

## **ATTACHMENT A: Project Delivery Strategy Report (Responses to Planning & Programming Committee)**

- A. Metro Teams Roles & Responsibilities
- B. Overall project schedule
- C. Environmental Clearance
- D. Third-Party Engagement (including but not limited to UP)
- E. Design Efforts
- F. Enabling Works Sequence
- G. P3 Timing
- H. Project Funding Plan

### **Additional questions:**

- Identified Metro Lead for WSAB (addressed as part of A)
- Defined roles, responsibilities, and timelines for each of the different internal WSAB teams (addressed as part of A)
- UPRR strategy for dealing with right of way issues (addressed as part of D)

## 1. Introduction

The West Santa Ana Branch (WSAB) will be one of the most complicated infrastructure projects that Metro has delivered. The corridor and alignment present numerous technical design challenges. There are a range of third parties with which Metro will have to coordinate to resolve a variety of complicated permits and approvals before final design and construction can begin. The scope and schedule of the project are ambitious, and the Metro Board of Directors has asked Metro staff to take all possible measures to further accelerate delivery and maximize the scope that can be delivered in the first decade of the Measure M program. Finally, Metro is embarking on an ambitious P3 delivery approach to drive innovation and performance and minimize risk while maximizing budget and schedule attainment.

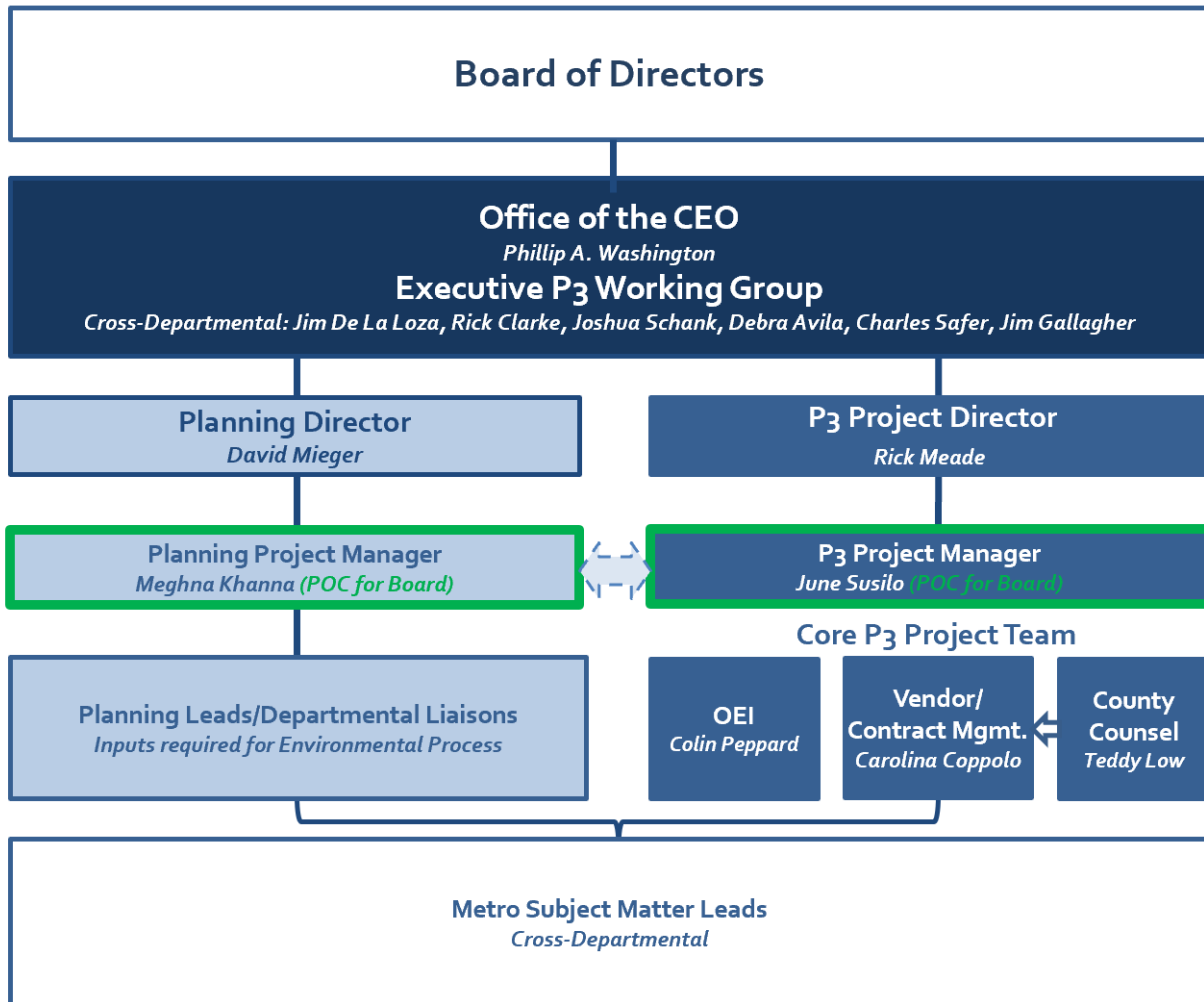
The challenge of achieving these ambitious goals has led Metro to approach the project through an integrated, coordinated, multidisciplinary strategy to ensure all these moving parts fit together into a cohesive, successful plan. Metro has established various teams, each of which are responsible for progressing individual components of the project strategy. Work efforts that are typically sequential have been overlapped, with the goal of reducing overall timeframes (though this approach also requires a higher level of staff and consultant resources, and increased levels of staff coordination).

Metro's approach to the WSAB effort is described further below.

## 2. Metro Team Structure, Roles & Responsibilities

Due to the overlapping and integrated nature of the work effort, as well as the multi-disciplinary requirements of a P3 procurement that may include all aspects of the project's lifecycle, Metro has used a matrix-based approach to the project teams, with each drawing from multiple departments or offices. **Figure 1** below shows the consolidated organizational structure of the overall WSAB project development effort. The Planning and P3 efforts are integrated, coordinated workstreams, with other contributing Metro departments supporting both efforts as required. Each workstream holds regular, frequent meetings (typically multiple times per week) with its core members, with collaboration of contributing departments occurring as needed. The full team representing all workstreams meets weekly, and the CEO and Senior Leadership are briefed on progress bi-weekly. A high-level description of the key roles and responsibilities of each team follows.

