

*Mobility. Environment. Community. Economy. Technology*



I-710 Corridor Project EIR/EIS

*metro.net*

# Overview – Description of I-710 Corridor Project Alternatives

## Technical Advisory Committee

March 16, 2011



# I-710 Corridor Project Study Area

**Project Limits:  
Ocean Blvd. to SR-60**



# Purpose and Need

- **Improve air quality and public health**
- **Improve traffic safety**
- **Reduce traffic congestion**
- **Modernize freeway design**
- **Address increased traffic resulting from growth related to goods movement**

# I-710 Corridor Alternatives

**Alt. 1**

No Build Improvements

**Alt. 5**

Widen I-710 to 10 Lanes	Fix I-710 Geometrics
Arterial System Improvements	
No Build Improvements	Added Transit

**Alt. 6A**

Freight Corridor (FC) - 4 Lanes	
Widen I-710 to 10 Lanes	Fix I-710 Geometrics
Arterial System Improvements	
No Build Improvements	Added Transit

**Alt. 6B**

Freight Corridor (FC) - 4 Lanes	
Widen I-710 to 10 Lanes	Fix I-710 Geometrics
Arterial System Improvements	
No Build Improvements	Added Transit

*Operational / Technology FC Components*

- Zero Emissions Vehicles
- Automated Guidance

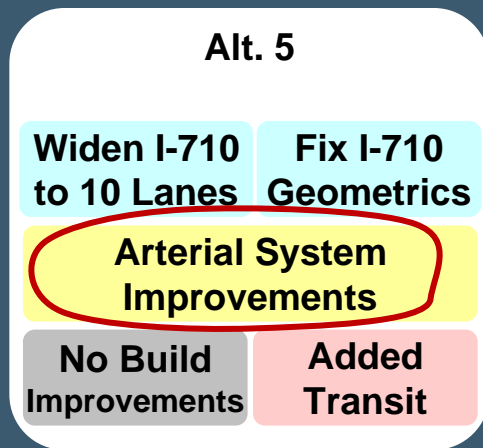
# Alternative 1 – No Build Improvements

**Alt. 1**

**No Build  
Improvements**

- **Required under CEQA and NEPA**
- **Represents the Future (2035) Baseline Condition**
- **Consists of Planned and Committed Projects, such as:**
  - **Enhanced Goods Movement by Rail Projects**
  - **Clean Trucks Program**
  - **Expanded Night Gate Operations at Ports**
  - **I-710 Pavement Rehabilitation Project**
  - **Added Lanes to I-5 between the Orange County Line and I-605**
  - **Traffic Signal Coordination Projects on Key Arterials throughout the I-710 Corridor Study Area**

# Alternative 5 – Build Alternative



## *Element: Arterial System Improvements*

- Peak Period Parking Restrictions (Key North-South Arterials)
- Proposes Signal Timing Improvements to 22 Intersections
- Adds Modest Geometric Improvements to 49 Intersections
- Adds Higher-Level (Capacity) Improvements to 14 Intersections

