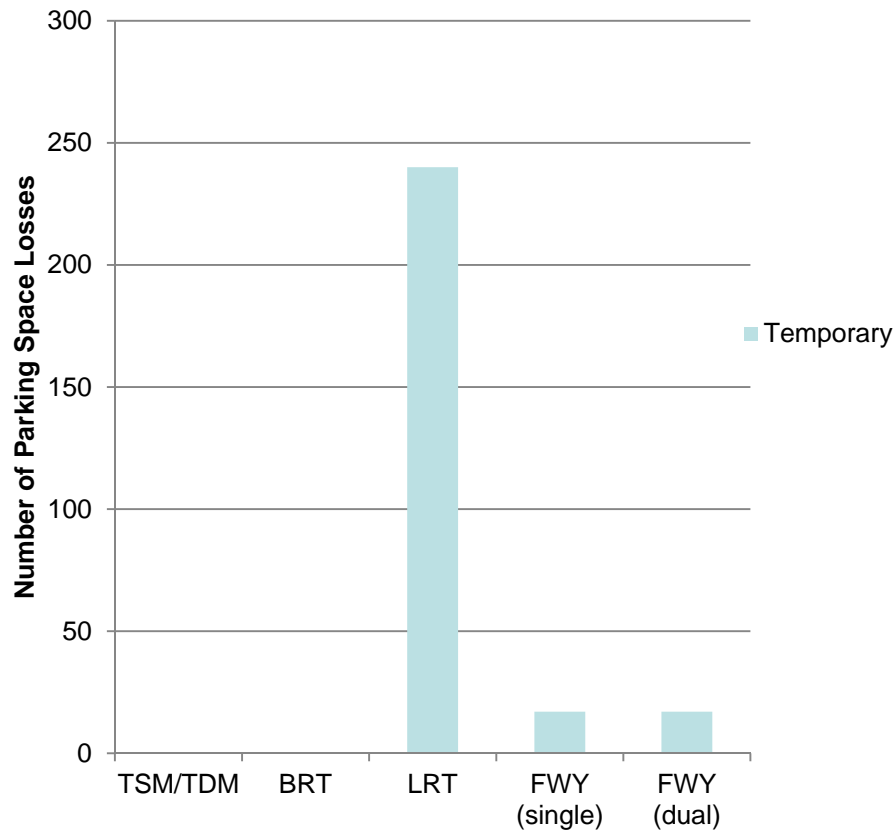


Relocations

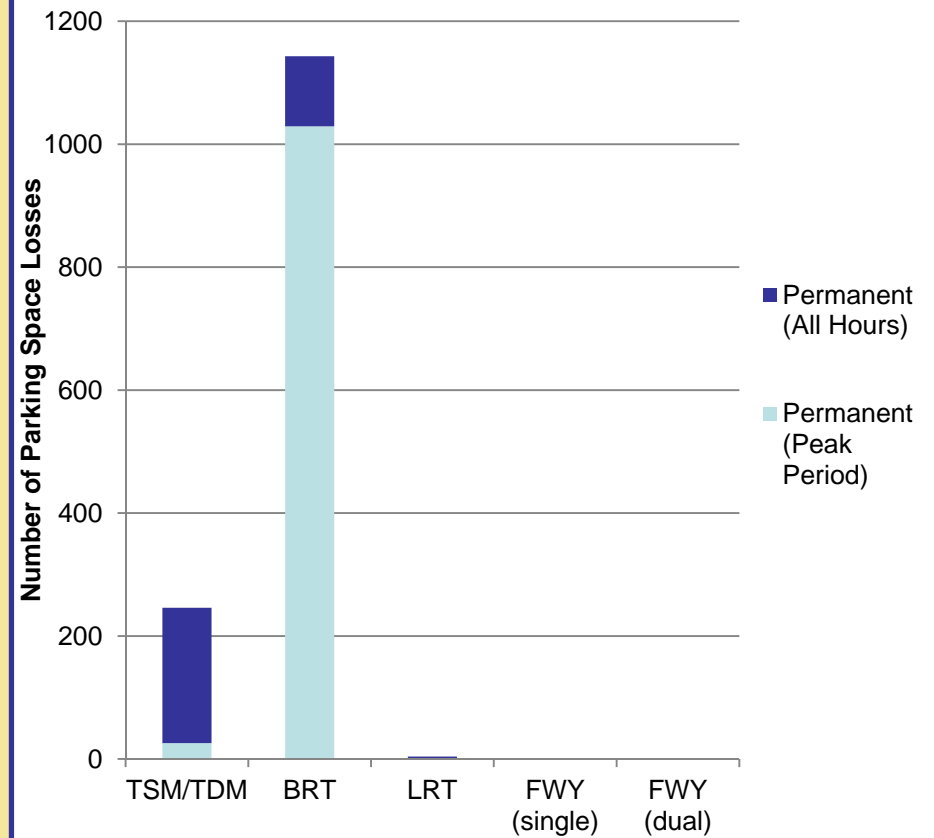


Land Use - Parking

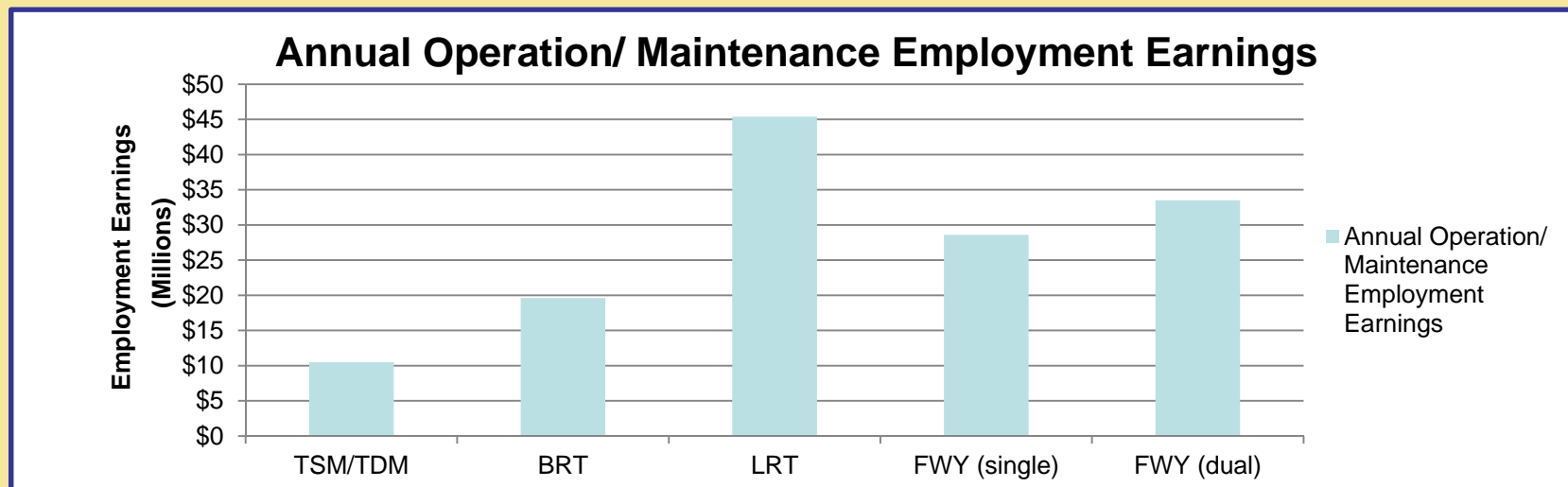
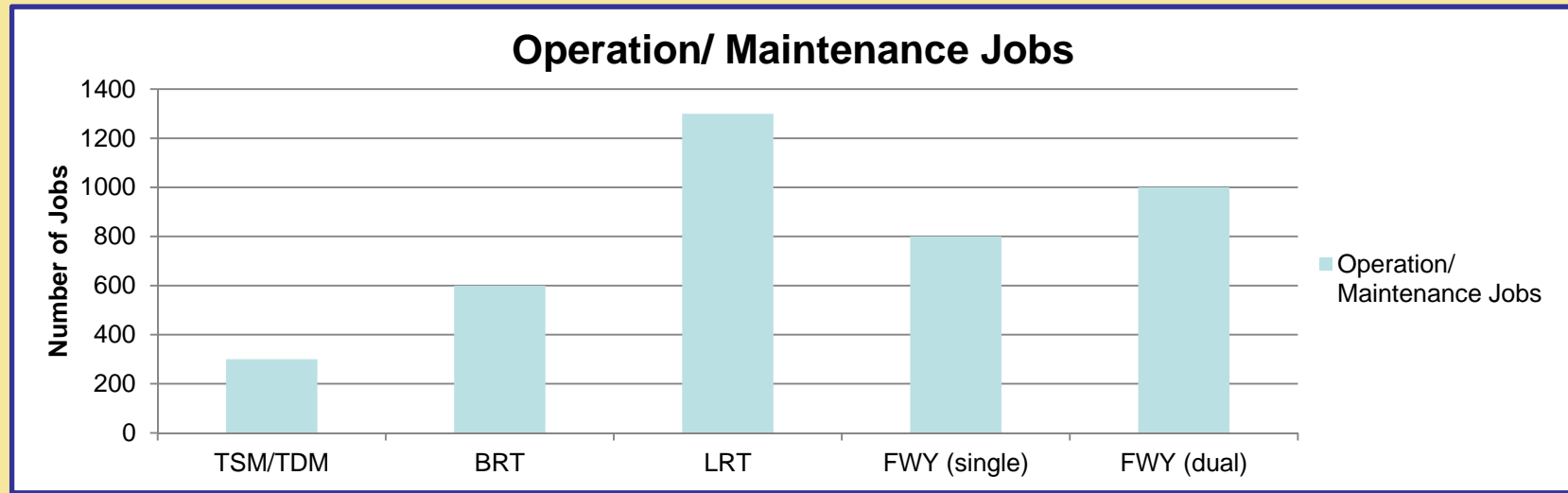
Temporary Parking Space Loss



