



WHY ALTERNATIVE DELIVERY?

- Owner of Choice
- Qualifications-based
- Proper Risk Allocation
- Partnership
- Transparent pricing
- Early Contractor Involvement

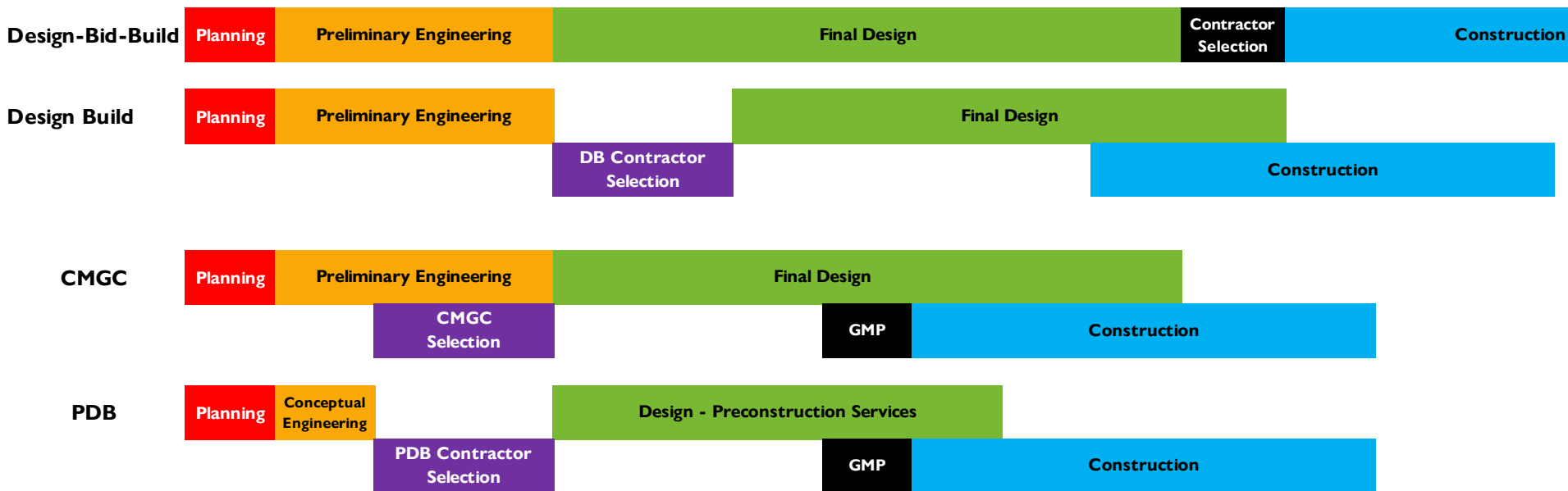


ALTERNATIVE DELIVERY CAN MITIGATE COMMON ISSUES

- Issues and problems with capital projects
 - Adversarial relationship
 - Cost overrun and schedule delays - Claims
 - Scope creep – Change Orders – Design Errors