# Alternative 5 – Build Alternative

Alt. 5

Widen I-710  
to 10 Lanes

Fix I-710  
Geometrics

Arterial System  
Improvements

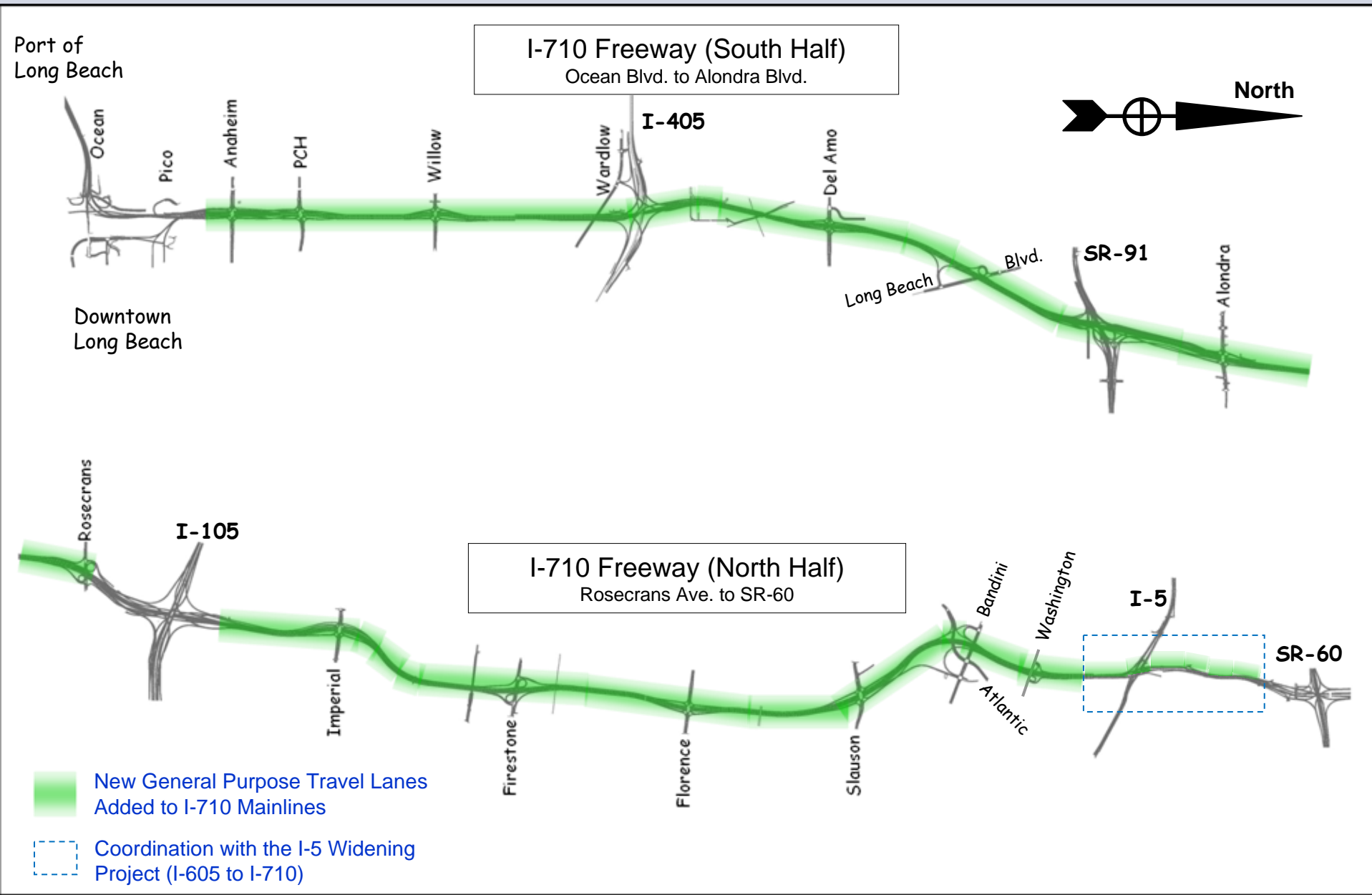
No Build  
Improvements

Added  
Transit

## *Element: Widen I-710 to 10 Lanes*

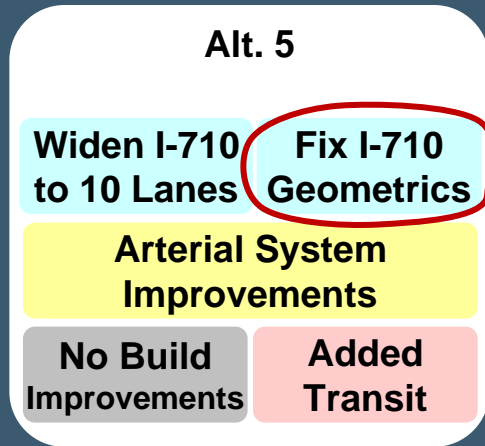
- Adds General Purpose Lanes to Several Sections of I-710
- I-710 Becomes 10 Lanes (5 Lanes in Each Direction)
- Improves Traffic Flow for All Vehicle Types