**Figure 1. WSAB Project Organizational Chart**



**Metro Planning Team**

**Project Planning**

- Lead Staffer: Meghna Khanna (Point of Contact for Board)
- Metro Executive: David Mieger

Project planning is a critical prerequisite of the P3 procurement. The Planning Team is responsible for environmentally clearing the project under state and federal environmental permitting processes. This includes advancing the conceptual design of the project to support the environmental process, as well identifying and advancing the design of all required environmental mitigations and 3<sup>rd</sup> party agreements. Design efforts initially are focused on the LRT alignment and core project components (e.g. trackway, stations, etc.), but will also include station/systemwide designs, first-and-last mile planning, and other key components, each led by the relevant group within the Planning Department. Feedback is also incorporated from other departmental liaisons, such as Operations, Rail Systems Engineering, Fire/Life Safety, etc. to ensure the project design supports future development of plans related to these disciplines.

The Planning Team ensures consistency with Metro policy and Measure M guidelines, as well as consistency with the Long-Range Transportation Plan and other strategic planning tools. Planning is also responsible for advancing the project's funding plan and securing grants from state and federal sources.

The outputs of the Project's planning process are direct inputs into the P3 procurement process.

### **P3 Project Team**

The P3 Project Team is responsible for developing and, if validated, executing an effective and expeditious procurement of the project through a P3 delivery model. The P3 effort is multi-departmental by design, representing the integrated multi-disciplinary nature of developing a P3 procurement. Each of the core team members are described below.

#### **Program Management**

- Lead Staffer: June Susilo (Point of Contact for Board)
- Metro Executive: Rick Meade

Program Management is the lead coordinating department for the P3 Procurement and Enabling Works Project effort. Program Management staff coordinate P3 Project Team meetings, documents, reviews, comments, schedules, tasks, timelines, etc. and is responsible for integrating the work products and deliverables of all P3 Project Team members. Program Management is also responsible for developing the technical aspects of the procurement, including development of all technical specifications, documents, and information supporting the project scope, as well as technical elements of the procurement package and form of contract. Program Management is the lead to coordinate designs for the Enabling Works with third parties and stakeholders including UPRR, cities, CPUC, Caltrans, and various utility companies.

Program Management oversees the P3 Technical Advisor and Engineering Consultant for Enabling Works.

#### **County Counsel**

- Lead Staffer: Teddy Low
- Metro Executive: Charles Safer

County Counsel manages all legal work pertaining to the P3 project agreement (i.e., contract) and procurement, as well as providing information and advice on all federal, state, and local statute and regulatory requirements. County Counsel also oversees Legal Advisory work, ensuring legal tasks are completed on time and to the highest standards. County Counsel will also support negotiations and contracting, including developing or reviewing all legal documents.

#### **Vendor/Contract Management**

- Lead Staffer: Carolina Coppolo
- Metro Executive: Debra Avila

Vendor/Contract Management (V/CM) leads the procurement process, including overseeing development of all procurement documents, timelines, interactions with potential bidders prior to and during procurement, oversight and administration of the procurement process, coordination of evaluation and scoring, contract negotiations, bid award, etc. and ensures the integrity of the procurement process. V/CM works with the team to ensure compliance with all internal, local, state, and federal statutes, regulations, and policies, and to ensure compliance with all ethical requirements. V/CM leads all commercial matters, based on the outputs of the technical and financial analysis.

### **Office of Extraordinary Innovation**

- Lead Staffer: Colin Peppard
- Metro Executive: Joshua Schank

OEI leads the development of the P3 Business Case, which supports the commercial/financial approach to P3 delivery. This includes overseeing the project's value for money analysis, which supports development of the P3 procurement package and contract, including the payment mechanism linking to performance specifications. OEI also provides a bridge to the P3 market, in terms of market trends and precedent, processes, industry engagement, and documentation during the pre-procurement and procurement phases of the project.

OEI oversees the external P3 Financial Advisors, in support of these efforts.

### **Other Key Departmental Partners**

Many departments and offices across Metro will contribute significantly to the development of this project. Subject matter leads contribute as needed to both the Planning and P3 development efforts. However, the following departments also contribute their insights as part of the regular Planning and/or P3 Project Team meetings:

- *Operations*: The Operations Liaison advises regularly on how project design may impact operations, and has responsibility for informing all technical specifications related to operations, facilities, rolling stock, and/or maintenance, and support development of any scope elements and evaluation criteria related to these functions.
- *Communications/Community Relations*: These team members develop and execute all communications plans related to the project development and implementation, with the goal of establishing and maintaining frequent, trusted interactions with all stakeholders throughout the project's development.

## **3. Overall Project Schedule**

As noted above, the WSAB development and delivery effort includes several workstreams, each of which have their own timelines. While some of these workstreams would typically be executed sequentially, Metro has chosen to overlap certain efforts to meet the direction to accelerate the schedule to the extent possible without risking the environmental effort.

Below is an overall project schedule outlining each of the various interdependent activities that are required to complete this project. Four key workstreams shown are: 1) Environmental Process; 2) Third Party Coordination; 3) Enabling Works; and 4) P3 Procurement.

- 1) *Environmental Process*: The Environmental process is a precursor to any final design or construction activities, and therefore drives the overall project schedule.
- 2) *Third Party Coordination*: Coordination with third parties that must provide various permits and approvals before final design and construction has begun with utilities, municipalities, the US Army Corps of Engineers, property owners including Union Pacific Railroad, Ports of Los Angeles and Long Beach, Caltrans, and the California Public Utilities Commission (grade crossings).
- 3) *Enabling Works*: Certain project components have been identified as high risk/high consequence elements that if not planned strategically and executed successfully could impact the P3 contract and add