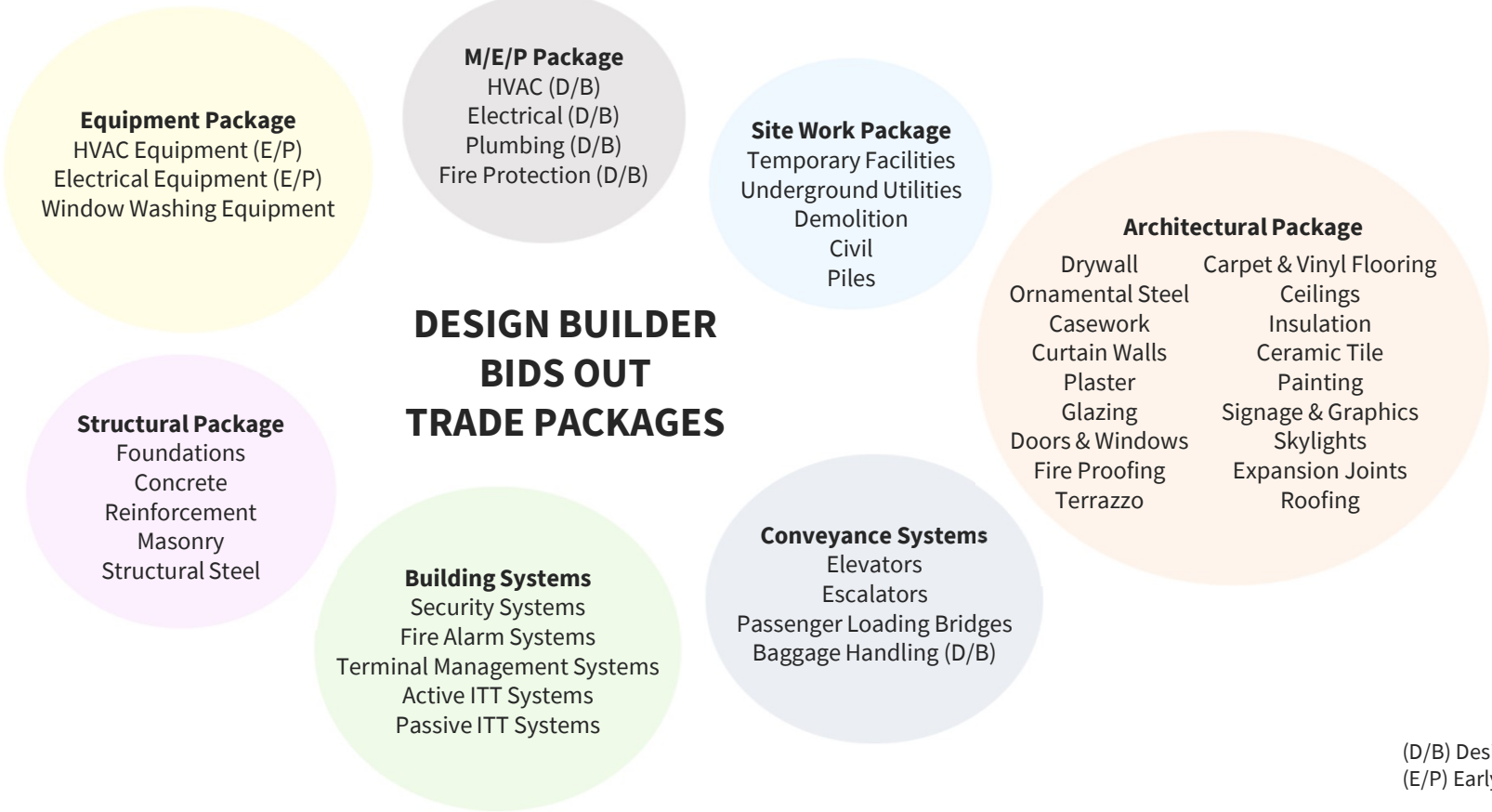


COMPARISON WITH OTHER PROJECT DELIVERY METHODS



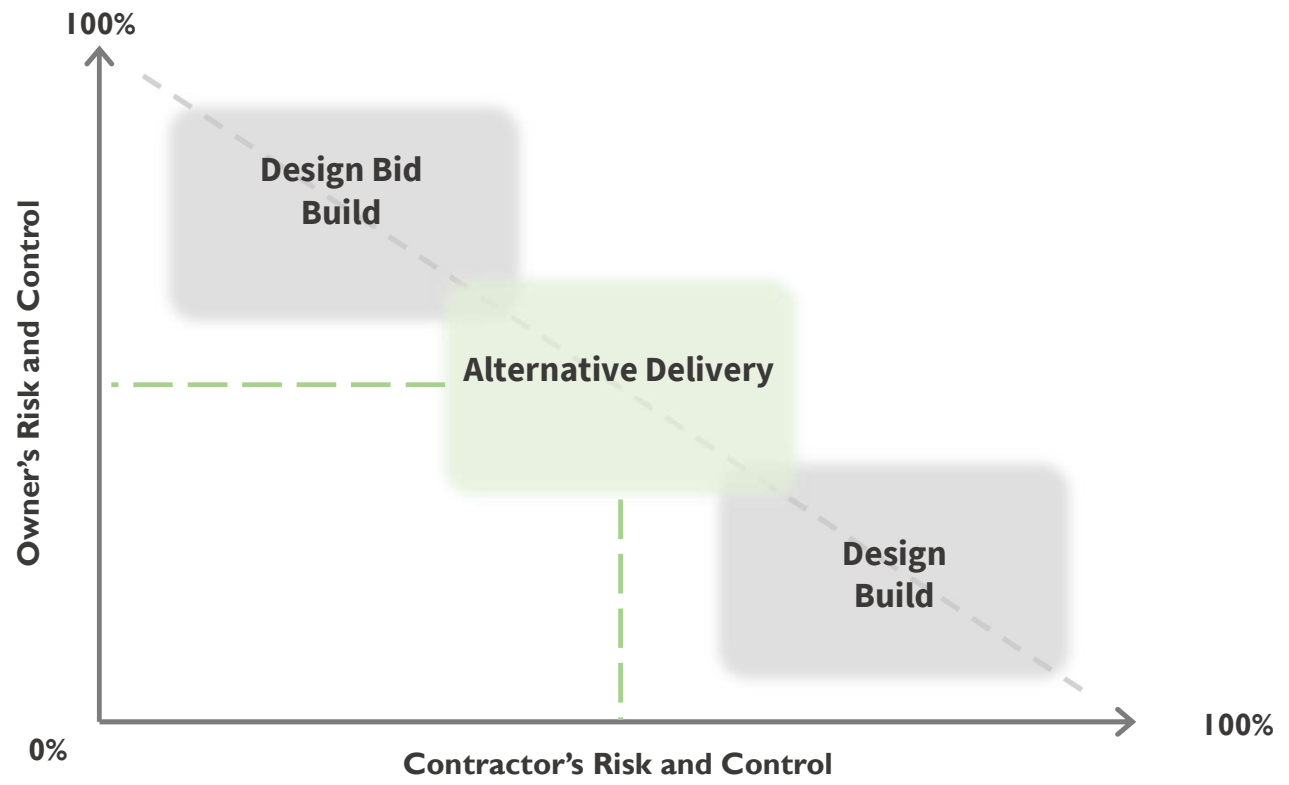


TRADE PACKAGES AND TRADE PACKAGE SETS





BALANCES RISK BETWEEN METRO AND CONTRACTOR





BENEFITS TO METRO

- Early contractor involvement
- Allocate design and construction risks
- Constructability Review / Value Engineering
- Complete agreement on scope of work
 - Design to Budget
 - Transparent Pricing and open books negotiations
- Reduced number of change orders
- Provide incentives for contractors to manage costs



CHALLENGES TO IMPLEMENT ALTERNATIVE DELIVERY

- Lack of negotiated Alternative Delivery experience
- Reassure stakeholders CMGC/PDB remains a competitive procurement process for linear construction
- Trepidation of discreet work packages and offramps