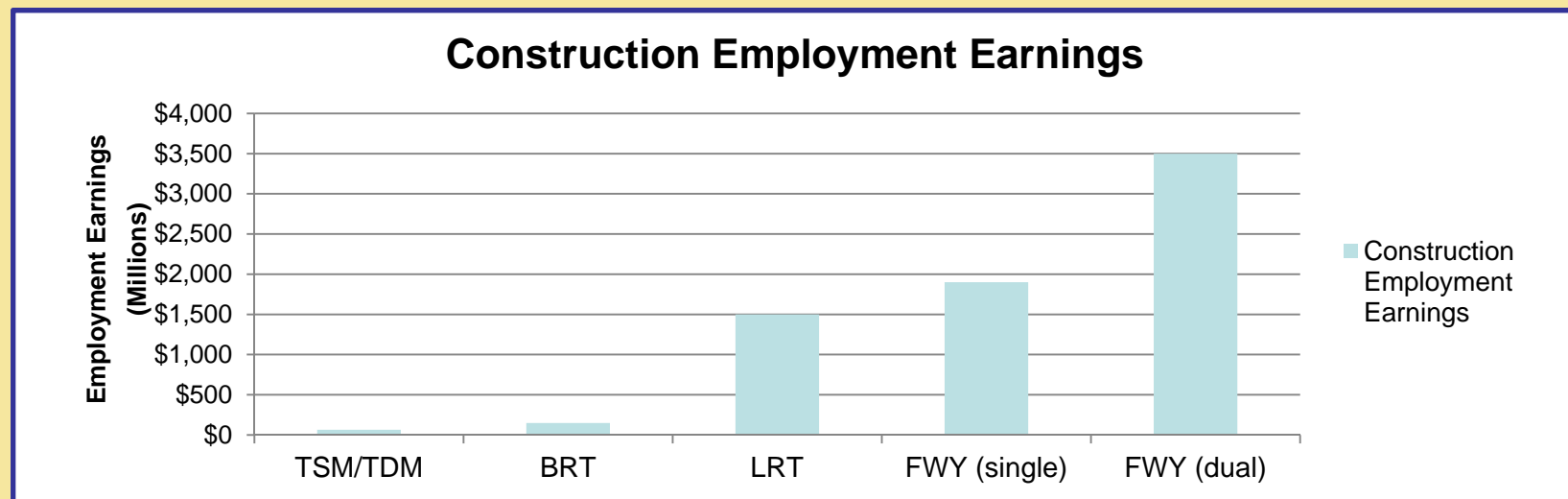
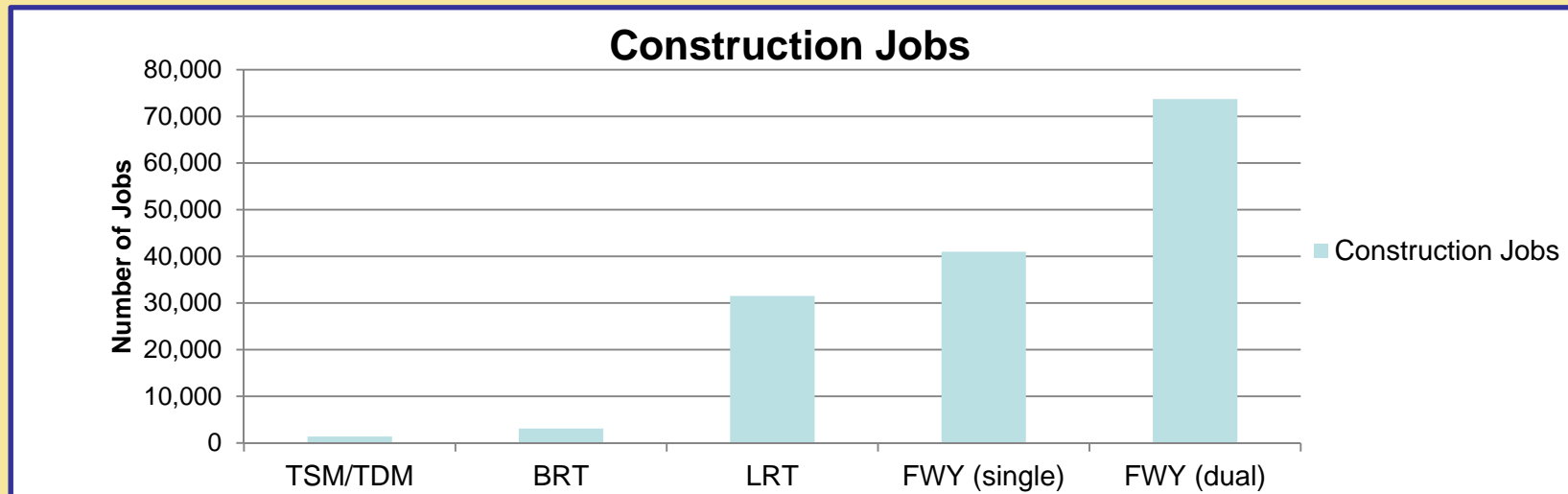
Permanent Parking Space Loss



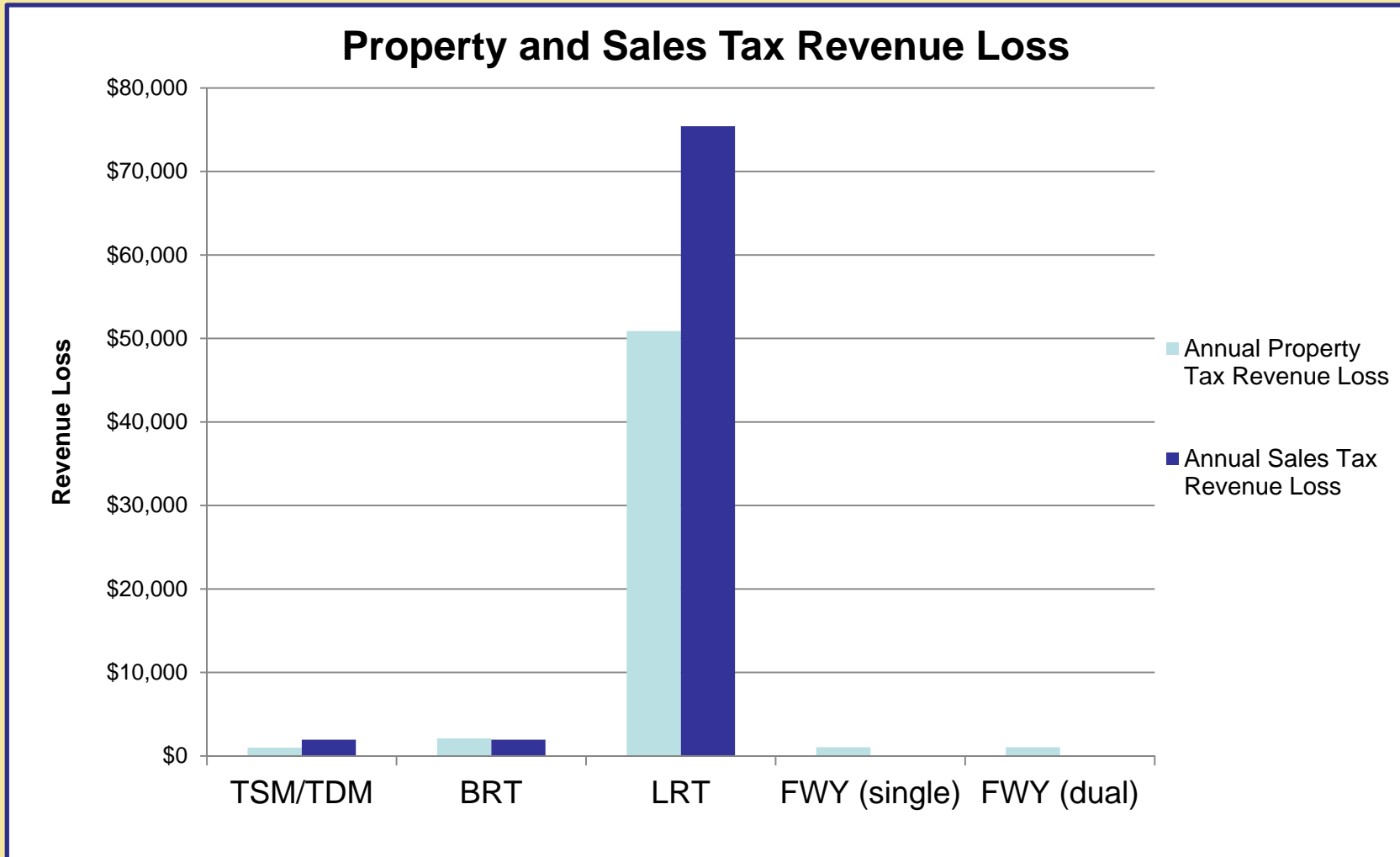
Employment/Fiscal Impacts



Employment/Fiscal Impacts



Property and Sales Tax Revenue Loss



Visual Effects

	TSM/TDM	BRT	LRT	Freeway Tunnel
Physical change/visible impacts	Minor	Low	Moderately low to moderate	Moderately low to moderate
Lighting	Minimal	Minimal	Low	None
Glare	Minimal	Minimal	Low	Minimal
Shade/Shadow	None	Minimal	Low	Minimal
Noise barrier visual impact	Low to high	Moderate to high	Low to high	Moderate to high

Visual Simulations



Proposed Bus Rapid Transit Lane (BRT) at 245 Fair Oaks Avenue in South Pasadena



Light Rail Transit crossing the I-10 Freeway



LRT maintenance yard at Valley Blvd.



Freeway Tunnel proposed northern portal

Visual Simulations



Existing Condition



Existing Condition



**Freeway Tunnel: Proposed Operation
Maintenance Building (OMC)**



**Freeway Tunnel: Proposed View at W. Colorado
Blvd.**

Cultural Resources

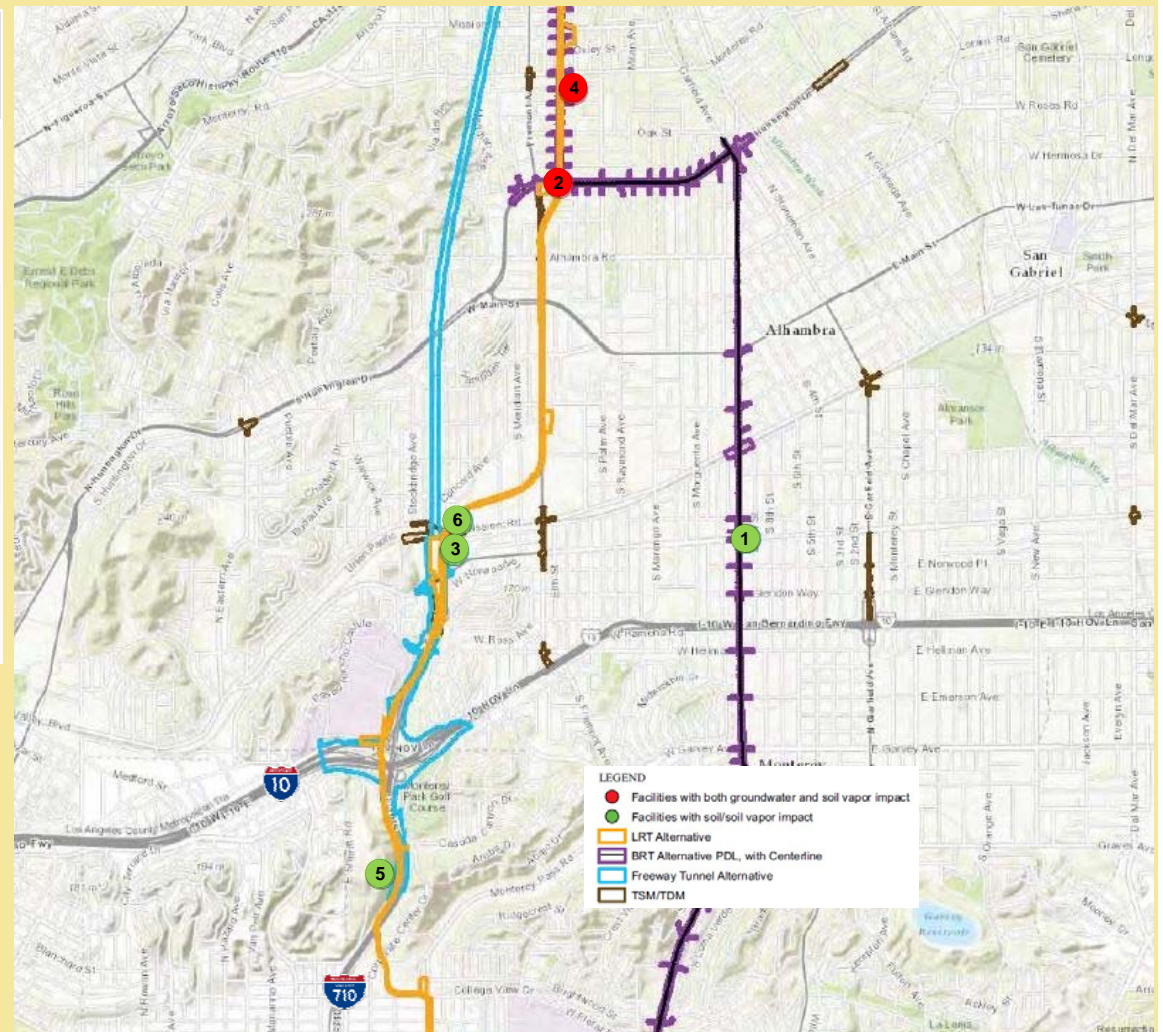
- 2,220 properties in project APE; 73 are listed in or eligible for the National Register:
 - TSM/TDM: 11 historic properties evaluated
 - No adverse effect
 - BRT: 17 historic properties evaluated
 - No adverse effect for 11 properties
 - No adverse effect with Standard Conditions for 6 properties
 - LRT: 17 historic properties evaluated
 - No adverse effect for 10 properties
 - No adverse effect without Standard Conditions for 7 properties
 - Freeway Tunnel: 51 historic properties evaluated
 - No adverse effect