# Element: Widen I-710 to 10 Lanes





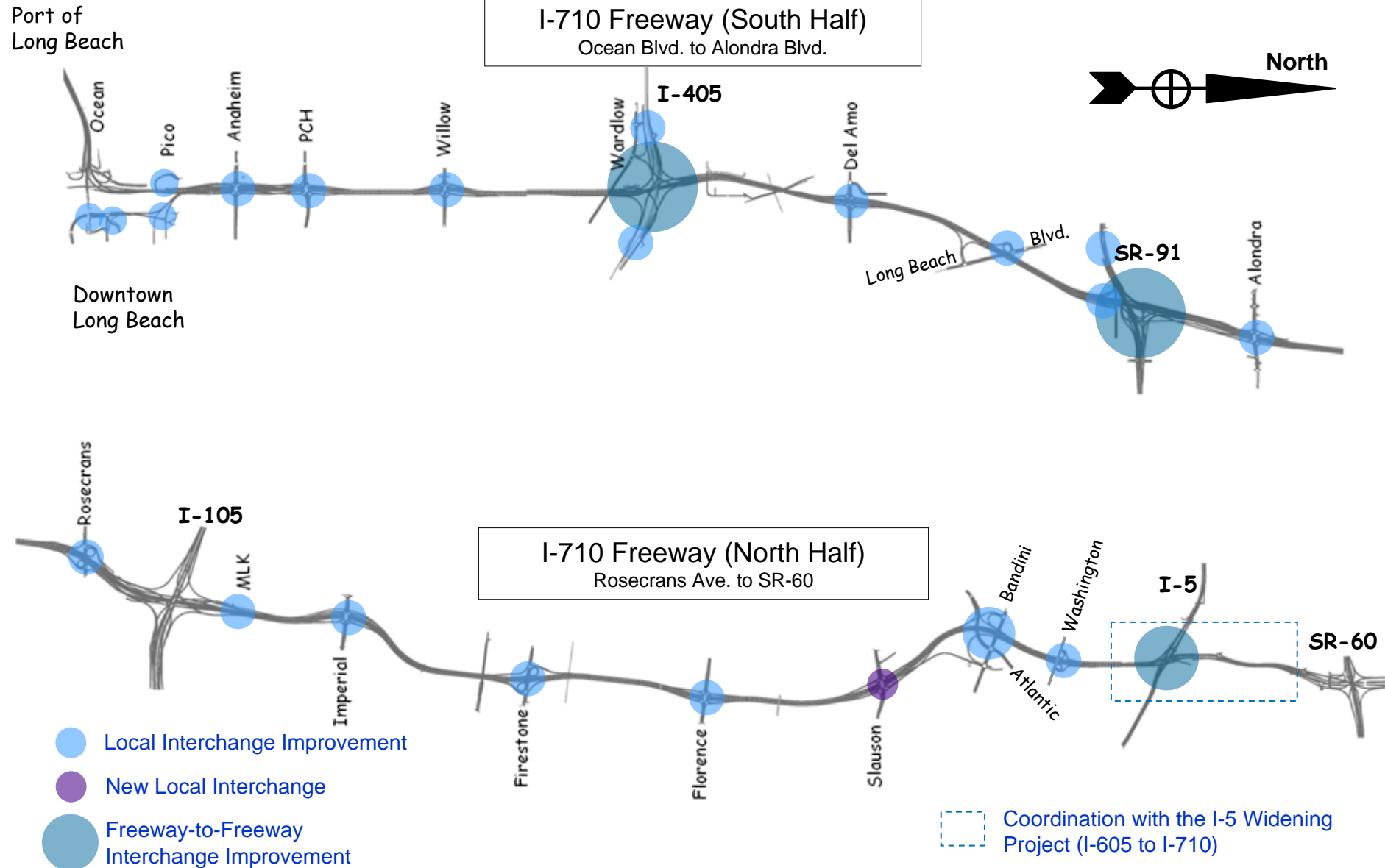
# Alternative 5 – Build Alternative



## *Element: Improve I-710 Geometrics / Design*

- Upgrades the Geometric Design of All the Local I-710 Interchanges
- Adds Auxiliary Lanes to I-710 Mainlines Where Needed to Improve Traffic Operations
- Improves the Geometrics of Key Freeway-to-Freeway Interchanges:
  - I-405
  - SR-91
  - I-5