Next stop: G Line Improvements



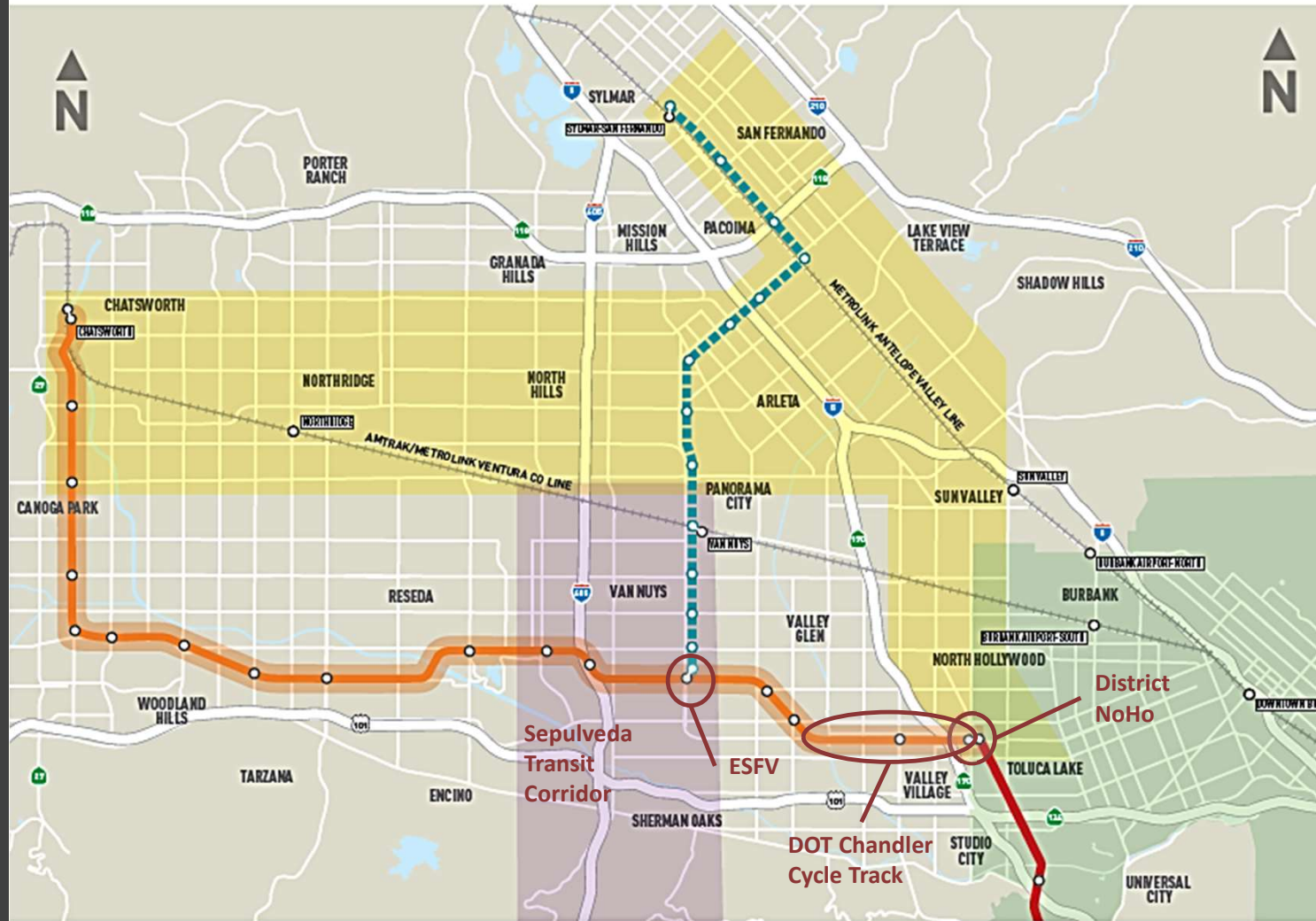
G Line BRT Improvements

- Gating at 35+ crossings
- Grade separation and BRT aerial station at Van Nuys (also includes grade separation at Vesper)
- Grade separation and BRT aerial station at Sepulveda
- Measure W Water Infiltration and Quality Project (Option)
- Bike Path Improvements (Option)



Project Interfaces

- East San Fernando Valley (ESFV)
- District NoHo
- DOT Chandler Cycle Track
- Sepulveda Transit Corridor (STC)



Gates Systems

Gating Rendering – Orange Line Vanowen Crossing



Conceptual rendering; subject to change

1. Four Quadrant Gate System with Flashing lights and Bells
2. Raised Median
3. Pedestrian/Bicyclist Crosswalk Gates
4. Bike/Ped Path

Grade Separations

Project Elements:

- GS and aerial station at Sepulveda Blvd
- GS and aerial station at Van Nuys, with closure of Tyrone Ave
- Connectivity with Sepulveda and East San Fernando Valley Transit Projects



Conceptual rendering; subject to change; not to scale

Source: MM/GF

MOL - Sepulveda Grade Separation Rendering

Grade Separations

Aerial Station Design Features:

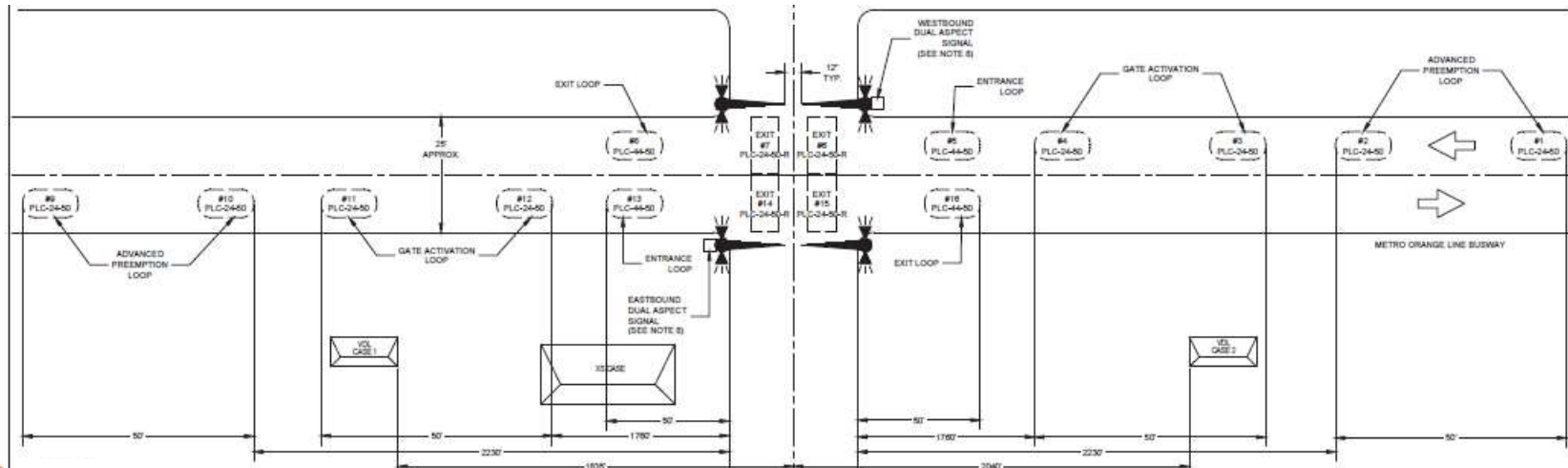
- Side Platforms. 42' Busway (3-14' wide Bus lanes)
- 1 escalator, 1 set of stairs, 2 elevators, and provision for a future second escalator at all 4 corners
- Designed for future conversion to LRT
- Bike Parking at Plaza Level
- Artwork



MOL - Sepulveda Grade Separation Rendering

Pilot Gate

- Pilot Gate Procurement – Hayvenhurst Ped Xing
 - Award: June
 - Construction & Testing: July – December
 - 3+ month closure of pedestrian crossing
 - Minimize impact to bus operations: night work, single tracking



Project Definition and Goals

Project Definition:

- any additional utility relocation not performed as part of Metro retained scope and required by contractor's design
- bike/pedestrian accommodations at Van Nuys and Sepulveda
- achieve increased capacity with minimal impact across traffic
- ability to use existing fleet with gating system (including any required retro-fitting of equipment)
- It is assumed that the aerial stations and crossings will be designed for future conversion to LRT. It is assumed that the scope will exclude any vehicle procurement

Project Goals:

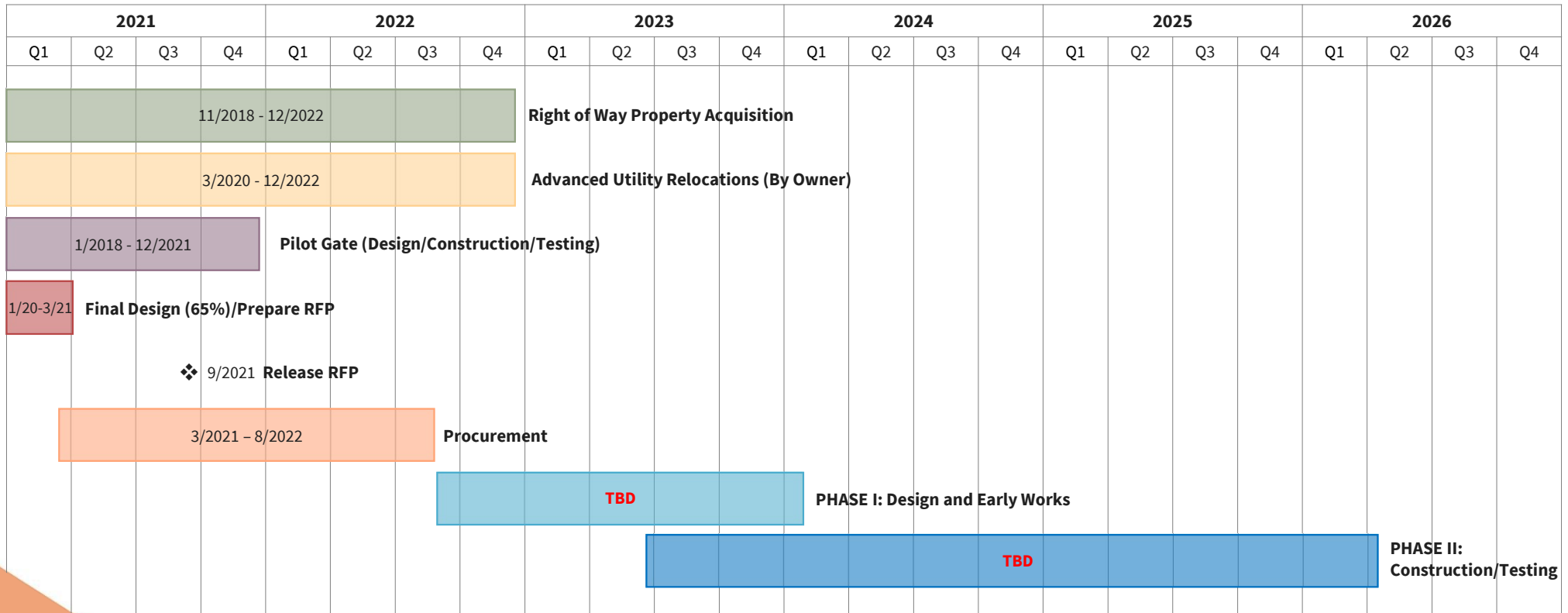
- improve operational safety, operation speeds, ridership and capacity
- benefit the surrounding community by decreasing travel time
- improving air quality, enhancing access to the transit corridor and promoting transit-oriented communities
- ensure cost effectiveness throughout construction (including by mitigating the risk of expensive claims)
- ready the transportation corridor for LRT conversion
- support fulfilment of Metro's Los Angeles County Traffic Improvement plan as authorized under Measure M

Key Project Risks

Key risks associated with the G-Line Project scope that are relevant to the selection of the delivery method include the following:

- Unproven technology
- Interface with other planned construction
- Third party interfaces and stakeholder involvement
- Interface with fleet services – how the fleet talks to the system and vice versa
- Utility / ROW unknown risks

Schedule



Procurement

- Progressive Design Build (PDB) delivery method approved by Metro board in March
 - Two-phase process
 - Phase 1: Design & Early Works Packages (guaranteed max price reached using open book negotiation)
 - Phase 2: Construction
- Developing procurement package – RFP Late Summer 2021
 - 65% Gates, 30% Sepulveda and 15% Van Nuys design
 - Internal Review: TBD

I-105 ExpressLanes Project



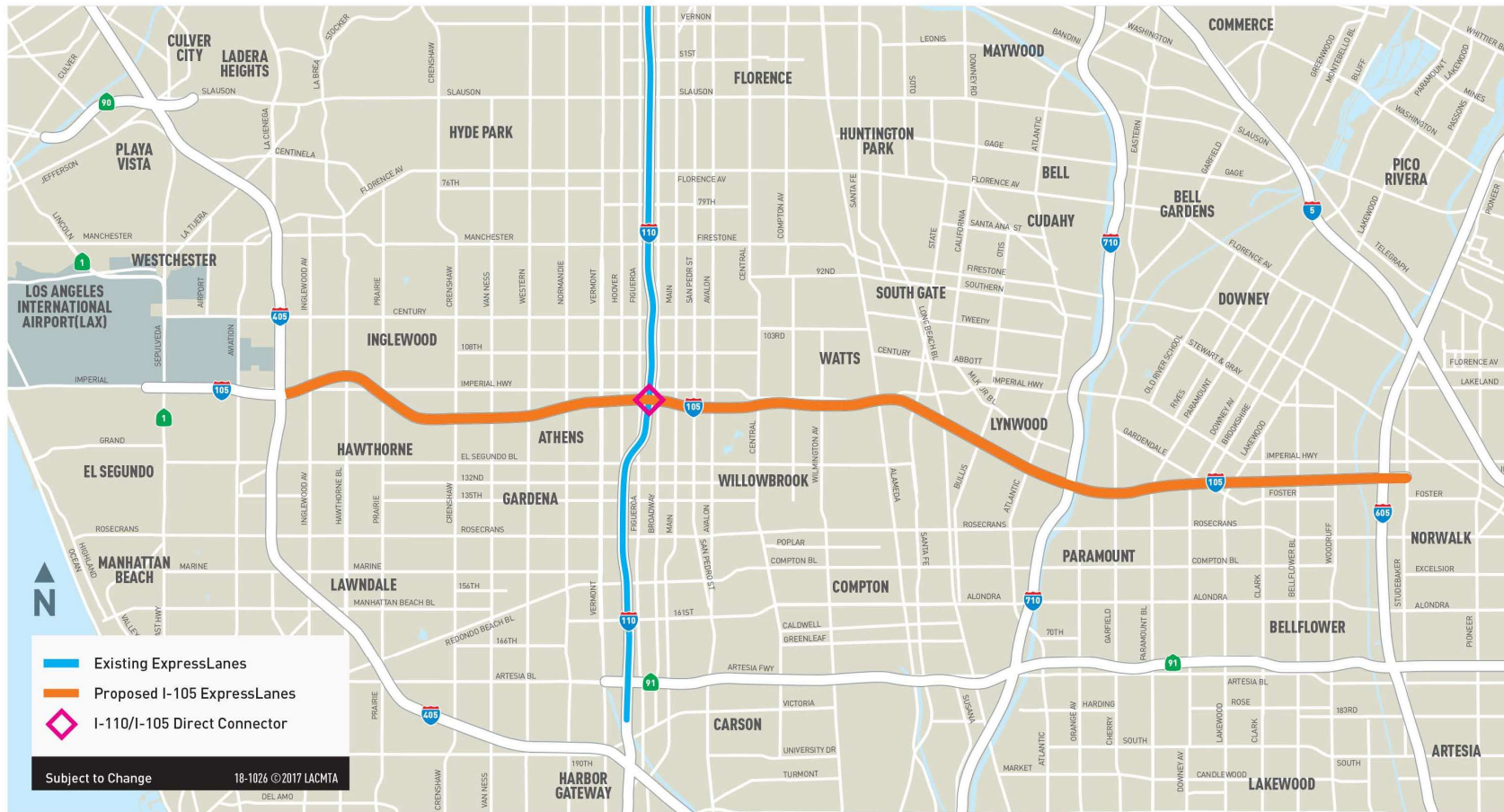
Project Overview



Project Overview



The project limits for the proposed ExpressLanes on I-105 are between the I-405 & Studebaker Road