Geology and Soils

	TSM/TDM	BRT	LRT	Freeway Tunnel
Fault rupture, seismically-induced ground motion, liquefaction, and/or landslides	Yes	Yes	Yes	Yes
Naturally occurring oil or gas encountered during construction	Low Potential	Low Potential	Low to Moderate Potential	Low to Moderate Potential
Settlement above and adjacent to tunnel due to tunnel boring	NA	NA	Low Potential	Low Potential

Hazardous Waste

Subject Property No.	Facility	Alternative(s) Affected
1	Former Circle K Stores	BRT
2	Fashion Master Cleaners	BRT, LRT, TSM/TDM (I-10)
3	Railroad ROW	TSM/TDM (Other Road Improvement T-1)
4	Elite Cleaners	BRT, LRT
5	Blanchard Landfill	LRT
6	Mercury Die/ Mission Corrugated	LRT, Freeway Tunnel, TSM/TDM (Other Road Improvement T-1)

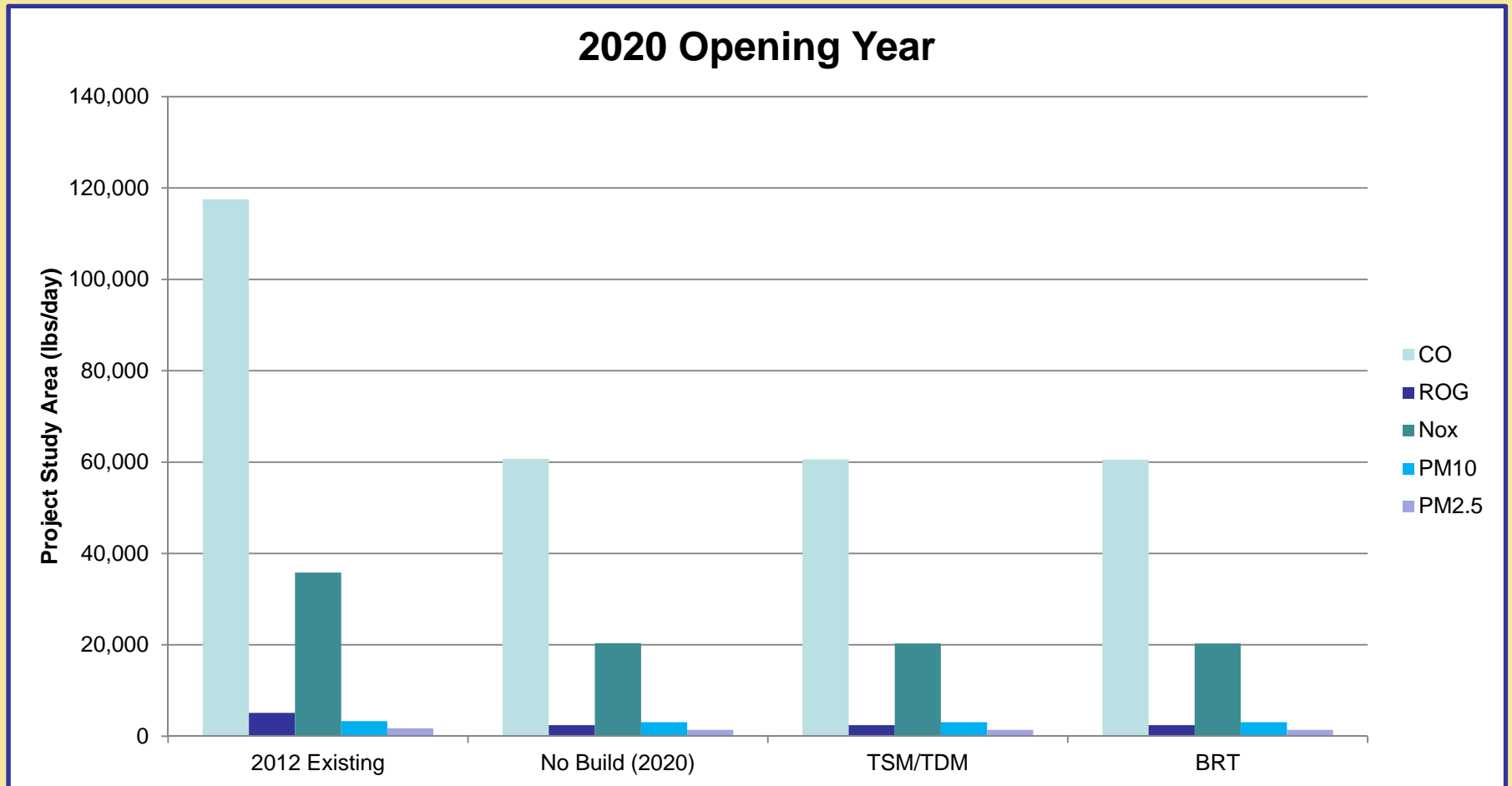


Air Quality - Conformity

- Freeway Tunnel, tolled operational variation: consistent with the 2012 RTP and 2015 FTIP
- TSM/TDM, BRT & LRT – not considered Projects of Air Quality Concern (POAQC) by Transportation Conformity Working Group (TCWG)
- Freeway Tunnel - additional analysis for conformity will be conducted if the freeway tunnel is identified as the preferred alternative