# Element: Improve I-710 Geometrics



# Example – Local Interchange



# Alternative 6A – Build Alternative

Alt. 6A

**Freight Corridor  
(FC) - 4 Lanes**

Widen I-710  
to 10 Lanes

Fix I-710  
Geometrics

Arterial System  
Improvements

No Build  
Improvements

Added  
Transit

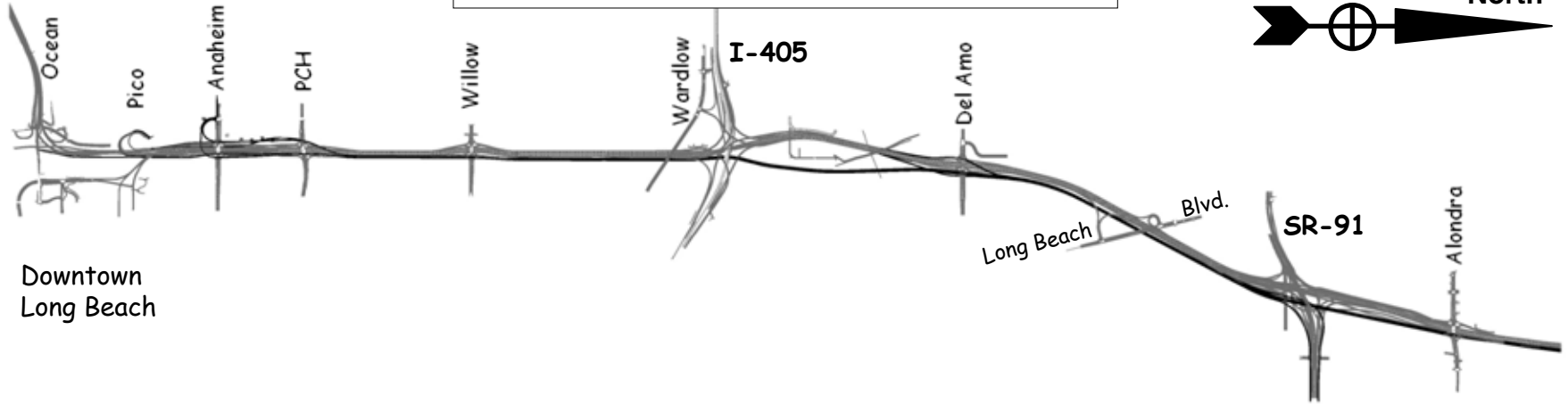
## *Element: Adds Freight Corridor*

- Adds Exclusive Travel Lanes Dedicated to Freight Movement
- Two Lanes in Each Direction
- This Option (Alt. 6A ) Presumes Conventional Trucks
- Parallels I-710 Freeway
- Makes Best Use of Utility Corridors to Minimize ROW Impacts to Residential Properties

