I-710 South Corridor Project

Locally Preferred Alternative Recommendation

Metro Board Meeting
March 1, 2018
Item 5
I-710 South Background

- EIR/EIS initiated in 2008
- 19 miles - 16 Cities / Communities
- Multi-Agency Partnership
- Community-Driven Process
  - More than 350 meetings held during env. process
- Focus on Green Technology
- Context-Sensitive Design
- Funding Sources
  - Measure R - $590 Million
  - Measure M - $500 Million
- $65 M spent to date
Purpose

• Address escalating demand due to growth in population, employment and economic activity related to goods movement
• Address design deficiencies
• Improve traffic safety
• Improve air quality and public health
Corridor Issues

• Need for Modernization - Freeway built in 1950s/60s
• Recurring congestion during peak times due to operational issues and insufficient freeway capacity
• I-710 is the Commerce Gateway Corridor - San Pedro Bay Ports handle 40% of all nation’s imported goods
• Daily Truck Trips expected to increase from 36,000 today to approx. 55,000 by 2035
• More than half of the interchange ramps in the Corridor report higher than average accident rates
• High diesel emissions/significant air quality issues
• Freeway traffic spillage into communities
• Compromised and diminishing quality of life
I-710 South Milestones

99-05  Major Corridor Study
2008  Scoping
2012  Draft EIR/EIS Circulation
2013  Re-Circulation Decision
2015  Finalized Conceptual Design of Revised Alternatives
2016  Completed Board Motion 22.1 evaluation /incorporation
2017  Re-circulation of Draft EIR/EIS
2017  Review public comments/alternatives evaluation – 710 Advisory Committee Meetings

Metro
Alternative 5C

- Modernizes the freeway
- Enhances safety
- Improves capacity, and
- Improves air quality

($6 Billion)
Alternative 7

- Modernizes the I-710 freeway
- Adds Freight Corridor
- Improves air quality ($10 Billion)

Freight Corridor Lanes
Freight Corridor Ramps
General Purpose Lane
Auxiliary Lane / Ramp
Freeway Interchange Geometric Redesign
Local Interchange Geometric Redesign

Metro
Sample Sections

Between Firestone Blvd. and Florence Ave.

For illustrative purposes

Configuration varies throughout the corridor
Both Alternatives 5C and Alternative 7 include:

- Zero-/Near Zero- Emissions truck deployment program
  - Pursuit of funds for purchase of ZE/NZE trucks and removal of the older non-conforming trucks
  - The program will run parallel to construction of the freeway
- Community health & benefit programs
- TSM/TDM/ITS improvements
- Transit improvement recommendations
- Active transportation improvements (bike / ped. facilities)
- Pursuit of Public-Private Partnership (PPP) for financing, delivery, and operation of infrastructure improvements
- Pursuit of grants to support various improvements programs and allow for accelerated implementation
Objective
• Makes funding available to implement projects and outreach activities to improve air quality / public health

Examples of Eligible Projects
• HEPA filters in schools, day care facilities, senior centers, clinics and hospitals
• School bus or senior transport vehicle retrofit/replacement
• Community health testing, education, and outreach, mobile asthma clinics
• Greenhouse gas reduction projects: renewable power, energy efficiency upgrades, tree-planting

Eligible Grant Recipients
Communities close to I-710:
• Cities / Unincorporated LA County
• Day Care Centers / Senior Centers
• Community Health Providers
• Non-Profit Organizations (with an air quality or public health mandate)
Motion 22.1 – Items Integrated Into Project Alternatives

Completed and Integrated

✓ Evaluated right-of-way avoidance designs (Alternative 7)
  - Reduced impacts where feasible; documented where infeasible
✓ Considered ZE Truck–Only option for freight corridor (Alternative 7)
✓ Evaluated high frequency express bus transit along I-710
  - Continuing coordination with Metro Transit Ops for further evaluation
✓ Evaluated separate bike path projects within the Study Area
  - Env. Clearance proceeding with LA County support
✓ Integrated five new pedestrian/bike bridges
✓ Verified application of Complete Streets treatments
✓ Considered other elements to maximize mobility and minimize impacts within study area
Motion 22.1 – Items Integrated Into Project Alternatives

To Be Done During Construction

- Transit Incentives/additional as-needed services
- Local Hire Provisions
- Bike/Ped Safety Plan
- Neighborhood enhancements within the project area
Public Circulation