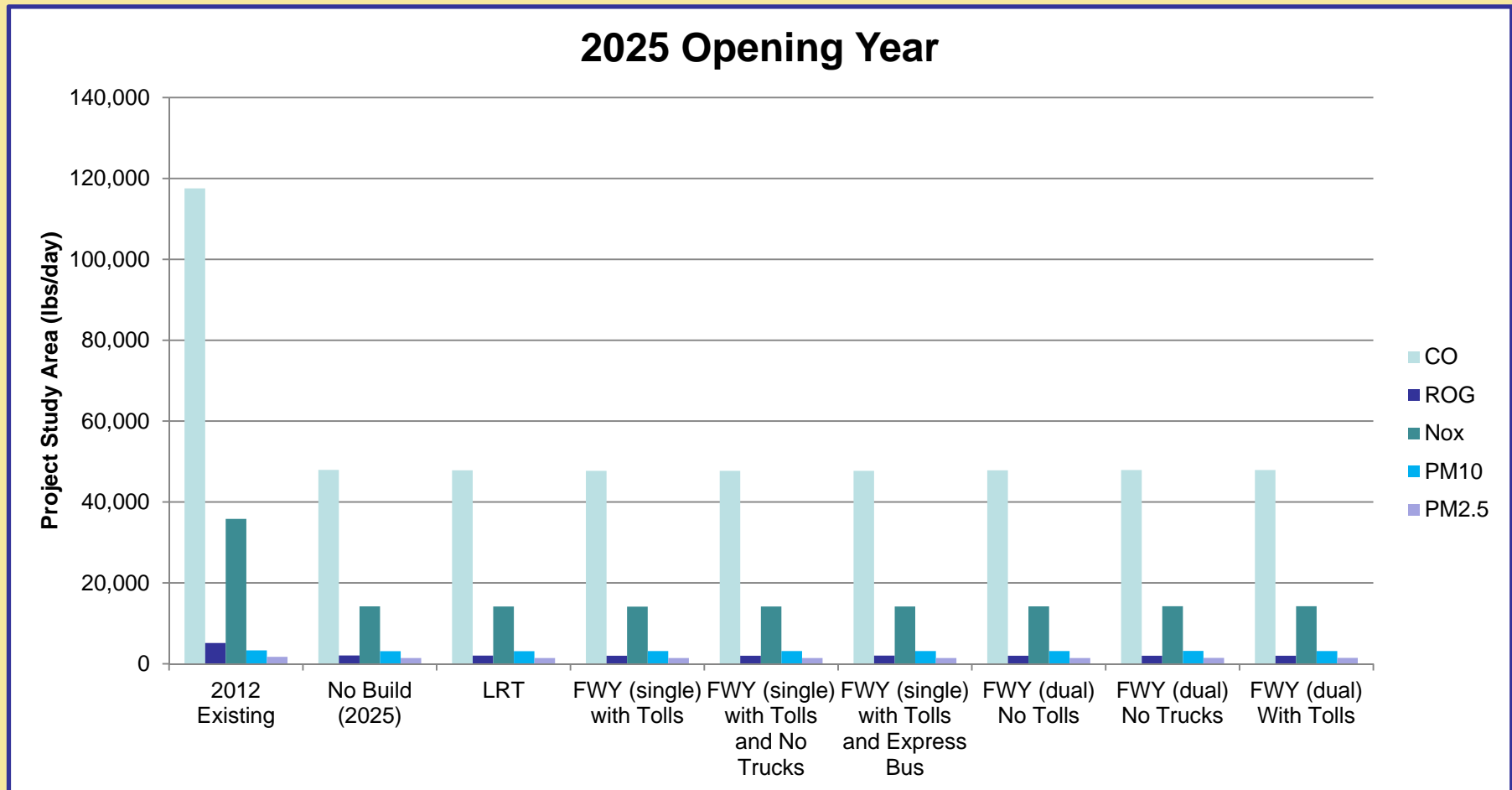
Air Quality

Criteria Pollutants – 2020 Opening Year

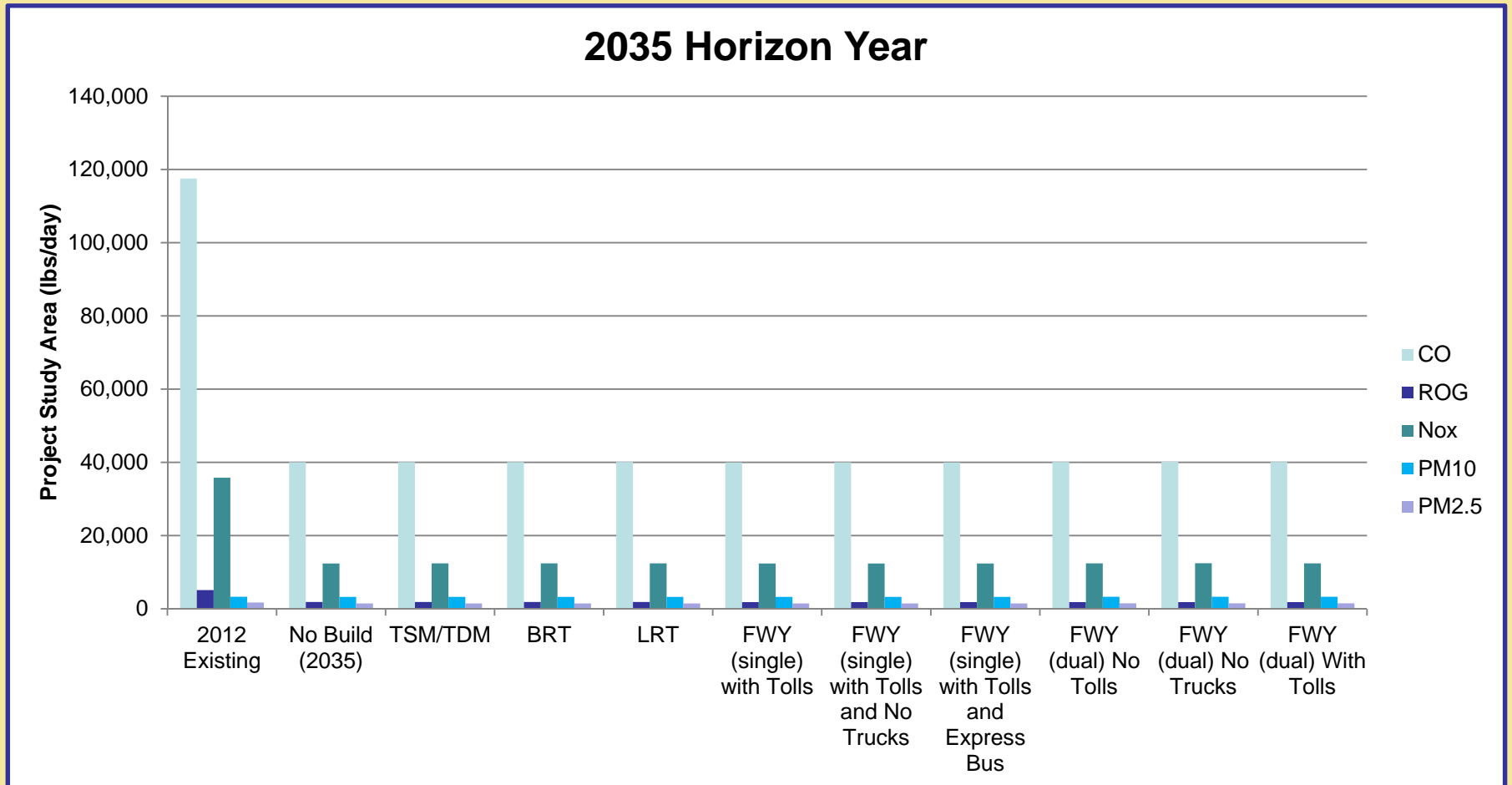


Air Quality

Criteria Pollutants – 2025 Opening Year



Air Quality Criteria Pollutants – 2035



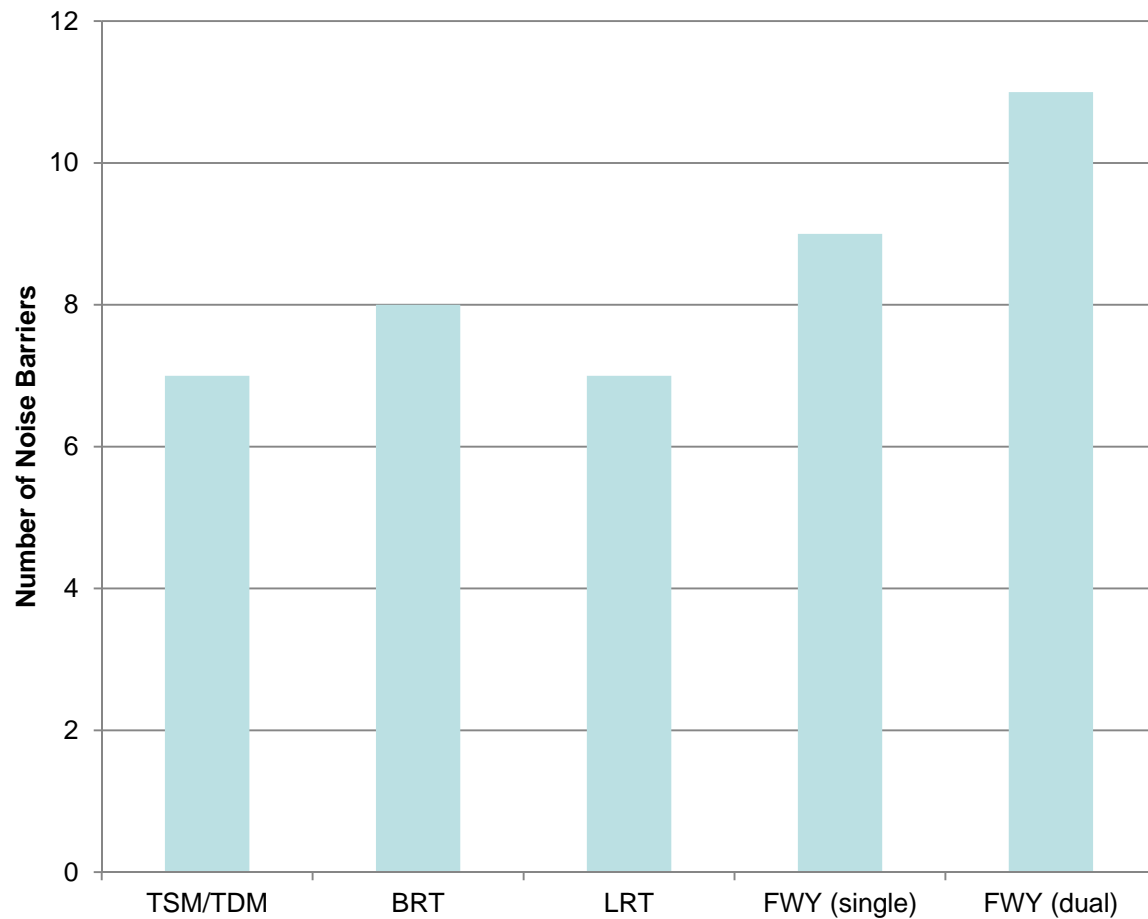
Noise

- FHWA Noise Abatement Criteria (NAC) and FTA Criteria used to determine when a noise effect would occur
- Receptors approaching and exceeding noise criteria prior to abatement:

TSM/TDM	BRT	LRT	Freeway Tunnel	
			Single-bore	Dual-bore
27 receptors approach or exceed NAC	9 receptors approach or exceed NAC	12 moderate impact receptors 5 severe impact receptors	66 receptors approach or exceed NAC	75 approach or receptors exceed NAC

Noise Abatement

Recommended Noise Barriers



■ Recommended Noise Barriers for the Build Alternative*

*Includes Recommended Noise Barriers for the TSM/TDM Improvements



Ground-borne Noise and Vibration

LRT Alternative

- Potential operational ground-borne noise and vibration impacts to 450 residential buildings and 1 commercial office building
- No ground-borne noise and vibration impacts with implementation of standard vibration control measures

Other Alternatives

- No impacts associated with ground-borne noise and vibration from the operation of the other Build Alternatives

Construction Impacts

- Temporary lane restrictions, road and ramp closures, and detours
- Emergency service travel delays
- Groundwater dewatering during construction (LRT and Freeway Tunnel)
- Temporary air quality, noise and ground-borne vibration impacts associated with construction
- Encountering hazardous materials
- Hauling excavated materials from tunnel boring using freeways and/or rail
 - LRT station excavation would use local streets

Health Risk Assessment

- Existing conditions:
 - Cancer risk estimated about 100 in a million near most highways/principal arterials
 - Cancer risk estimated over 250 in a million near I-210 (east of SR 710) and I-5.
- Decrease of cancer risk in the study area for all alternatives compared to existing conditions
 - Reduction in cancer risks within the study area on local arterials
 - Higher reduction adjacent to freeways compared to existing conditions
 - Decrease attributed to stringent emission standards, cleaner fleets, improved fuel efficiency, shifting of traffic for each of the build alternatives, etc.
- Locations with greater existing VMT will have greater cancer risk reduction in the future
- The overall regional reduction of cancer risks considers emissions from the ventilation structure
 - Particulate matter emissions are substantially reduced by scrubbing and dispersion

CEQA Conclusions

Unavoidable Significant Environmental Effects:

- Paleontological resources
- Inconsistency with local plans
- Impacts to Study Area intersections/freeway segments
- Views of LRT from two locations
- Cumulative impacts
 - Visual (LRT Alternative Only)

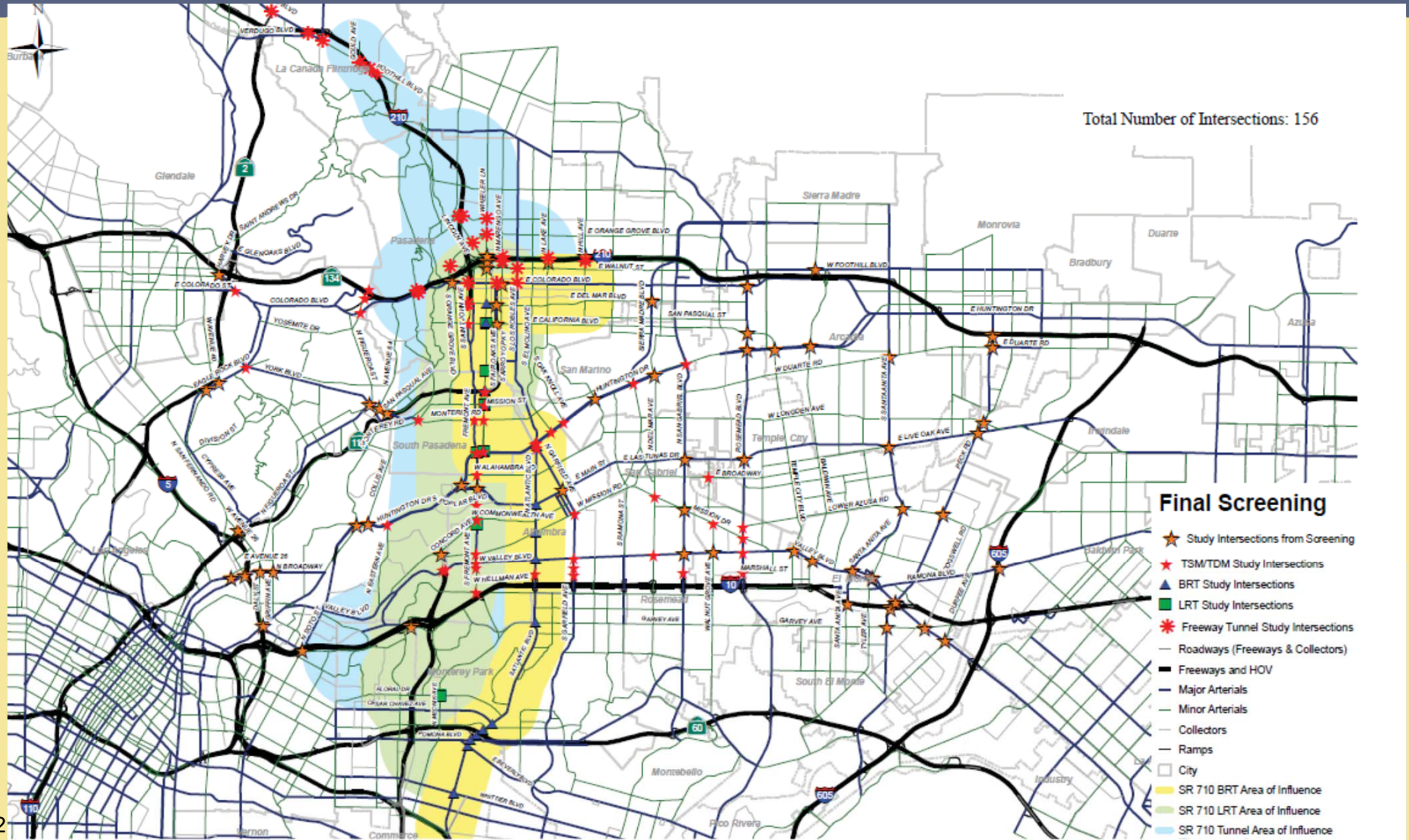
CEQA/NEPA Process

- Comments on Draft EIR/EIS will be accepted during public review period
 - Written comments
 - Verbal comments from public hearing
 - Comments should address substantive concerns on the technical analysis provided in the EIR/EIS