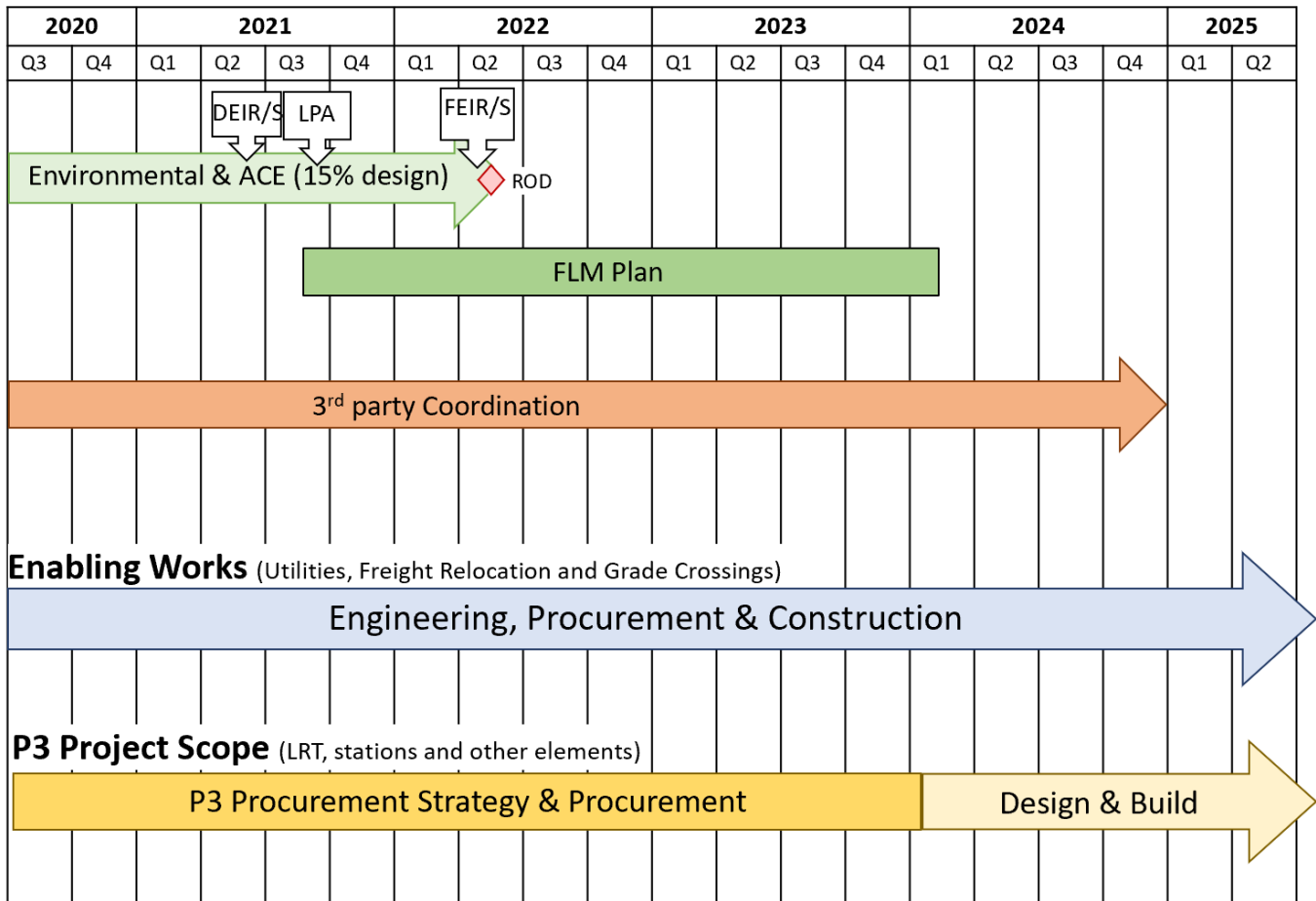
cost and schedule delays to the LRT construction. These components generally require long lead times and/or high levels of design (~100%). These high-risk items have been packaged together as the project's "Enabling Works," which will be separately procured and constructed from the main LRT system, and include utilities investigations and relocation, geotechnical investigations, grade crossing design, freight rail relocation design and construction, and Caltrans interface (i.e. Green Line station and I-105 bridge reconstruction). Third party agreements must be in place for these elements to move to construction.

- 4) *P3 Project Scope*: The P3 Project scope comprises the remaining LRT project works, which are being assessed for P3 delivery. This includes remaining civil works including railbed, track, traction power and rail/wayside systems and train controls, stations, and maintenance & storage facility, as well as rolling stock. Metro must have certainty regarding the scope and schedule before beginning construction of these project components.

The schedule below in **Figure 2** shows the interdependencies of the procurement milestones for Environmental, Enabling Works and P3 contracts. The environmental process milestones follow the state (CEQA) and federal (NEPA) environmental requirements and dictate the level of design effort needed to support environmental analysis without predetermining the Preferred Alternative. In addition, the ability to advance negotiations and completion of third-party agreements and approvals by UPRR, cities, Caltrans, CPUC, and various utility companies is also tied to completion of environmental.

To expedite the delivery of the project, design for Enabling Works will continue to advance while the environmental document is underway. The UPRR agreement and approval of the freight relocation design is a critical step towards the ability to start the enabling works construction. Due to the extensive design review and approval process with UPRR, the 18-month application time frame for CPUC approval for grade crossing applications, USACE, and Caltrans approval processes, some of the design packages will overlap with construction. 2022 is the anticipated groundbreaking which is likely to occur in the metro-owned Pacific Electric Right-of-Way (PEROW) and where approvals for work within the ROW are not required.

**Figure 2. WSAB Integrated Project Summary Schedule**



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The project schedule is updated regularly, with risks to key milestones identified and mitigations implemented to the extent possible.

#### 4. Environmental Clearance

The Environmental approval process is the required first step of the project development effort. The project cannot advance to final design and/or construction, nor receive federal financial assistance, until the environmental process is complete. Four Build Alternatives are being considered in the environmental process as part of the Draft EIS/R:

1. **Alternative 1:** Los Angeles Union Station to Pioneer
  - o **Design Option 1 (Alt 1):** Northern terminus behind MWD Building on east side of LAUS, not at the LAUS Forecourt
  - o **Design Option 2 (Alt 1):** Adds the Little Tokyo Station
2. **Alternative 2:** 7th St/Metro Center to Pioneer
3. **Alternative 3:** Slauson/A Line (Blue) to Pioneer
4. **Alternative 4:** I-105/C Line (Green) to Pioneer

Alternative 3 & 4 are [Board-approved IOS segments](#). These were approved to be studied as part of the Draft environmental clearance in 2018. **Table 1** provides a high-level comparison summary of these Alternatives. **Figures 3 and 4** show the alternatives and alignment configuration for each alternative.