- July 21, 2017: Recirculated Draft Environmental Document released to public
- October 23, 2017: 90-day comment period closed
- Public Hearings:
  - 8/23/17 Commerce
  - 8/26/17 Paramount
  - 8/31/17 Long Beach
- Community Briefings:
  - 10/18/17 East Los Angeles
  - 10/19/17 Long Beach
Summary of Public Comments

Key Issues & Concerns:

- Preference for full Zero Emission Technologies
- Minimize Right-of-Way Impacts (i.e. avoid residential relocations and impacts to Bell Shelter and Long Beach Multi-Service Center)
- Concerns about peak-hour parking restrictions on nearby streets
- Duration of construction and impacts including ramp and street closures
- Need for more bike and pedestrian connections to LA River trail
- Environmental justice and air quality concerns for communities near I-710
- Need to include local hire provisions in construction
- Need to fully utilize freight rail and the Alameda Corridor
How is the Preferred Alternative Determined?

**Purpose & Need**
- Congestion Relief, Mobility Benefits, Travel
- Time Savings, Safety, Air Quality

**Technical Feasibility**

**Affordability**

**Public Concerns**
- Air Quality & Health Risk, Displacements, Visual, Section 4f, & Environmental Justice

**Pref. Alt.**

**Benefits Now!**

**What can be built ASAP?**
## Comparison of Benefits and Impacts

<table>
<thead>
<tr>
<th>Evaluation Factor</th>
<th>Measure</th>
<th>Alternative 5C</th>
<th>Alternative 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobility Benefits</strong></td>
<td>Reduction in Vehicle Hours of Delay</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Congestion Relief</strong></td>
<td>I-710 Level of Service (LOS)</td>
<td>✔️</td>
<td></td>
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<tr>
<td><strong>Travel Time Improvements</strong></td>
<td>I-710 Auto / Trucks</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Travel Time Improvements</strong></td>
<td>Freight Corridor - Trucks</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>Safety Benefits</strong></td>
<td>Removes Operational Conflicts</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td><strong>Safety Benefits</strong></td>
<td>Separates Cars &amp; Trucks</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td><strong>Air Quality</strong></td>
<td>Diesel Particulate Matter and Nitrogen Oxides (NOx)</td>
<td>✔️</td>
<td>*</td>
</tr>
<tr>
<td><strong>Air Quality</strong></td>
<td>Least Amount of PM 2.5</td>
<td>✔️</td>
<td></td>
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<tr>
<td><strong>Air Quality</strong></td>
<td>Greenhouse Gases</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

* Assumes incentive funding for 18,350 ZE/NZE Trucks to use the Freight Corridor (compared to 4,000 ZE/NZE Trucks under Alt. 5C). Incentive funding would be pursued under either alternative, but it’s subject to availability.
### Comparison of Benefits and Impacts, cont.

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<thead>
<tr>
<th>Evaluation Factor</th>
<th>Measures</th>
<th>Alternative 5C</th>
<th>Alternative 7</th>
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</thead>
<tbody>
<tr>
<td><strong>Impacts</strong></td>
<td></td>
<td></td>
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<tr>
<td>Parks, rec. areas, refuges, and historic sites</td>
<td>Partial Impacts</td>
<td>✅</td>
<td></td>
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<tr>
<td></td>
<td>Full Impacts</td>
<td>✅</td>
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<tr>
<td>EJ Impacts</td>
<td>Least Adverse Effect to EJ Populations</td>
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<tr>
<td>Visual Impacts</td>
<td>Fewest Visual Impacts</td>
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<td>ROW Impacts</td>
<td>Residential Displacements</td>
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<td>109</td>
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<tr>
<td></td>
<td>Non-Res. Displacements</td>
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<td>121</td>
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<td>Sensitive Facilities Displacements</td>
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<td>206</td>
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<tr>
<td><strong>Cost</strong></td>
<td></td>
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<tr>
<td>Air Quality Cost Benefit</td>
<td>$ per lbs. Diesel Particulate Matter Reduced</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>$ per lbs. NOx Reduced</td>
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<tr>
<td><strong>Cost / Affordability</strong></td>
<td>Total Project Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordability</td>
<td></td>
<td>✅ *</td>
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<tr>
<td><strong>Constructability</strong></td>
<td>phasing and implementation of Early Action Projects</td>
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*Based on implementation of Early Action Projects*
Comparison of Benefits and Impacts, cont.