Travel Demand Forecasting Summary



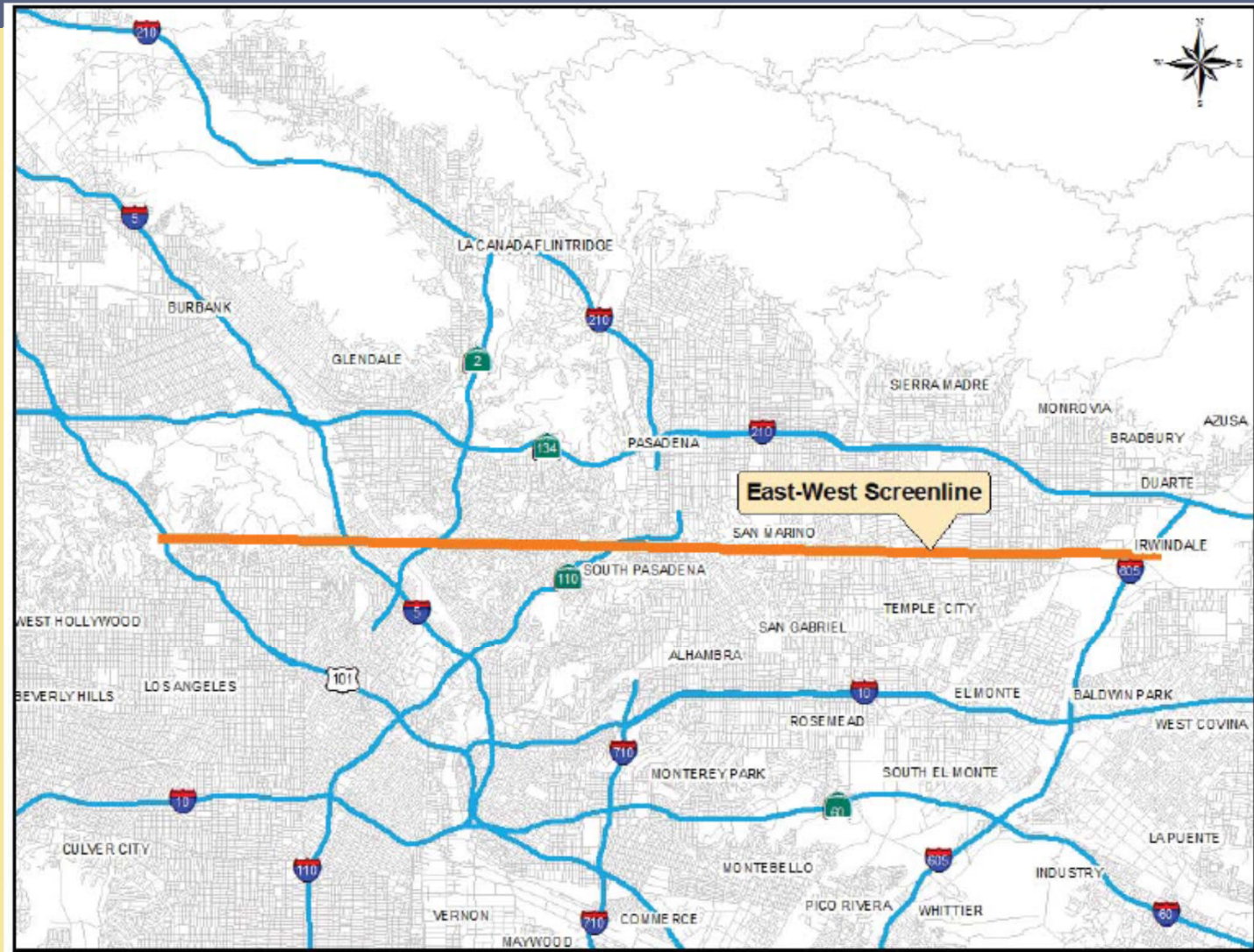
Traffic Analysis Study Area - Intersections



Performance Measures for Travel Forecasting

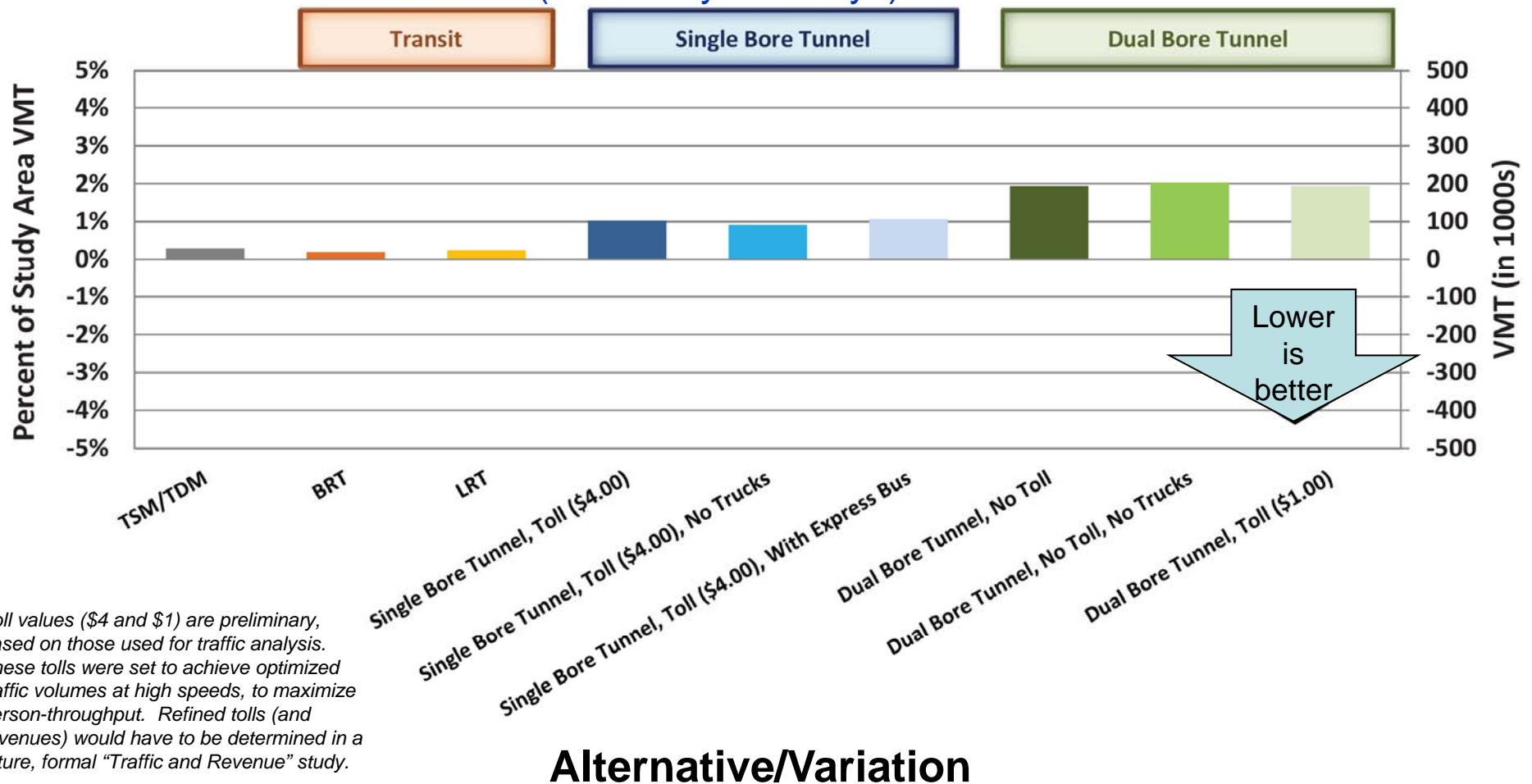
- System: VMT, travel time, throughput (arterial and freeway), employment accessibility
- Highway: Volume served, traffic diversion to local arterials, use of arterials for long trips, travel time improvement
- Transit: new transit trips, transit mode share, north-south transit throughput, transit accessibility

East-West Screenline



Change in VMT (Study Area) vs. 2035 No Build

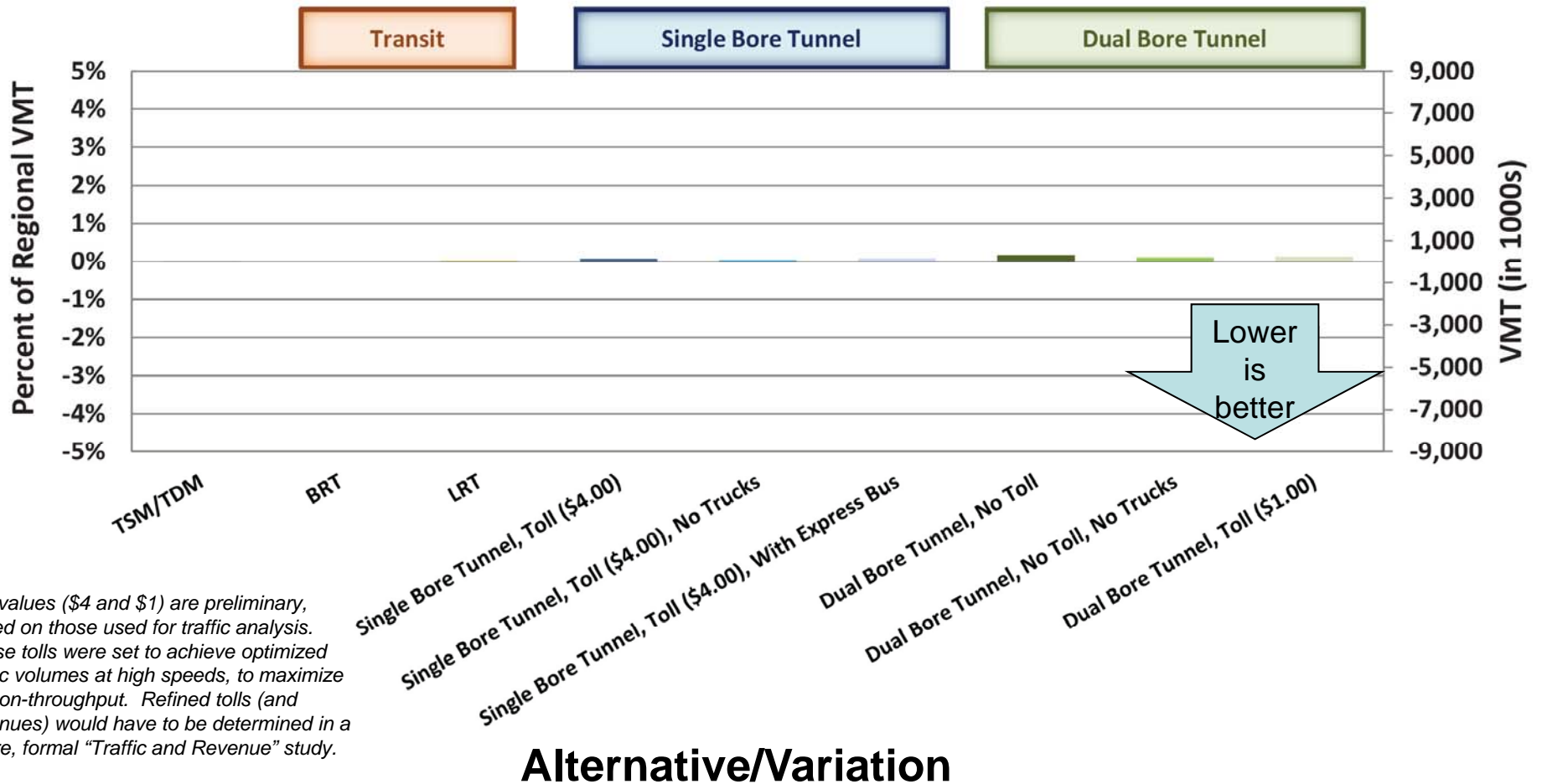
Additional roadway capacity attracts traffic from local streets
(served by freeways).