**Table 1. Comparison Summary of Draft EIS/R Build Alternatives**

	Alt 1: Union Station to Pioneer	Alt 2: 7th/Metro to Pioneer	Alt 3: Slauson to Pioneer	Alt 4: Green Line to Pioneer
<b>Length (miles)</b>	19.3	19.3	14.8	6.6
<b>At-grade</b>	12.3	12.3	12.2	5.6
<b>Aerial</b>	4.7	4.7	2.6	1.0
<b>Underground</b>	2.3	2.3	-	-
<b>MSF Facility</b>	Bellflower or Paramount	Bellflower or Paramount	Bellflower or <b>Paramount</b>	Bellflower or Paramount
<b>No. of Stations</b> <small>All alternatives include a new C Line Station at I-105</small>	11 3 aerial; 6 at-grade; 2 underground	12 3 aerial 6 at-grade 3 underground	9 3 aerial 6 at-grade	4 1 aerial 3 at-grade
<b>No. of Crossings</b>				
<b>At-grade crossings</b>	31	31	31	11
<b>Elevated street crossings</b>	25	25	15	7
<b>Freight crossings</b>	10	10	9	2
<b>Freeway crossings</b>	6	6	4	3
<b>River crossings</b>	3	3	3	1
<b>Shared ROW with freight (miles)</b>	11.4 miles	11.4 miles	10.1 miles	2 miles
<b>Freight relocation needed (miles)</b>	8.1 miles	8.1 miles	8.1 miles	1.3 miles
<b>No. of Park &amp; Rides</b>	5 facilities (Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower and Artesia Stations) (Alternative 4 does not include the Park & Ride at Firestone)			



Figure 3. Build Alternatives



Figure 4. Project Alignments/Configurations



## Environmental Schedule

The schedule below shows the key milestones remaining in the environmental process. This schedule includes a 45-day public comment period after circulation of the Draft EIS/EIR in June 2021, followed by the Metro Board selection of the Locally Preferred Alternative (LPA). The LPA decision will be based on: effectiveness in meeting the Purpose and Need, environmental impacts and benefits, public comments received during the public review period, and above all the financial capacity to construct, operate, and maintain the Project.

Milestone/Review	Schedule
<b>First Admin Draft EIS/EIR Submittal</b>	Nov 20, 2020
Min. three rounds of FTA reviews, Metro response and Legal Review	Nov 20 to June 2021
<b>Federal Register Publication/Draft EIS/EIR Release</b>	June 2021*
<b>Public Comment Period</b>	June to August 2021
<b>Board Selects LPA</b>	September 2021
<b>FTA Issues ROD &amp; Final Certification of EIR by Metro Board</b>	Summer 2022

\* Includes 180 days of SHPO delay, Green Line Station design exploration considering the I-105 Historic District designation, and Slauson Station design exploration.

## First Last Mile (FLM) Plan

Per Board-approved Metro policy, Metro will also establish a FLM Plan for the project. The FLM Plan will:

- Build upon the WSAB Transit Oriented Development Strategic Implementation Plan (TOD SIP) completed in May 2019.
- With Board Selection of the LPA, FLM planning will begin and include engagement with the cities and stakeholders. The FLM Plan will identify a network of walking and biking improvements around the stations within the half-mile radius for walking improvements and up to a three-mile radius for biking improvements.

## 5. Third-Party Engagement (including but not limited to UP)

The corridor for all of the WSAB Build Alternatives will require significant third-party approvals, including various environmental permits and/or approvals, right-of-way agreements, and approvals from asset owners, municipalities, and regulatory bodies. Most of these approvals are schedule critical to progression of the project's final design and construction.

Accordingly, the Planning and Project Teams have established a risk-based strategy for addressing various third-party coordination and engagement tasks. For example, if schedule risk is high, but approval risk is low (e.g. grade crossings), Metro is simply adding additional time contingency to its schedule. On the other hand, asset owners like utilities and Caltrans may present greater design risks, which are addressed through greater pre-construction investigation and design efforts. These are further discussed below.

### A. Freight Coordination - Union Pacific Railroad (UPRR) and Ports of LA & Long Beach

Each of the Build Alternatives would be located parallel to active freight rail track(s). Specifically, the following segments would be impacted:

- UPRR-owned Wilmington Branch right-of-way (ROW) (between approximately Martin Luther King, Jr. Boulevard along Long Beach Avenue to Slauson Avenue),
- UPRR-owned La Habra Branch ROW (between Slauson Avenue along Randolph Street to Salt Lake Avenue),
- Ports of Los Angeles and Long Beach-owned San Pedro Subdivision ROW (between Randolph Street to approximately Paramount Boulevard), and
- Metro-owned PEROW (between its intersection with the San Pedro Subdivision ROW from approximately Paramount Boulevard to Somerset Street).

The Build Alternatives 1, 2 & 3 would require the following realignment of freight track(s) to accommodate the LRT alignment and maintain existing freight operations.