# Element - Adds Freight Corridor

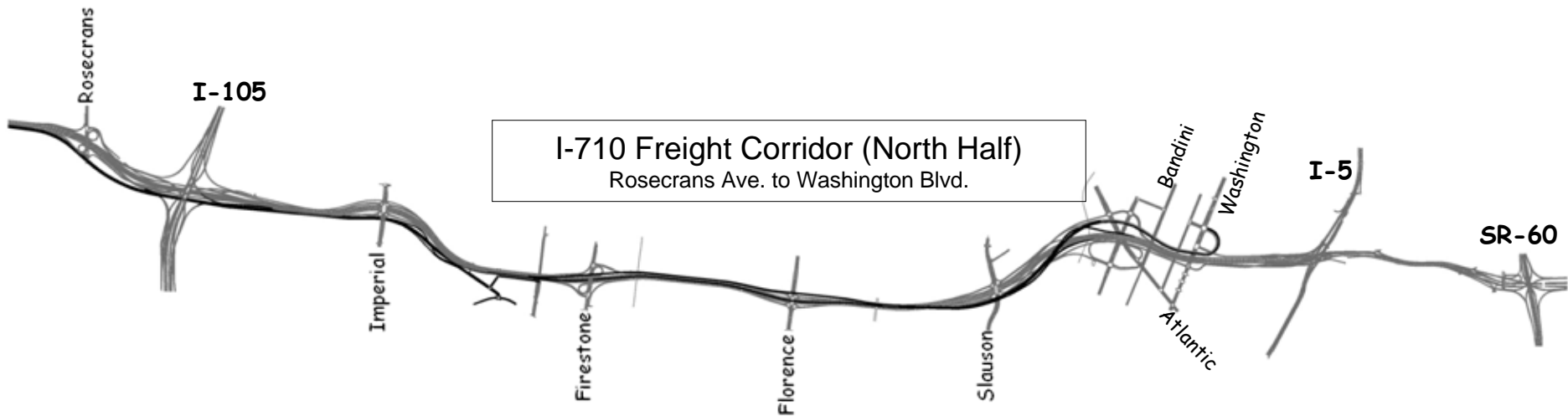
Port of Long Beach

I-710 Freight Corridor (South Half)  
Ocean Blvd. to Alondra Blvd.