Toll values (\$4 and \$1) are preliminary, based on those used for traffic analysis. These tolls were set to achieve optimized traffic volumes at high speeds, to maximize person-throughput. Refined tolls (and revenues) would have to be determined in a future, formal "Traffic and Revenue" study.

Change in VMT (Region) vs. 2035 No Build

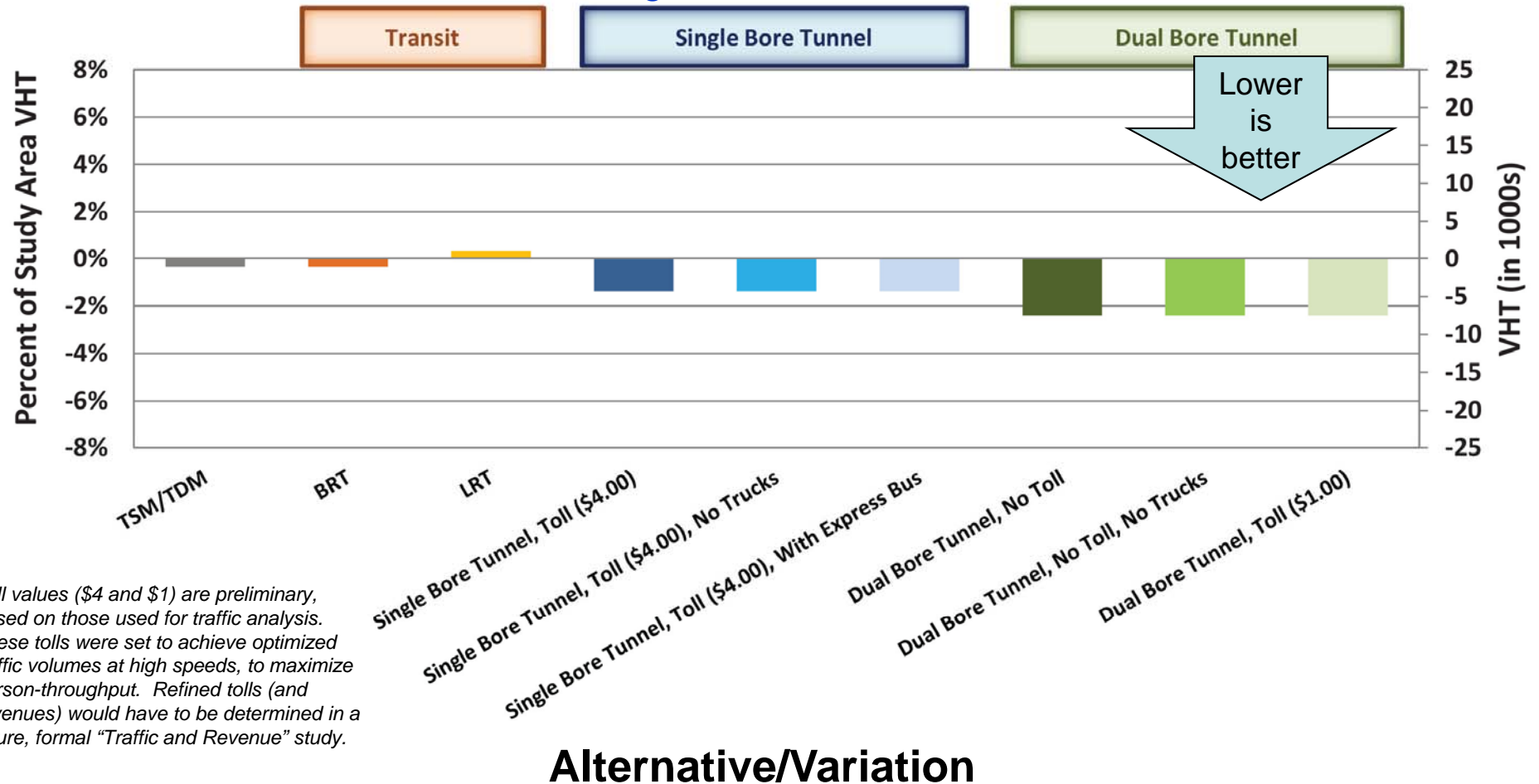
Regional VMT changes are near zero, as traffic is redistributed.



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Change in VHT (Study Area) vs. 2035 No Build

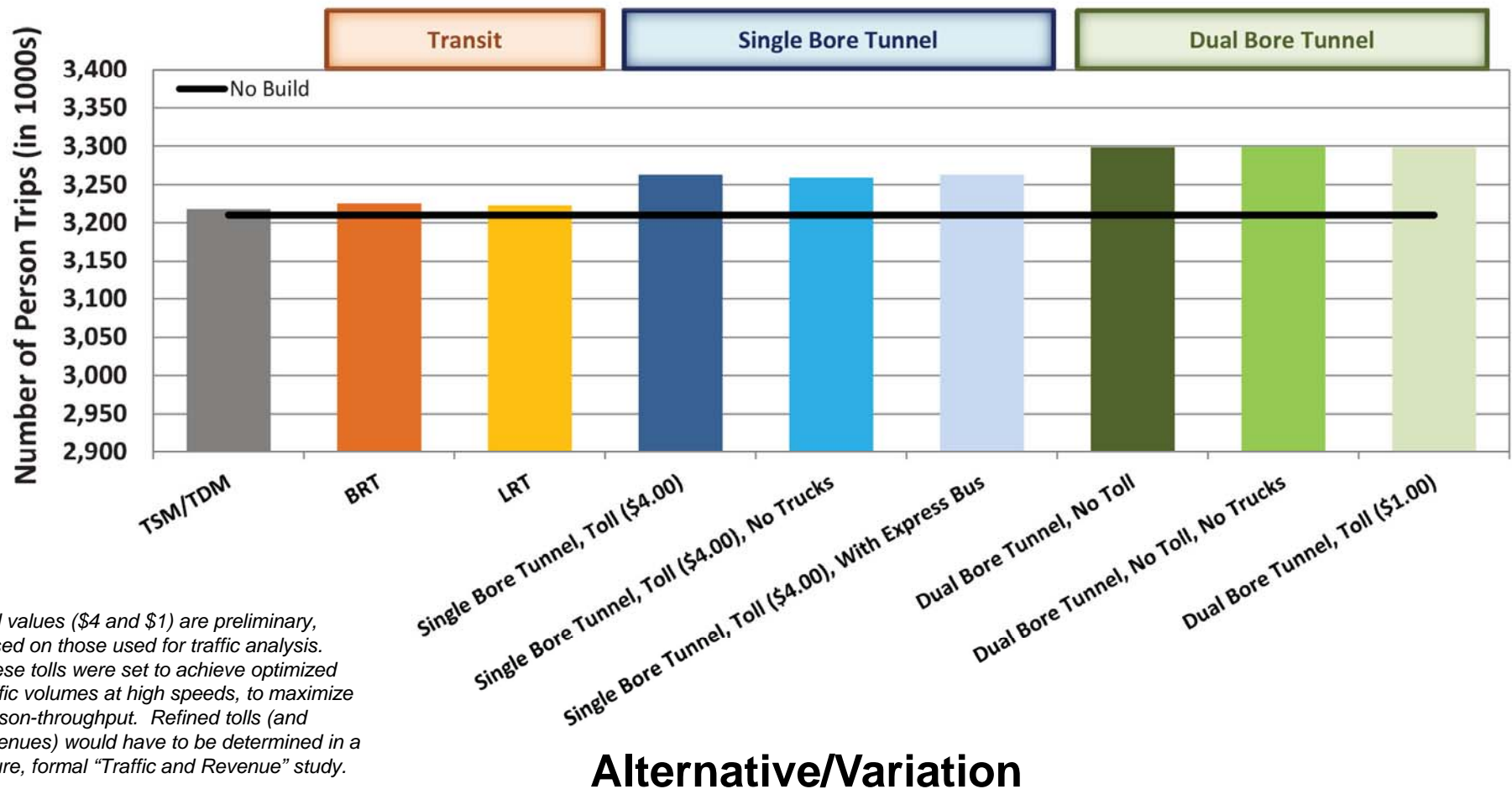
Study area travel time (VHT) drops as more roadway capacity is added, even though VMT increases.



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Person Trips Passing East-West Screenline