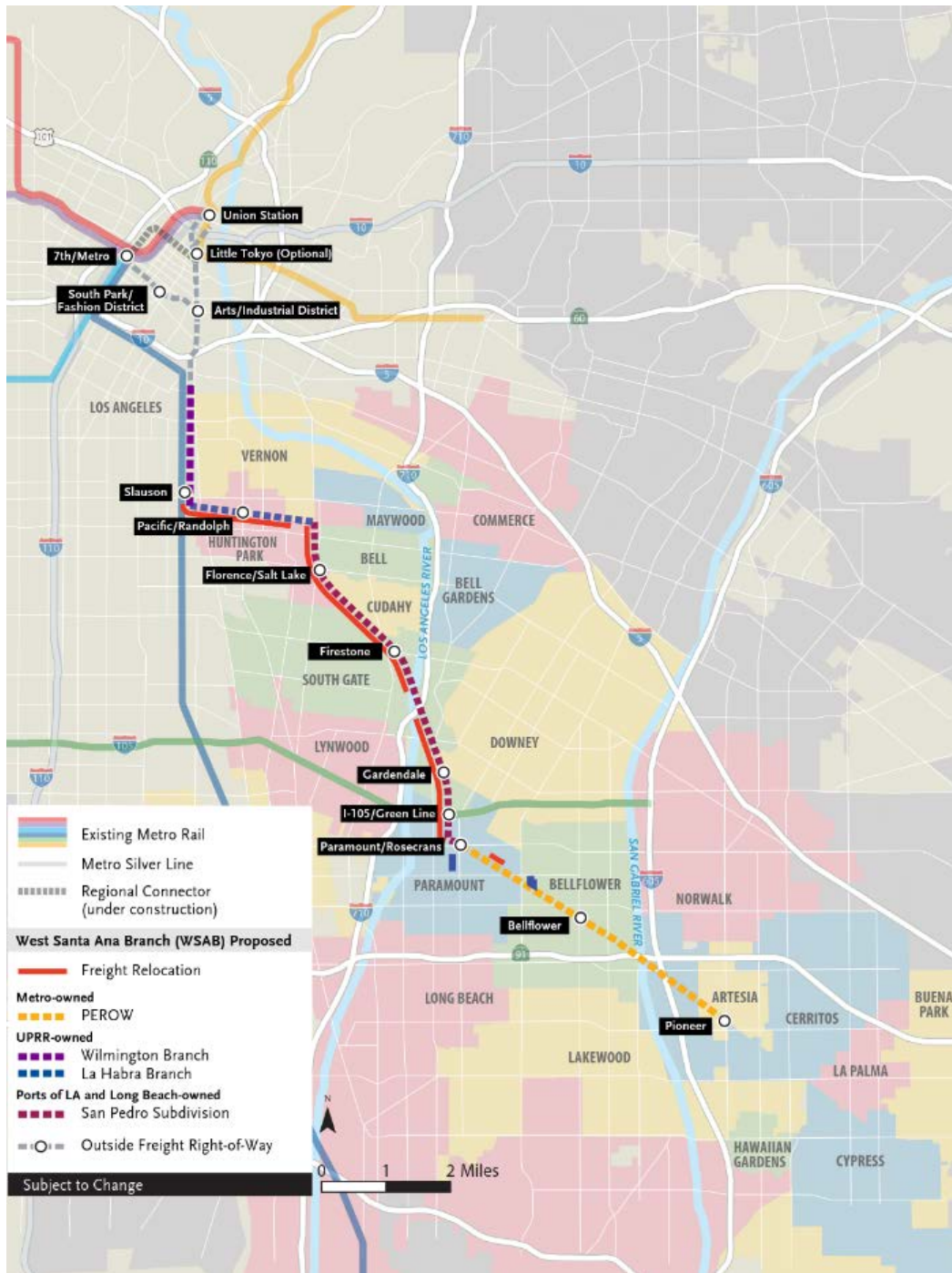
- Require an aerial easement along the Wilmington Branch ROW; the LRT would be in an aerial viaduct that would overhang the UPRR ROW
- Relocation to the south of the LRT alignment within the La Habra Branch ROW,
- Relocation to the west of the LRT alignment within the San Pedro Subdivision ROW, and
- Relocation to the north of the LRT alignment within Metro-owned PEROW.

Table 2 below summarizes the freight rail impacts of each alignment. **Figure 5** shows the WSAB interface with freight ROW.

**Table 2. Freight Track Realignment**

Rail ROW	Shared ROW with Freight (miles)	Freight Relocation by Build Alternatives (miles)			
		Alternative 1	Alternative 2	Alternative 3	Alternative 4
Wilmington Branch	1.8	0.1	0.1	0.1	—
La Habra Branch	2.3	2.0	2.0	2.0	—
San Pedro Subdivision	6.1	5.4	5.4	5.4	0.7
Metro-owned PEROW	1.2	0.6	0.6	0.6	0.6
<b>Total</b>	<b>11.4</b>	<b>8.1</b>	<b>8.1</b>	<b>8.1</b>	<b>1.3</b>

**Figure 5. WSAB Project and Freight Interface**



Final design and construction of either the Enabling Works or P3 LRT Project cannot begin without reaching agreement with freight right-of-way owners. UPRR is essential in delivering this project because they own and have operating rights on more than 50% of the corridor. Timely resolution of the impacts to UPRR ROW is critical to meeting the project schedule, and indeed, completing the project at all. In addition to schedule implications, agreements regarding ROW access, freight rail relocation, and required operational and safety measures may have

significant cost implications. As a result, the Project Team has developed the following strategy to address these challenges:

- Minimize UPRR network impacts both initially and long-term,
- Maintain UPRR operations and minimize future potential customer impacts to the extent practicable,
- Minimize UPRR real estate impacts, and
- Maximize safe shared corridor operations.

To implement the above strategy the Project Team:

- Has signed a Preliminary Agreement and Non-disclosure Agreement with UPRR in February 2020. This is an important initial step to commit Metro funds to reimburse UPRR for their technical and legal review of project documents.
- Has had several meetings with UPRR to discuss the project with the most recent occurring on December 9<sup>th</sup>, 2020. Attendees from UPRR included representatives from their network planning, operations, real estate, government affairs, and public projects divisions. UPRR noted that some of their internal stakeholders have changed since the spring and will therefore require additional time to get them up to speed on the project. Below is a summary of the meeting:
  - Overview of the project scope and alignment characteristics including interface in the three subdivisions that are key to UPRR.
  - Emphasis that there is funding available with the passing of Measures R and M to progress this project.
  - It was noted that significant effort has occurred to get feedback from all the communities along the proposed alignment which has driven the decision for the location of this project.
  - Some notable feedback from UPRR on the proposed alignment include the following:
    - No comment on the proposed horizontal clearance between LRT and freight tracks at this time until further investigation could be conducted.
    - Access for UP maintenance must be maintained.
    - Considerations for impacting adjacent city streets and not just UPRR. (Response was traffic lanes, parking, and sidewalks will be impacted in the La Habra Subdivision.)
    - Concern regarding impacts to both existing and potential future industrial customers. (Responded that it was too early to engage in a parallel path to identify and mitigate any property transactions. However, UPRR acknowledged that having their engineering and real estate divisions working simultaneously was not unheard of.)
  - UPRR stated they would like to wait until after their upper management meeting before setting up regular meetings with Metro. Metro staff indicated they would follow up with UPRR the week of December 21<sup>st</sup> to get added updates and feedback from UPRR's upper management meeting.