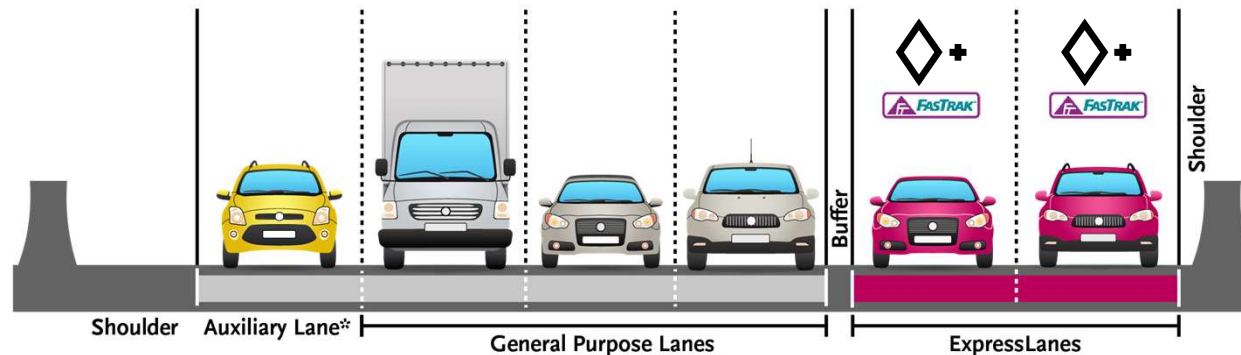


Project Need



- > I-105 experiences heavy demand during peak commute hours that exceeds the freeway's capacity.
- > Between 200,000 to 250,000 daily vehicles on an average weekday, some locations as high as 300,000.
- > HOV lane is degraded per Federal guidelines (speeds are less than 45 miles per hour during peak periods).
 - It takes 36 minutes to drive the HOV lane eastbound during the PM peak compared to 15 minutes with no congestion.
- > Peak period speeds average 25 miles per hour or less in the General Purpose lanes.
 - It takes 43 minutes to drive the corridor eastbound during the PM peak period compared to 15 minutes with no congestion.
 - The morning peak begins around 6am and ends around 10:15am (over 4 hours)
 - The evening peak begins around 2pm and ends around 8pm (6 hours)

Selected Alternative Typical Section



*Note: Auxiliary Lane is only in certain locations on I-105.

- > Convert existing HOV lane to one (1) ExpressLane and add a second ExpressLane in each direction
- > Non-standard lane and shoulder widths (lane would be reduced from 12 ft to 11 ft)
- > Structure widenings, new soundwalls, weave lanes, new auxiliary lanes
- > Add ExpressLanes toll equipment, signage, pavement markings
- > Temporary Construction Easements (TCEs) and partial Right of Way acquisition required