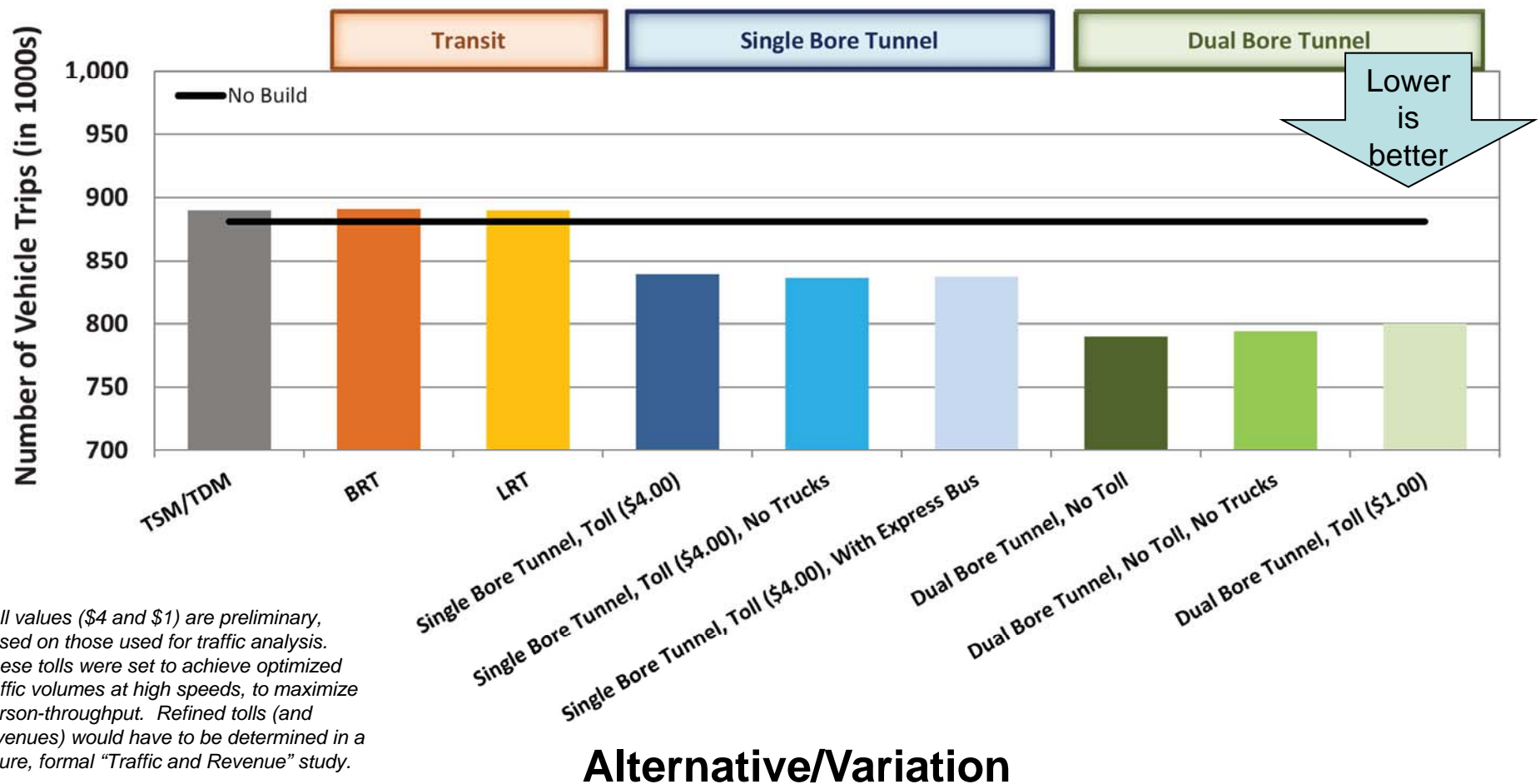
All alternatives serve more north-south travel.



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Volume Crossing Screenline (Arterials)

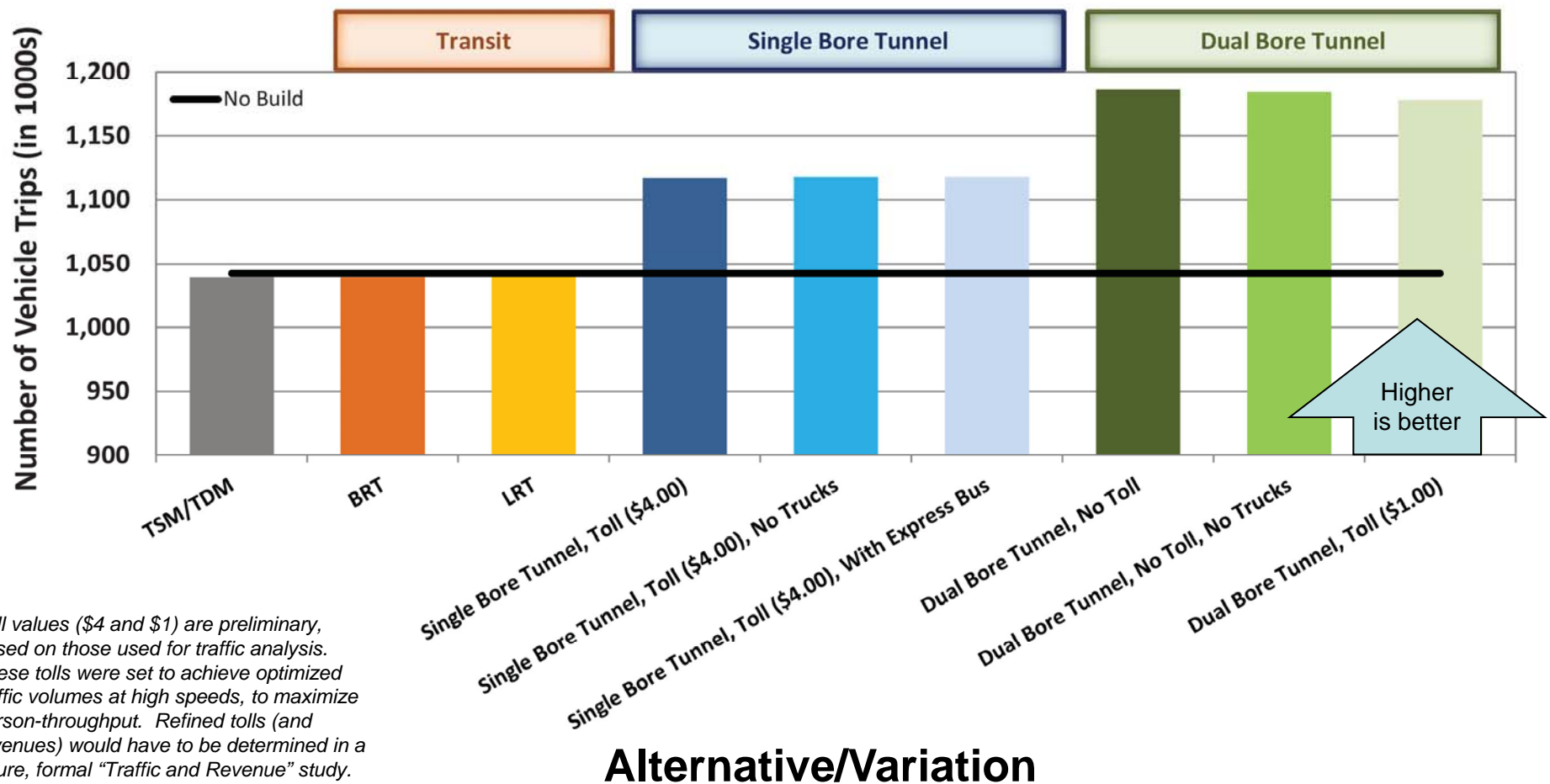
Arterial traffic volume is reduced with the freeway tunnel compared to transit alternatives.



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Volume Crossing Screenline (Freeways)

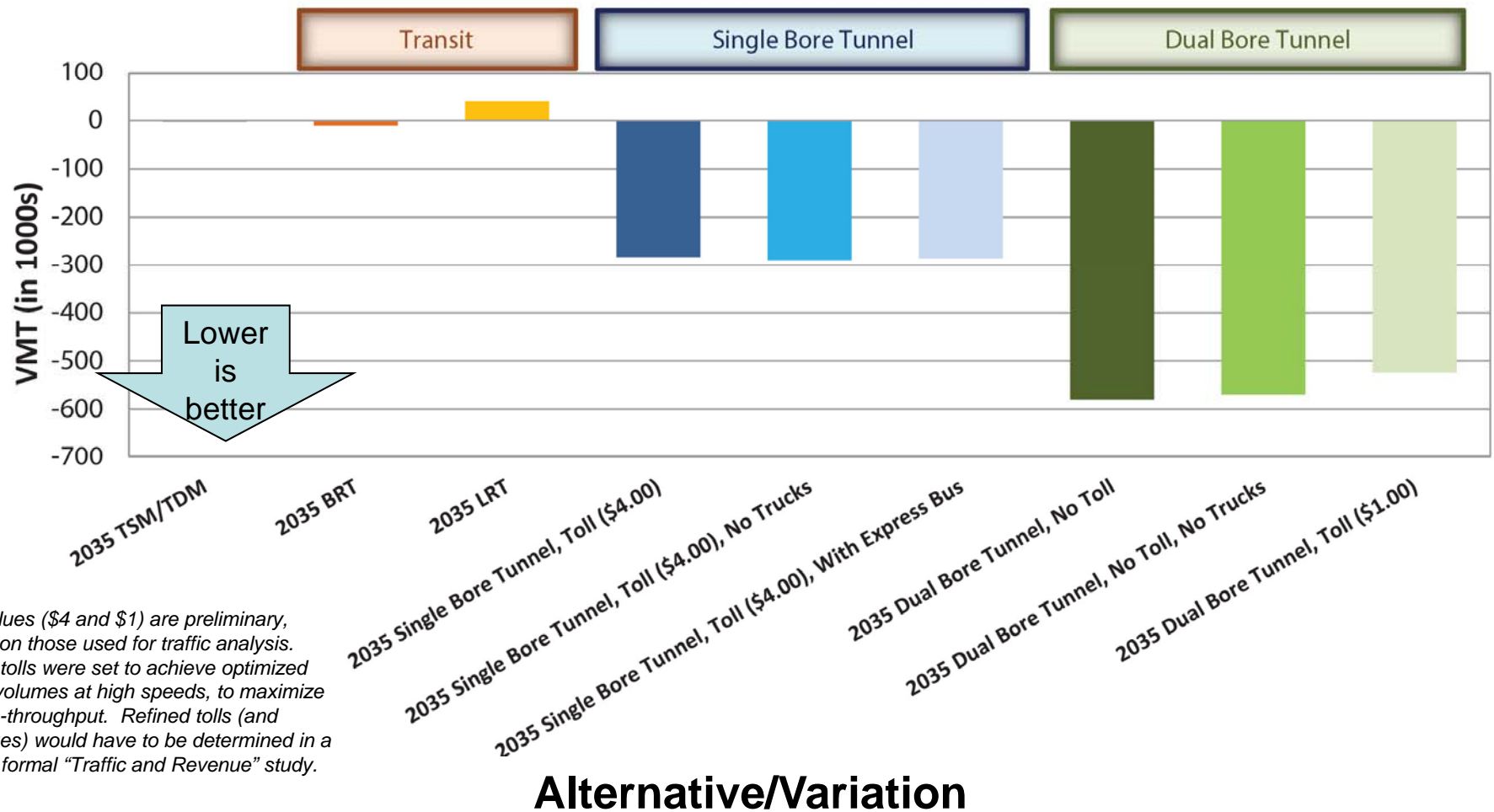
Additional freeway capacity serves more vehicle trips.



Toll values (\$4 and \$1) are preliminary, based on those used for traffic analysis. These tolls were set to achieve optimized traffic volumes at high speeds, to maximize person-throughput. Refined tolls (and revenues) would have to be determined in a future, formal "Traffic and Revenue" study.