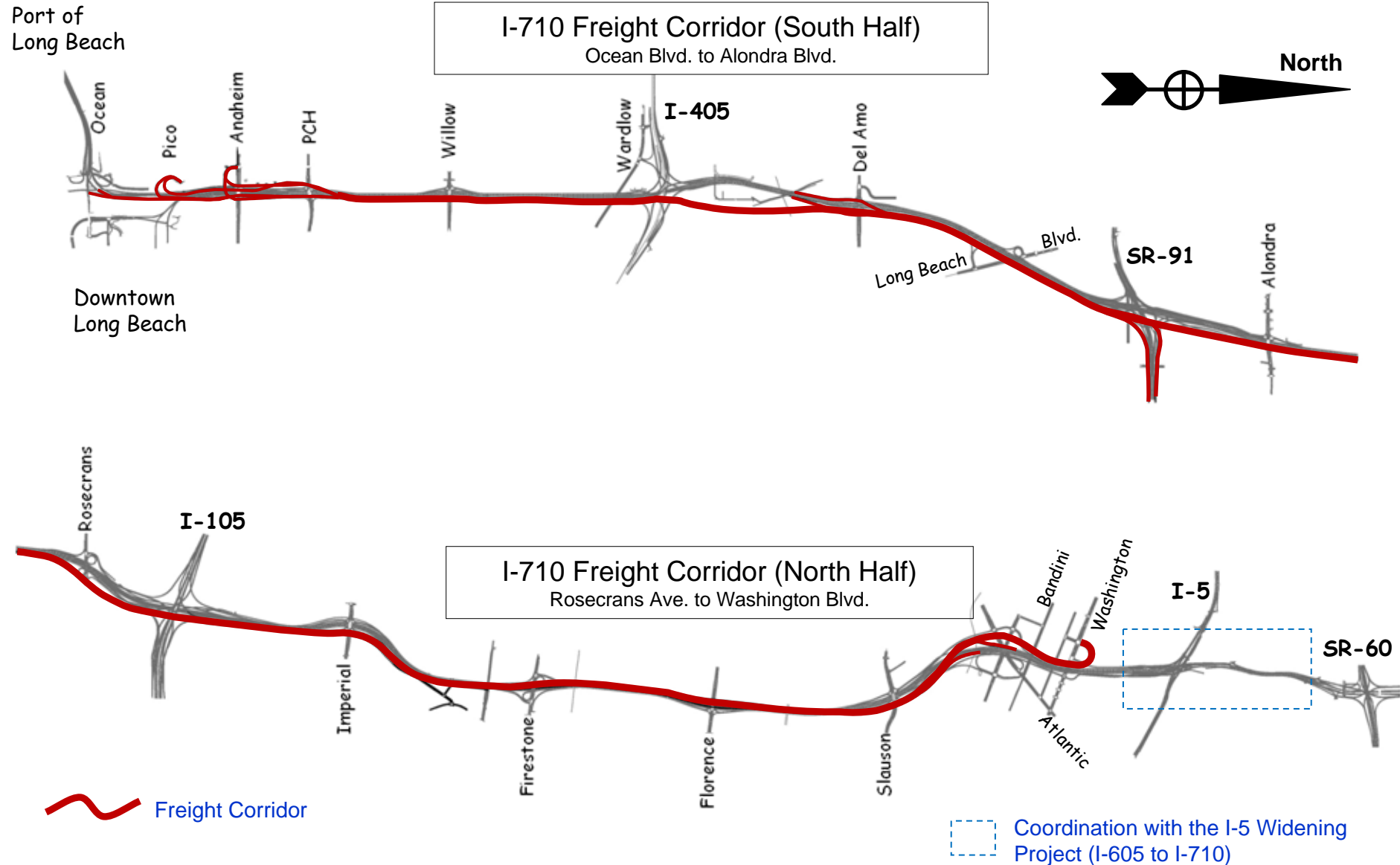


Downtown Long Beach

I-710 Freight Corridor (North Half)  
Rosecrans Ave. to Washington Blvd.

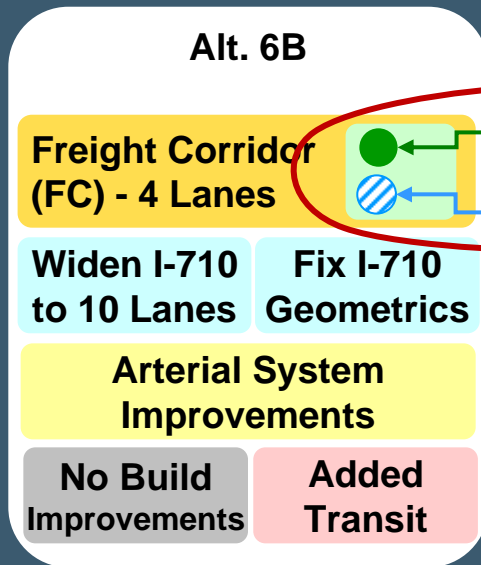


# Element - Adds Freight Corridor



# Alternative 6B – Build Alternative

*Element: Adds Technology and Operational Features to Freight Corridor*



Zero Emissions Vehicles

Automated Guidance

- Zero Emissions Technology for Freight Vehicles
- Automated Guidance for Freight Vehicles