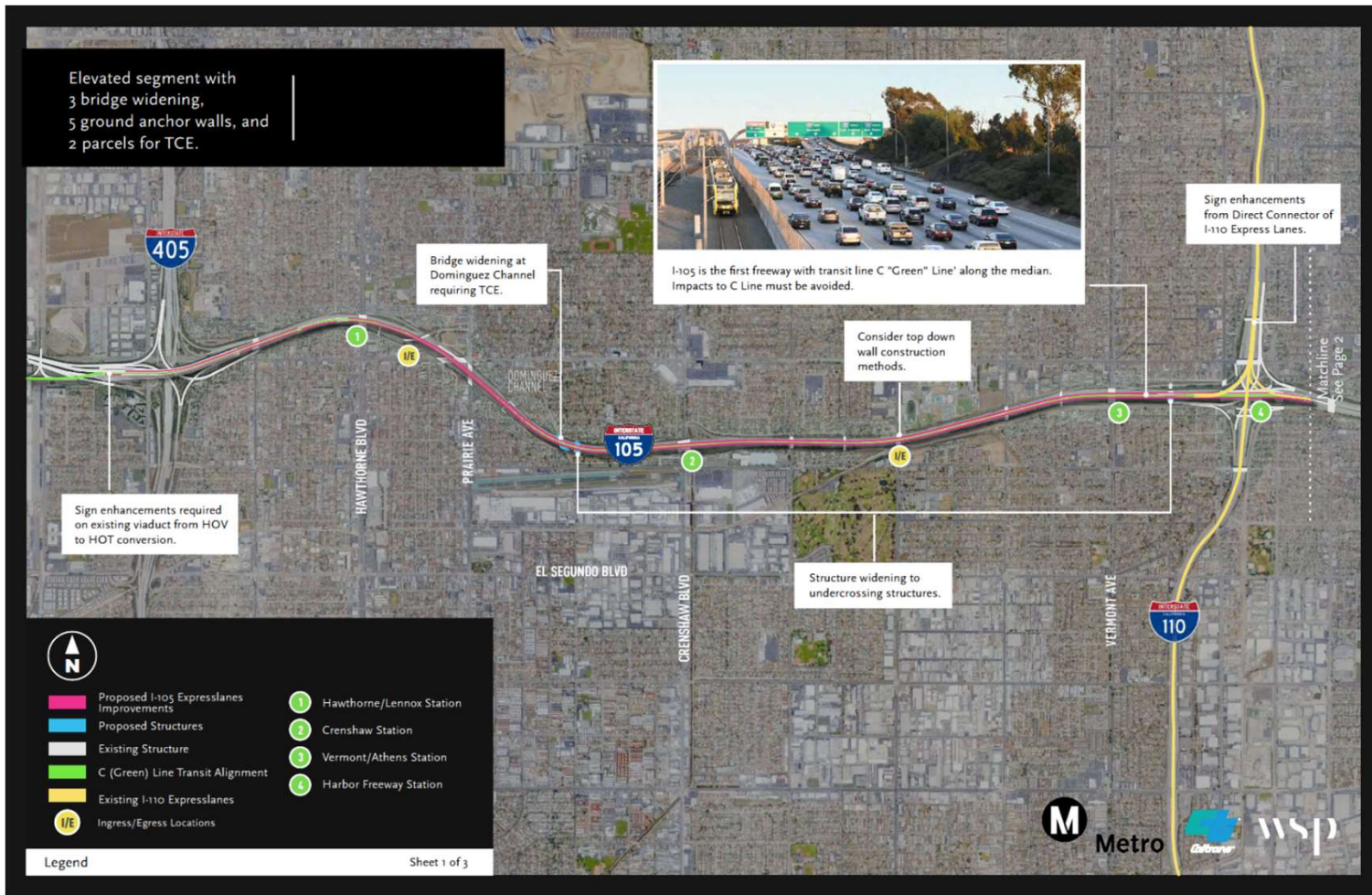
Project Funding



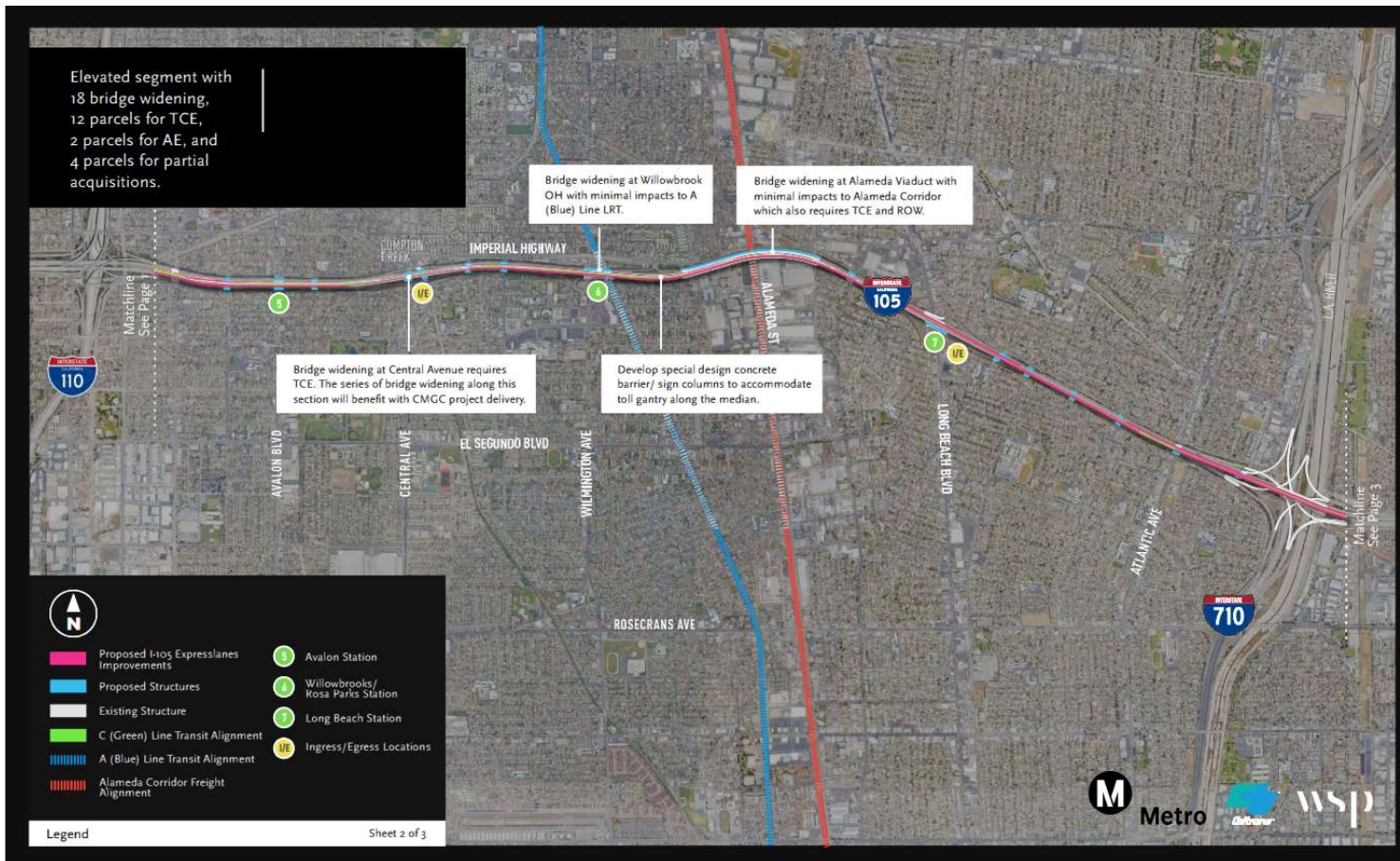
- > In December 2020, this project was awarded a \$150M Solutions for Congested Corridors (SCCP) grant by the California Transportation Commission
- > The funding gap could be funded by bonding against toll revenue or a TIFIA loan

	Alternative 3
Project Cost	\$690M
CMAQ and Measure M	\$70M
SB 1	\$150M
Funding Gap	\$470M
In Millions	