Change in Arterial VMT (Study Area) vs. 2035 No Build

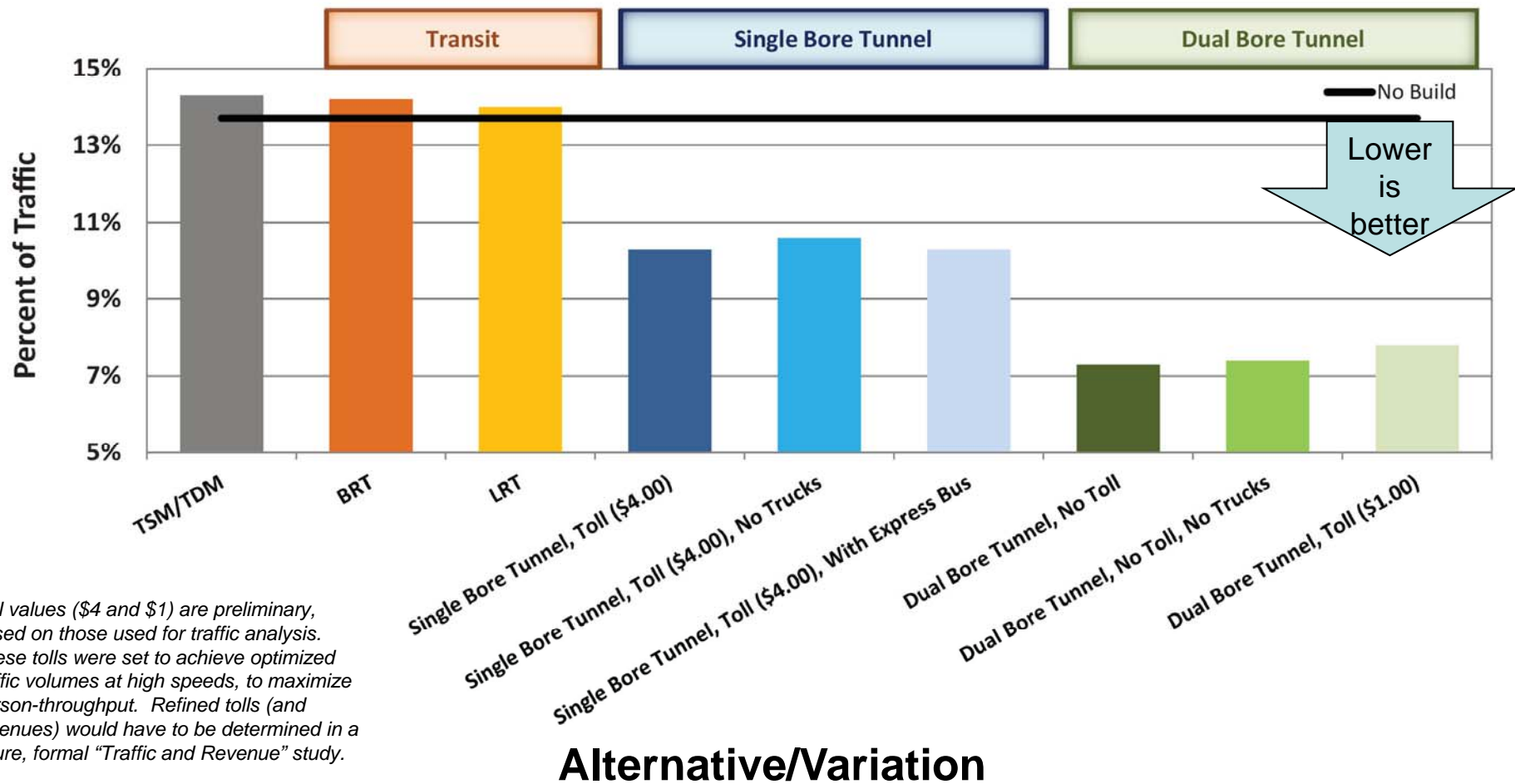
Arterial VMT is reduced when freeway capacity is increased.



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Use of Study Area Arterials for Long Trips

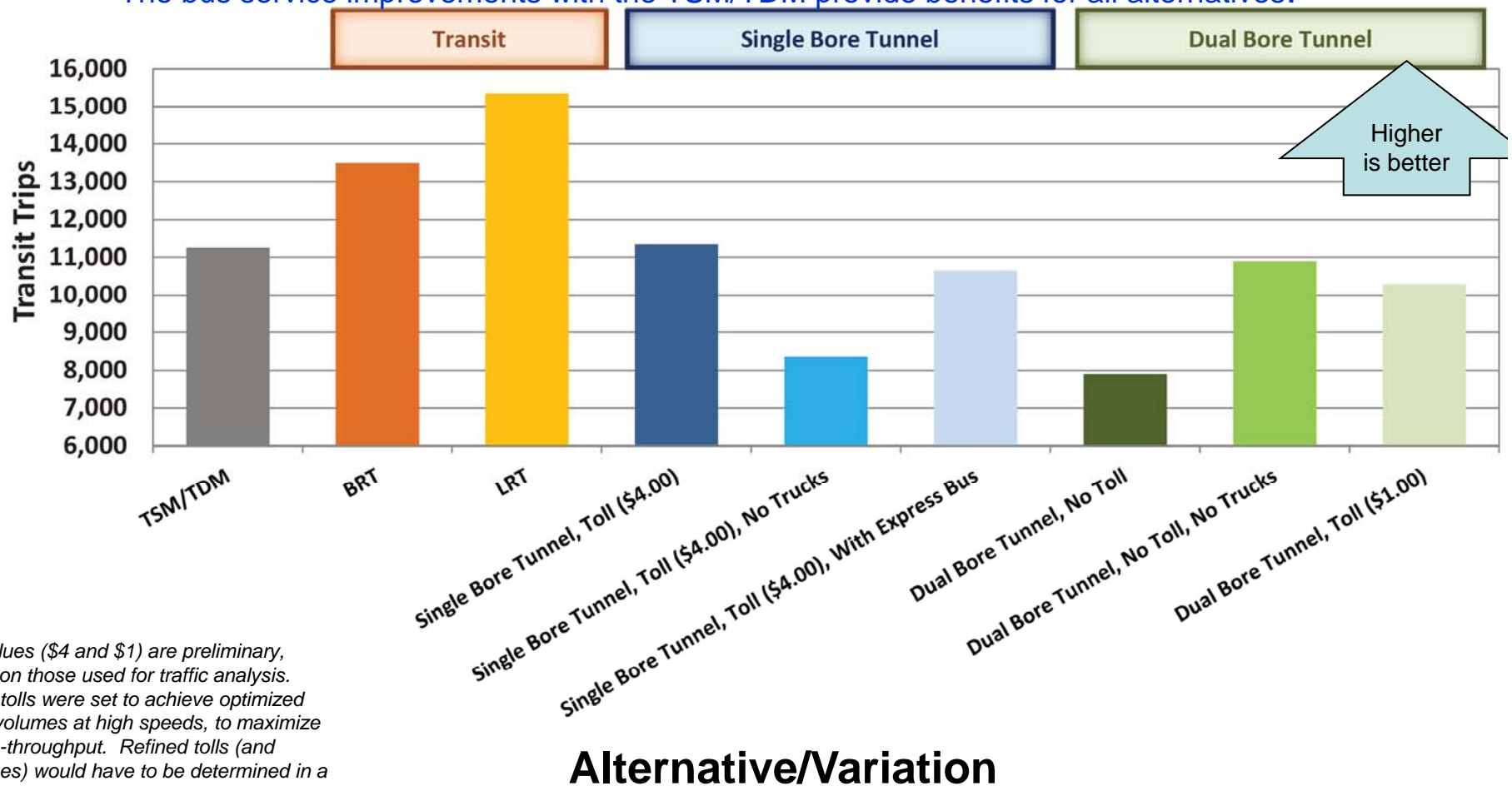
The percent of long (cut-through) trips on local streets is reduced up to half when freeway capacity is increased.



Change in Linked Transit Trips (Study Area) vs. 2035 No Build

Linked transit trips (a measure of additional use of transit) is highest for the LRT.

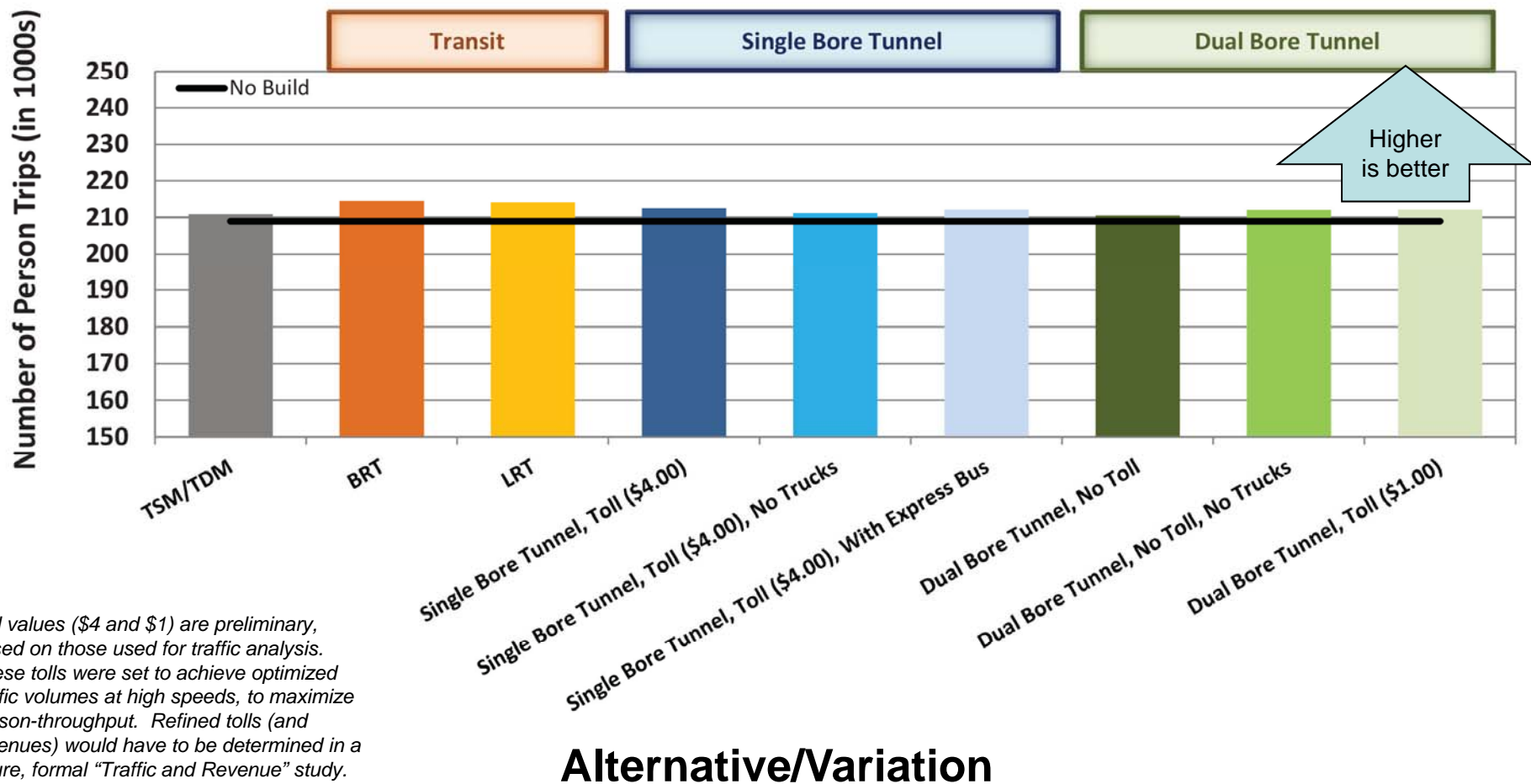
The bus service improvements with the TSM/TDM provide benefits for all alternatives.



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Transit Travel Across the Screenline

North-south transit travel in the study area is approximately the same for all alternatives.



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Analysis Overview

- Level of Service (LOS) on freeways (~600 segments) and intersections (156)
- 2020/2025 opening year and 2035 horizon year
- AM and PM peak periods
- No-Build vs. Build (9 alternatives/variations)
- Individual intersections and freeway segments listed
- Mitigation strategies assessed

Next Steps



Next Steps

- Draft EIR/EIS Released on March 6, 2015
- Circulation Period – 120 days
- Three Public Hearings – April 11 & 14, 2015 and TBD
- Response to Comments – Fall 2015
- Identification of Preferred Alternative – 2016
- Obtain Metro Board Approval – 2016
- Revise and Finalize EIR/EIS – 2016

Tentative Meeting Dates for TAC/SOAC

2015 TAC/SOAC Meeting Schedule:

August 12/13, 2015

November 11/12, 2015

Open Discussion