# Zero Emissions Technology

## Examples of Hybrid and Zero Emissions Heavy Duty Trucks



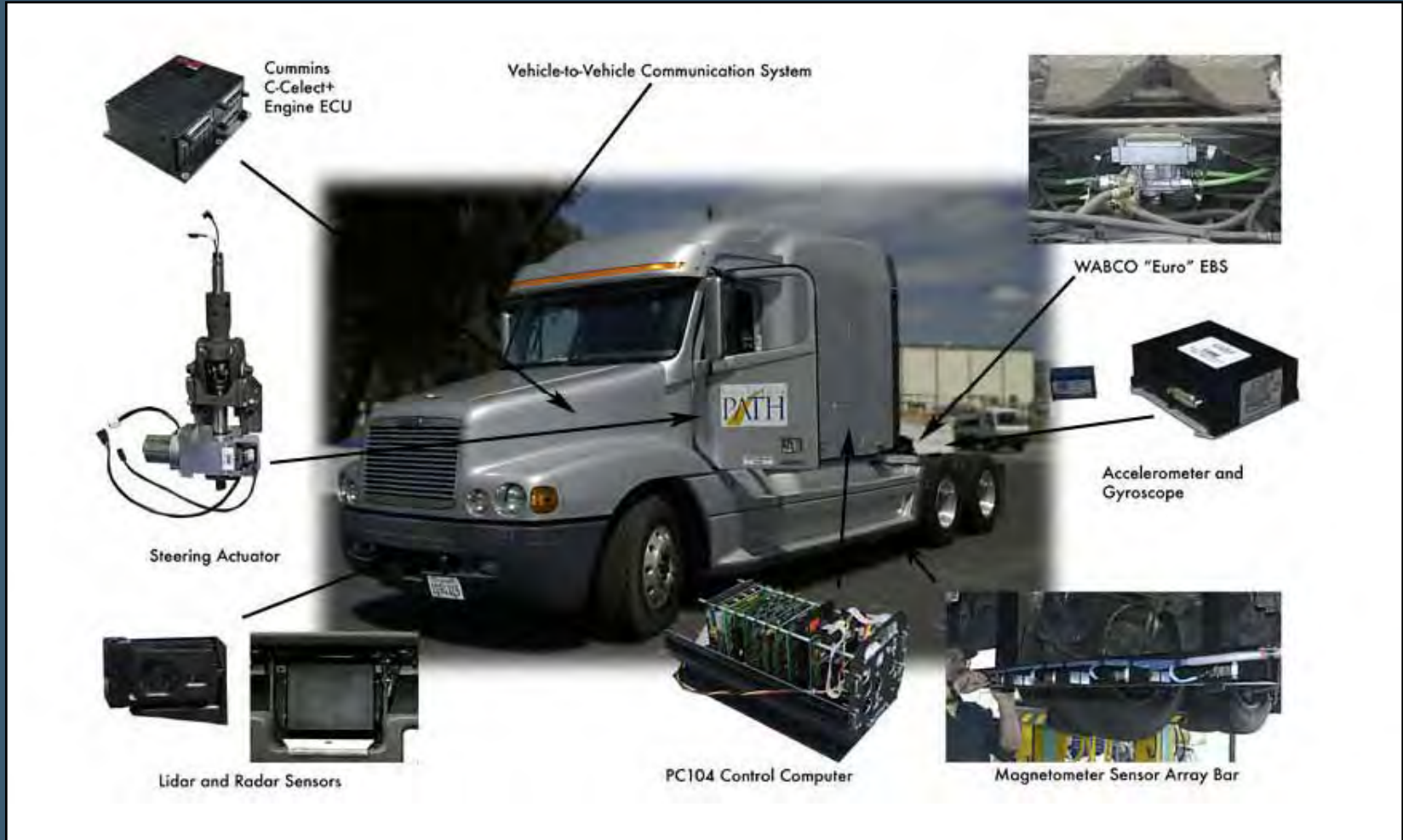


# Zero Emissions Technology

## Zero Emission Trucks



# Automated Guidance



California Path Program, Institute of Transportation Studies  
University of California, Berkeley

# Automated Guidance

- **Currently in Demonstration Phase of Development**
- **Allows for Platooning of Commercial Vehicles**
- **Reduces Spacing Between Trucks**
- **Results in 50% Increase in Freight Corridor Lane Capacity**