Visual Impacts

View from LARIO Trail, Looking Southwest at the I-710/SR-91 Interchange, in the City of Long Beach
## Compare NZE & ZE Truck Performance

<table>
<thead>
<tr>
<th></th>
<th>Conventional Diesel Truck</th>
<th>Near Zero Emission Truck</th>
<th>Zero Emission Truck</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Particulate Matter* (DPM) (lb/10,000 miles)</td>
<td>0.12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nitrogen Oxides* (NOx) (lb/10,000 miles)</td>
<td>38.7</td>
<td>3.9</td>
<td>0</td>
</tr>
<tr>
<td>Greenhouse Gases* (GHG) (MT CO2/10,000 miles)</td>
<td>15.1</td>
<td>15.1</td>
<td>0</td>
</tr>
<tr>
<td>Approx. number of Trucks per $100 million of Funding**</td>
<td>N/A</td>
<td>4,000 Trucks</td>
<td>1,520 Trucks</td>
</tr>
</tbody>
</table>

* Running Exhaust emission factors are based on EMFAC2014 for heavy-heavy duty trucks in Los Angeles County for calendar year 2035.

** Unit costs represent incremental, average costs of zero emissions trucks (battery electric, fuel cell vehicles) from I-710 Zero Emissions Truck Commercialization Study, assuming pre-2035 deployment (Calstart, 2013).
Maximize Number of “Clean Emissions” Trucks and Air Quality Benefits

– Begin with mix of ZE and NZE trucks in the near term

– Transition to ZE trucks as ZE trucks become commercially available and affordable.

– Partner with SCAQMD, EPA, CARB to pursue grant funding outside of the project programmed funds to support health-benefit investments.
Project Schedule:
What’s Next?
Next Steps

**Winter 2018**
- Metro Board to adopt the Preferred Alternative for FEIR/FEIS
- Initiate Work on FEIR/FEIS for Preferred Alternative
- Coordinate with Air Agencies to:
  - Refine and Enhance I-710 ZE and NZE Truck Program
  - Seek Funding

**Spring 2018**
- Identify scopes and order of pursuit of Early Action highway improvement projects based on independent utility, benefits, and availability of funds

**Summer 2018**
- Complete the Environmental Process
- Caltrans to approve the Final Environmental Document

**Winter 2019**
- Release RFPs for Final Design of Early Action Projects
Early Actions Candidates

All Estimates are Present Value and Subject to Change.

$592M
Anaheim
PCH

$127M
Willow

$12M
Hill

$8M
Spring

$134M
Del Amo

$134M
LB Blvd

$220M
Alondra

$151M
Shoreline/7th

+ $200 M in Arterial improvements

$157M
Imperial

$18M
Clara

$18M
Slauson

$91M
Firestone

$144M
Florence

$152M
Atlantic-Bandini

$3M
Humphreys

$60M
Southern

All Estimates are Present Value and Subject to Change.
Early Action Objectives & Outcomes

1. Work within funding constraints
2. Address today’s problems
3. Deliver safety, mobility, and health benefits sooner

Identify Candidate Projects with:
- Verified Benefits
- Lower Capital Costs
- Lower Property Impacts
- Shorter Overall Schedule

Several Early Action Candidates:
- Include Arterial Improvements and Safer Interchanges with:
  - New/Improved Signals (incl. signal synch)
  - Improved ped/bike facilities on city streets
- Include New Ped/Bike Crossings over the freeway and across the LA River for community connectivity
- Result in reduced interim relocations needed for the whole project.
Next Steps

– Air Quality Improvements
  • NZE/ZE truck Program - purchases/subsidies
  • Pollution source controls and elimination (ports and industry)
  • SCAQMD and all project partners

– Active Transportation
  • Bike and pedestrian projects (potential early action)
  • Safety education and awareness programs
  • Metro ATP group and local jurisdictions
  • LA County for the LA River Bike projects

– Community Health Benefits Grant Program
  • Grants for improvements at sensitive receptors
  • Community-agency dialogue (development of guidelines)
  • Community health risk prevention/reduction
  • LA County Health Department and local jurisdictions
Next Steps

– **Ports AQ Improvement Programs**
  - Clean port operations
  - Community engagement
  - Ports and cities of LA and LB

– **Freeway Operation Safety programs/ITS**
  - Regular advisory and informational bulletins/progress reports
  - Community engagement
  - Truck safety and speed monitoring/control
  - Speed and emission enforcement
  - Caltrans, Metro, CHP, Local law enforcement