The process for UPRR to obtain approval on a project from their internal organization includes:

- Working with the UPRR assigned manager and technical leads to address engineering, right-of-way, marketing, and customer service concerns,
- Presenting to the UPRR NEST Committee (made up of senior personnel from their Engineering, Marketing, Right-of-Way, and Legal divisions) to make the business case by outlining the project pros and cons,
- Presenting the business case to their Operating Committee and Corporate Executives who would ultimately make the final decision on the project.

Only until after going through these committees will UPRR begin negotiations with LA Metro.

- Metro has engaged design consultants with UPRR experience.
- The Metro Board has sent a letter to UPRR on December 14<sup>th</sup> emphasizing not only the Board's priority on the WSAB project but also its commitment to working with UPRR to deliver the project.
- Plans to schedule recurring technical meetings to continue momentum of the project.
- Continue to leverage pre-existing relationships with key UPRR representatives.
- Continue to work with and make progress with the local UPRR team and engage executive and political resources strategically.

The Project Team will also continue to coordinate with the Ports of Los Angeles and Long Beach since they own the 6.1-mile long San Pedro Subdivision.

## B. Gateway Cities

Each of the cities that the project runs through must grant several approvals to allow the project's design and construction to advance within that City's portion. To help address city's approval process and associated concerns, the WSAB City Managers TAC was formed within the Gateway Cities COG to serve as an effective forum for generating consensus positions on a range of technical, financial, and policy challenges confronting the corridor cities. The members include City Managers or key staff for the cities and LA County staff. The 10 Gateway Cities include Huntington Park, Vernon, Cudahy, Bell, South Gateway, Downey, Paramount, Bellflower, Cerritos and Artesia. The monthly meetings are also attended by key board deputies from Supervisor Hahn, Supervisor Solis, Mayor Garcia offices and Eco-Rapid and the Gateway Cities COG staff.

Metro has worked with the TAC to establish a collaborative approach to achieving the milestones required for the project to advance, which includes:

- Developing & executing provisions of the **Master Cooperative Agreement** with Metro that cover the interests of all the corridor jurisdictions and to establish a scope and work plan with cities to reimburse the cities for their review time.
- Establishing ongoing engagement on the current project-level environmental process (being conducted by Metro and its consultant WSP) to protect interests of the cities and secure meaningful mitigation measures, supported by an effective monitoring system.
- Developing an approach to the required 3% contribution to Metro from cities along a light rail line (per Measure R and Measure M), and its relation to implementation of First/Last Mile projects within cities.
- Partnering effectively with Metro in the implementation of the Transit-Oriented Development Strategic Implementation Plan (TOD SIP) which was completed in 2019.
- Coordinating on other efforts such as the Urban Design Guidelines, SCAG and Metro Value Capture Studies, etc.

## C. Caltrans

The planned project alignment crosses six freeways owned by Caltrans, which requires coordination regarding environmental clearance, design and construction.

In particular, the I-105 Freeway requires demolition and reconstruction of three bridges including an existing freight bridge, the Arthur Avenue pedestrian bridge, and Façade Avenue street bridge. A new LRT bridge will also be constructed next to the relocated freight bridge. Bridge work is summarized in **Table 3**, below.

The approval and environmental clearance of these bridge design and modifications is critical to meeting the project schedule and progressing overall project design.

- Executed a work order with Caltrans to establish scope and work plan (Form 60s/payment) to reimburse Caltrans staff for services provided
- Scheduling monthly meetings with Caltrans team
- Preparing Project Study Report/Project Report for Caltrans approval. The report will be submitted to Caltrans in June after the release of Draft EIS/R
- Advancing Enabling Works design to further discussions on bridge type, construction means and methods

**Table 3. Freeway Crossings**

Alt 1: Los Angeles Union Station to Pioneer	Alt 2: 7th and Metro to Pioneer	Alt 3: Slauson to Pioneer	Alt 4: I-105/C Line to Pioneer
US-101: Underground Bored Tunnel	US-110: Underground Bored Tunnel: Partial crossing		
<ul style="list-style-type: none"> <li>• I-10: Aerial</li> <li>• I-710: Undercrossing (jack box construction)</li> <li>• I-105: Aerial (new bridges over the freeway)</li> <li>• SR-91: WSAB will use existing undercrossing</li> <li>• I-605: WSAB will use existing undercrossing</li> </ul>		<ul style="list-style-type: none"> <li>• I-710: Undercrossing (jack box construction)</li> <li>• I-105: Aerial (new bridges over the freeway)</li> <li>• SR-91: WSAB will use existing undercrossing</li> <li>• I-605: WSAB will use existing undercrossing</li> </ul>	<ul style="list-style-type: none"> <li>• I-105: Aerial (new bridges over the freeway)</li> <li>• SR-91: WSAB will use existing undercrossing</li> <li>• I-605: WSAB will use existing undercrossing</li> </ul>