Example (with Autos)  
Automated Guidance - Platooning

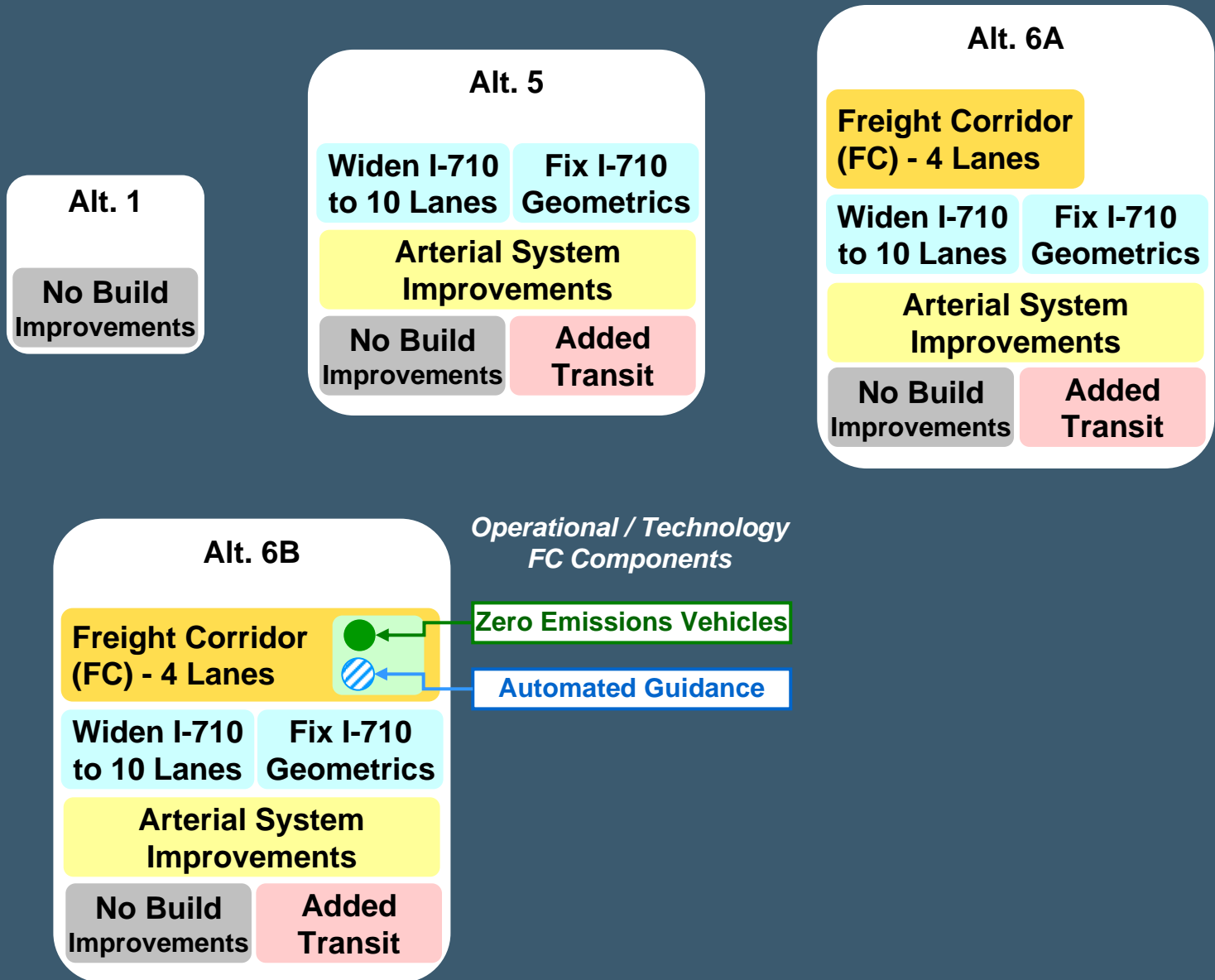


# Regulatory Considerations

## Incentives / Disincentives to Spur Private Sector Use of New “Zero Emissions” / Automated Guidance Technologies

- New Enabling Legislation
- Port Restrictions
- Enforcement Component

# I-710 Corridor Alternatives



# New Option – Alternative 6C

**Alt. 1**

No Build Improvements

**Alt. 5**

Widen I-710 to 10 Lanes    Fix I-710 Geometrics

Arterial System Improvements

No Build Improvements    Added Transit

**Alt. 6A**

Freight Corridor (FC) - 4 Lanes

Widen I-710 to 10 Lanes    Fix I-710 Geometrics

Arterial System Improvements

No Build Improvements    Added Transit

**Alt. 6B**

Freight Corridor (FC) - 4 Lanes

Widen I-710 to 10 Lanes    Fix I-710 Geometrics

Arterial System Improvements

No Build Improvements    Added Transit

**Toll FC Lanes**

**Zero Emissions Vehicles**

**Automated Guidance**

*Operational / Technology FC Components*

**Alt. 6C**

Freight Corridor (FC) - 4 Lanes

Widen I-710 to 10 Lanes    Fix I-710 Geometrics

Arterial System Improvements

No Build Improvements    Added Transit

# New Option – Alternative 6C

*Element: Adds Tolling Feature to Alt. 6B*

- Tolls Freight Corridor Lanes Only
- Creates Revenue Source
- Opportunity for Public / Private Partnership

# Recommendation

*Recommend to the I-710 Project Committee:*

**that the Public Private Partnership (PPP) Alternative – Toll Freight Corridor Only – be included in the I-710 Project EIR-EIS as Alternative 6C.**