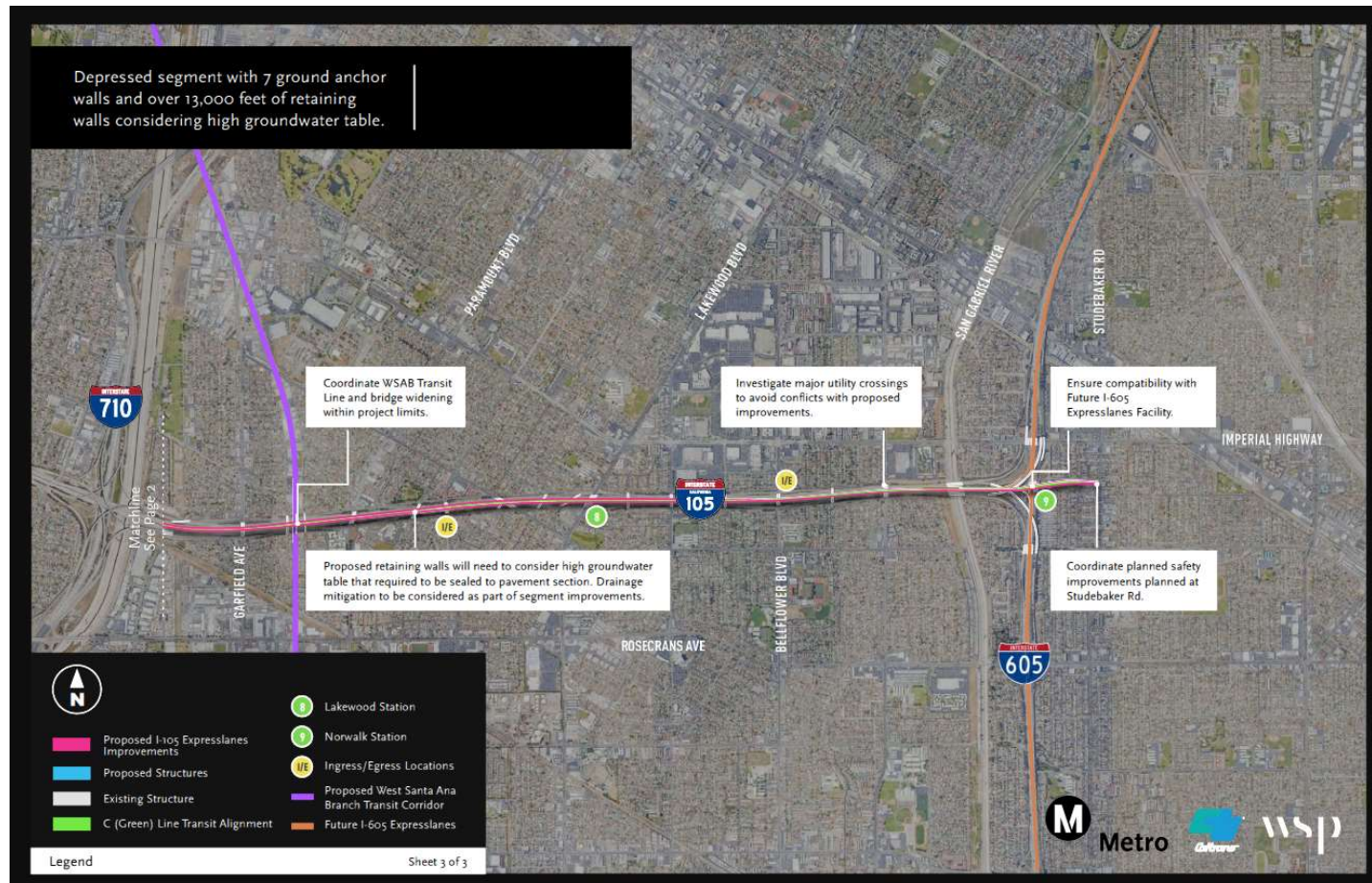
Project Construction Segment 1 (405 to 110)



Project Construction Segment 2 (110 to 710)



Project Construction Segment 3 (710 to 605)



Project Timeline and Contracts



Roadside Toll Collection System (RTCS) Design-Build-Operate-Maintain (DBOM)

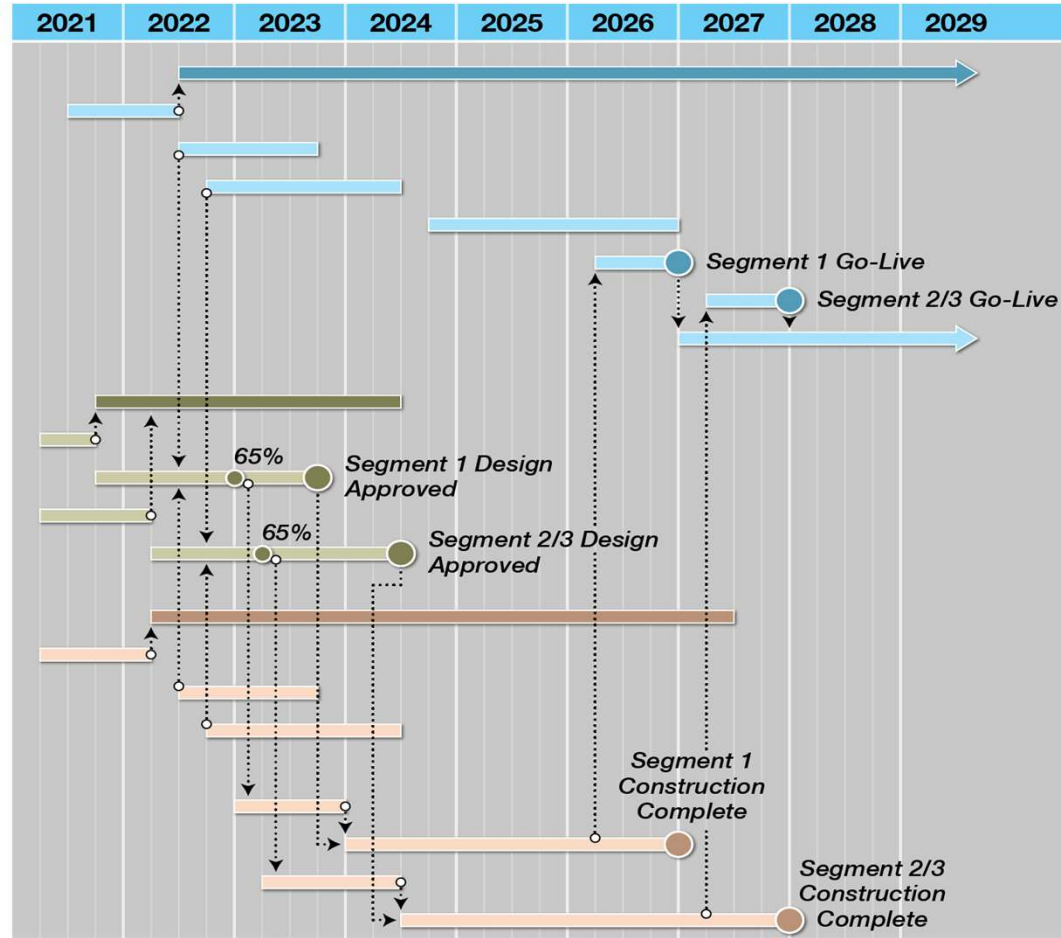
- Procurement
- Segment 1 Design Input
- Segment 2/3 Design Input
- RSS Design/Implementation
- Segment 1 Lane Install
- Segment 2/3 Lane Install
- Operations/Maintenance

Design Professional Service for PS&E

- Segment 1 Procurement
- Segment 1 Design Package
- Segment 2/3 Procurement
- Segment 2/3 Design Package

Construction Manager/General Contractor (CMGC)

- Procurement
- Segment 1 Design Input
- Segment 2/3 Design Input
- Segment 1 Estimate/Negotiation
- Segment 1 Construction
- Segment 2/3 Estimate/Negotiation
- Segment 2/3 Construction