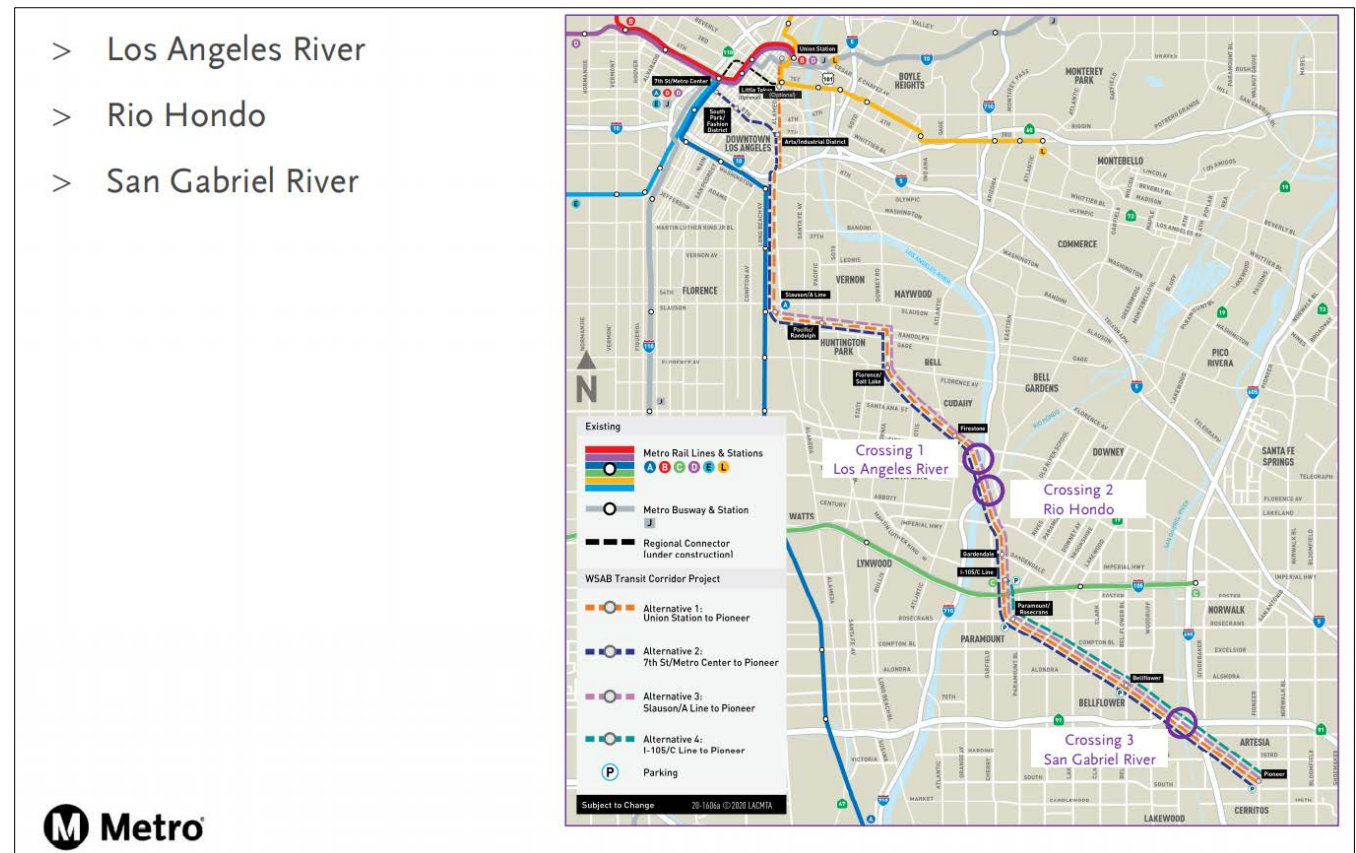
#### D. U.S Army Corps of Engineers (USACE)

The alignment will cross three existing concrete-lined flood channels adjacent to existing railroad bridge crossings at Los Angeles River, Rio Hondo, and San Gabriel River. Alternative 4 requires only one crossing at San Gabriel River. Each of these river crossings, shown in Figure 6, impacts flood control channels owned and operated by the U.S. Army Corps of Engineers (USACE). To construct over these bodies of water, the Project will require Section 404 and 408 permits. Metro has begun early permitting activities to ensure that such approval can be granted in a timely manner:

- Entered into Agreements to establish scope and work plan for 408 and 404 review and approval and reimburse staff for their time
- Submitted the Project Jurisdictional Delineation Report for review In October 2020 as the first step of the approval process
- Advance the design of river crossings and conducting geotechnical subsurface investigations under enabling works scope