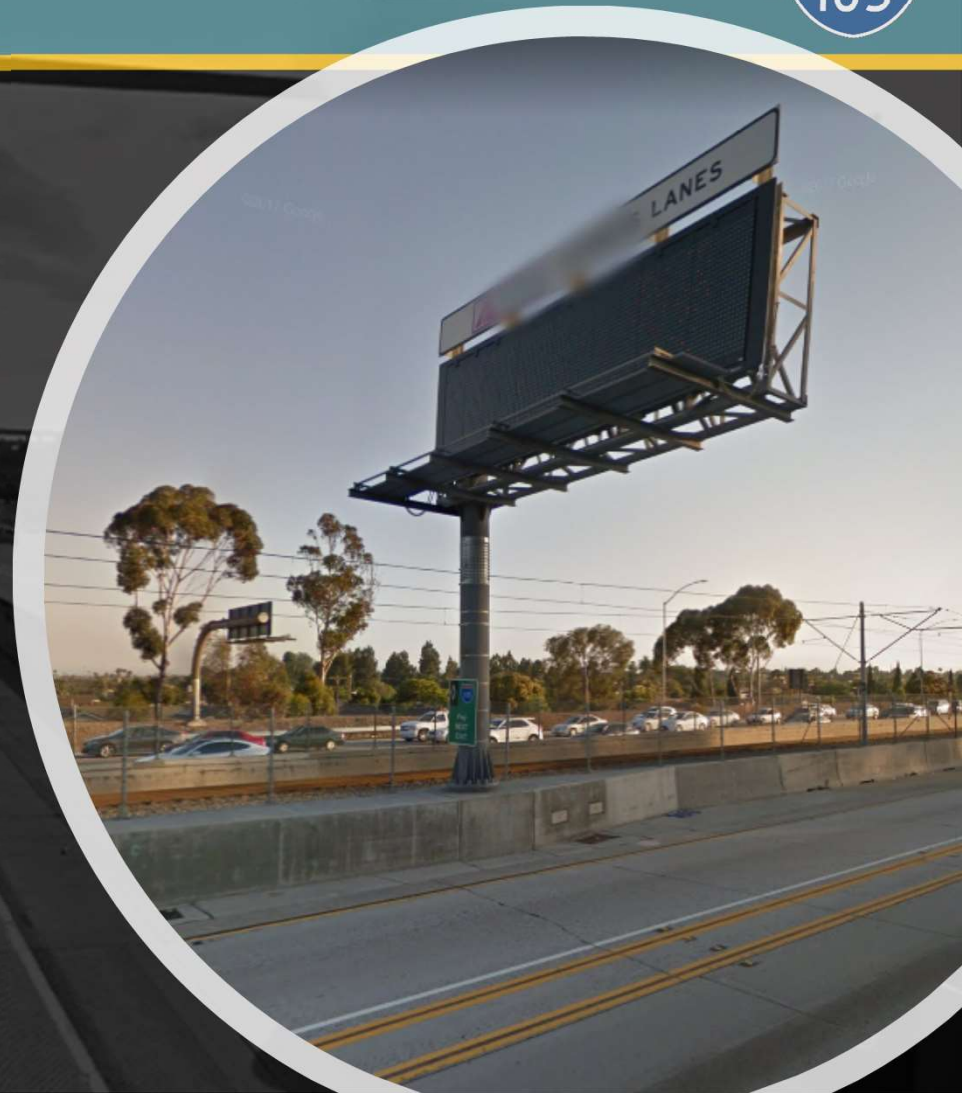


Construction Manager/General Contractor

- Design Control
- Flexibility of civil design work with RTCS DBOM
- Flexibility of separating the project into multiple construction packages
- Extensive construction staging for a long corridor
 - > Freeway traffic handling
 - > Metro C (Green) Line operations
- Anticipate coordination with the West Santa Ana Branch Project
- Optimize risk management and value engineering

Green “C” Line Impact

- Green “C” Line Impact During Construction
- Overhead Signs Construction
- Tolling System Construction
- Other Barrier Modifications



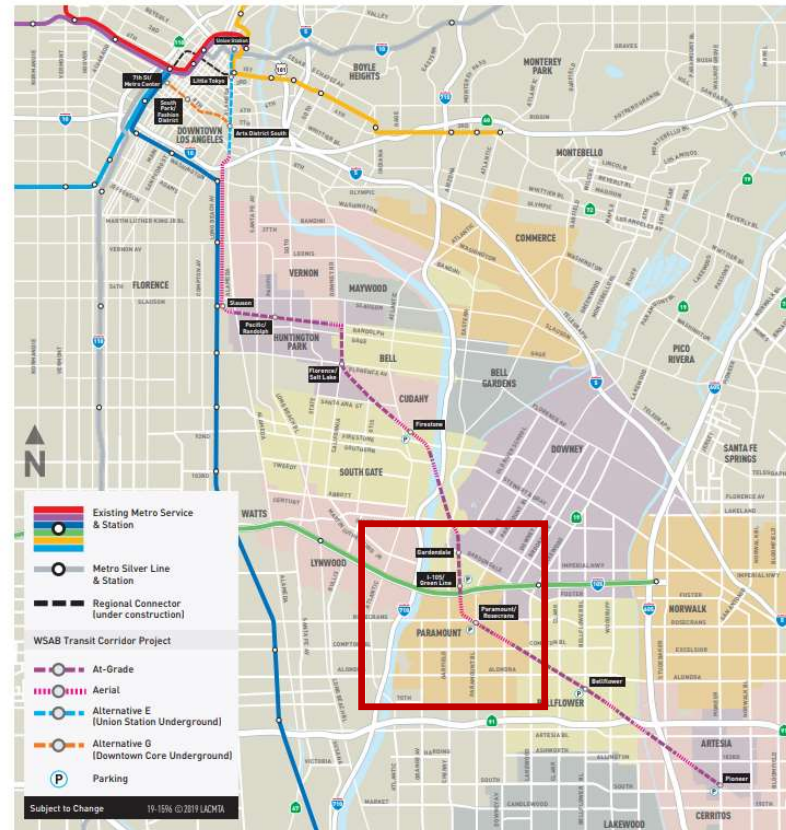
Toll Gantry



West Santa Ana Branch



- A new Metro Green Line station is being planned at the intersection of the West Santa Ana Branch transit corridor project and the I-105
- Studies are currently ongoing to determine the design of the new Green Line station in relation to the I-105 ExpressLanes project



I-105 ExpressLanes Project Status and Next Steps



- Environmental document completed April 2021
- Further refine funding plan and pursue funding to fill funding gap
- Seeking Metro Board approval for CMGC in June 2021
- Procurement work for:
 1. Design consultant(s) to prepare final PS&E package – June 2021
 2. Construction Management/General Contractor – July 2021
 3. Roadside Toll Collection System (RTCS) – August 2021
 4. Program Management Support Services – August 2021
- Project is expected to begin construction in December 2023



I-105 ExpressLanes Project