Figure 6. River Crossings

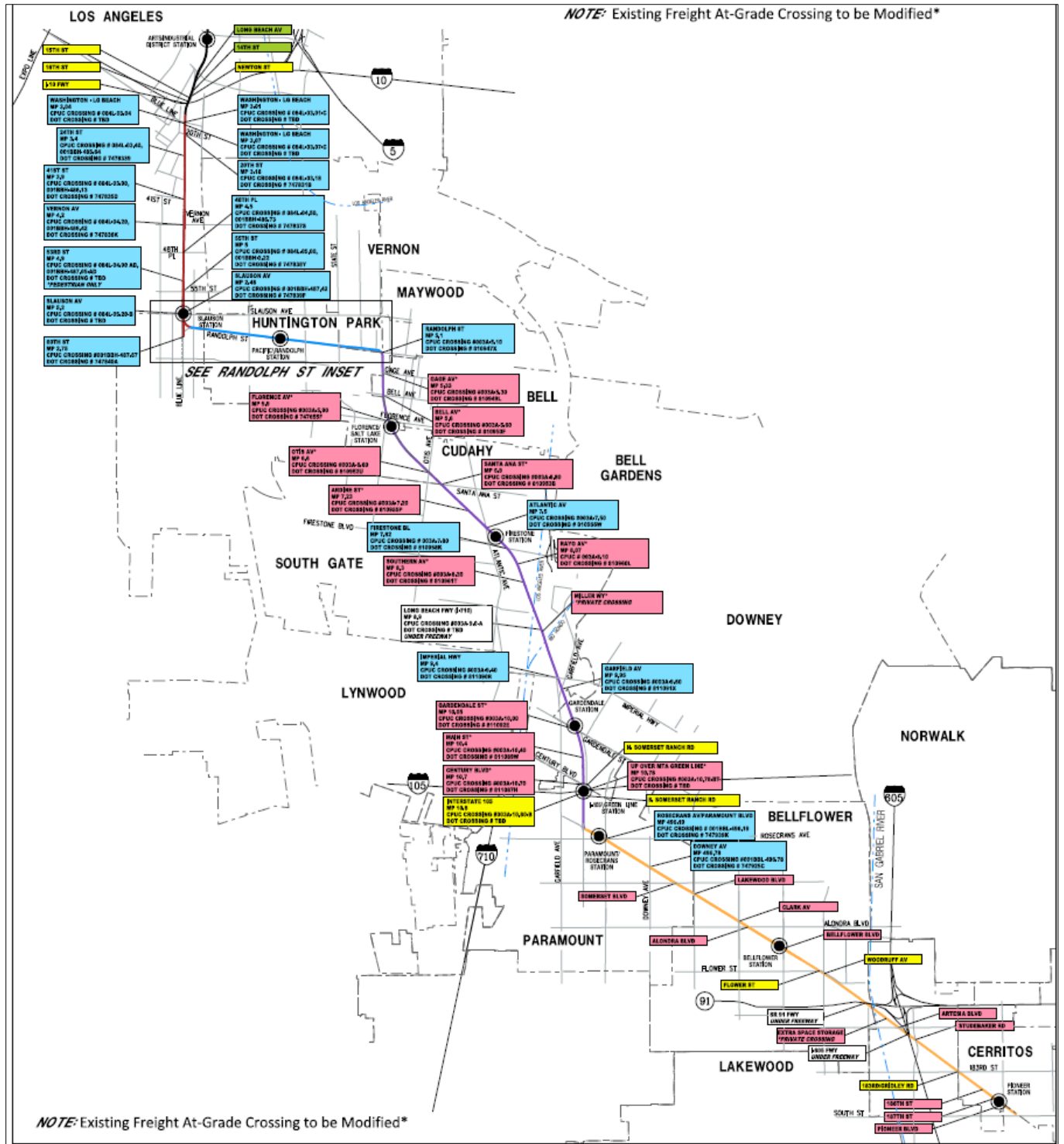


### E. California Public Utilities Commission (CPUC)

Thirty-one at-grade street crossings will require approval from the California Public Utilities Commission. **Figure 7** shows the location of these crossings. The CPUC process includes an 18-month application and design review process that begins at the end of the environmental process. An approved project environmental document is a prerequisite for starting this process. To accelerate this timeframe, Metro plans to use the Enabling Works scope to:

- Advance the grade crossing design with input and concurrence from UPRR and the Cities,
- Meet with CPUC on a regular basis to discuss design of grade crossings, and
- Work with CPUC to develop multiple grade crossing application packages and time the submittal of the packages based on level of complexity such that CPUC could approve the simpler crossings more expeditiously than the 18 months. This allows Metro to work with the contractor to sequence construction based on approval of grade crossing packages.

Figure 7. Street Crossings



## F. Utilities

The WSAB requires coordination with 64 utility companies. Conflicting utilities may need various treatment, including relocation in many cases. Based on 15 percent project design, Metro has identified interfaces with 18 water utilities, 88 power assets, eight telecom assets, 6 gas utilities, ten oil utilities, 58 SD assets, and 25 SS assets, for a total of 213 interfaces which could present conflicts or require treatment.

Potential major utility conflicts include the following

<b>Southern California Edison</b>	<ul style="list-style-type: none"><li>○ Overhead 54</li><li>○ Underground 27</li><li>○ Transmission 2</li></ul>
<b>LADWP</b>	<ul style="list-style-type: none"><li>○ Transmission 4</li></ul>
<b>SoCal Gas</b>	<ul style="list-style-type: none"><li>○ Three 26" Lines and one 30" Line</li></ul>
<b>Oil</b>	<ul style="list-style-type: none"><li>○ 4 Lines (6-12" – EACH 1500')</li></ul>
<b>Telecommunications</b>	<ul style="list-style-type: none"><li>○ Multiple 4-12" conduit ductbanks</li></ul>

In general, utilities have relocation policies that allow for conflicts to be addressed as long as the affected agency 1) provides funding for the design and construction, and 2) conforms to the utilities' design criteria. Through the Enabling Works effort, Metro plans to take early action on these potential conflicts as follows:

- Confirm utility conflicts with utility owners and by potholing
- Identify disposition of the utility (abandon, protect-in-place, or relocate)
- Design the relocated utility with ongoing coordination with utility owners
- Obtain approval
- Reduce potential schedule delay to the LRT construction and therefore minimize project risks

## 6. Design Efforts

Critical to the success of this project is balancing the advancement of project design for various components. In some instances, advancing project component design will help to reduce uncertainty that could drive contingencies and risk premiums up, result in cost overruns or schedule delays, or otherwise create challenges to project delivery. In other cases, limiting design efforts can preserve the opportunity for P3 bidders to introduce performance-based innovations into the project design, creating opportunities to reduce costs, accelerate schedules, and limit risk premiums and contingency budgets. The Project Team has completed advanced conceptual engineering of the build alternatives to support environmental analysis, provide flexibility in selecting the LPA and plans to advance enabling works for specific project elements to reduce environmental risks as needed and described below.

## 7. Enabling Works Sequence

Completing design and construction of high risk/high consequence and critical path elements of the project especially those requiring third-party approvals prior to construction of the LRT infrastructure by a P3 Developer is

key to minimizing risks to the overall project and likely to accelerate the delivery of the project. The sequence of Enabling Works is as follows:

- Advance the design for Enabling Works including freight relocation, grade crossings, and utility relocations in the portion of the corridor common to all four Build Alternatives
- Perform subsurface geotechnical borings
- Determine delivery method for construction including but not limited to Construction Manager/General Contractor (CMGC)
- Release RFQ/RFP for approved delivery method
- Continue coordination with UPRR, cities, Caltrans, CPUC, and utility owners
- Obtain Board approval for award of contract for Enabling Works delivery
- Issue Notice-to-Proceed for preconstruction services
- Complete final design and obtain third party approvals (e.g., CPUC grade crossing applications and Caltrans project approval) following final EIR certification and/or ROD issuance
- Upon successful negotiation of CMGC contract issue NTP for construction of Enabling Works
- Construction of Enabling Works commences

## 8. P3 Timing

Development of a project like WSAB for P3 delivery requires several key steps to support procurement efforts, which can occur once the project’s environmental approvals are in place, and key third party issues are resolved. The key deliverables include:

- a project risk analysis, which allows staff to quantify the value of project risks and performance requirements
- a value for money (VfM) analysis to confirm P3 delivery as the appropriate approach and support the P3 contract structuring
- the P3 contract, which is specific to the project, and includes detailed performance specifications, risk allocation, and payment terms
- the solicitation package, which includes the RFQ, RFP, P3 contract, scope of the project, performance requirements, and proposed payment terms, as well as the approach to evaluation and selection of a preferred proposer

It is important that these materials each reflect the actual project that is to be built, and therefore cannot progress too far ahead of the advancement of the project design. Metro’s strategy is for a “just-in-time” drafting approach, where each of the materials described above is developed as soon as there is sufficient project design detail and certainty that it won’t change in a significant way.

The current expected milestone schedule is below. Note that if key project development milestones change, these P3 milestones will shift accordingly.

Activity	Target Date
<b>1. Update Risk Analysis for Enabling Work and IOS LRT scope (completed)</b>	October 2020
<b>2. Preliminary VfM Analysis for internal review and comment</b>	Early December 2020

<b>3. Finalize VfM Analysis</b>	Late December 2020
<b>4. Initial draft WSAB Business Case for Internal Review</b>	Early January 2020
<b>5. Internal Review/Comment Process</b>	January 2021
<b>6. Draft preliminary WSAB Business Case</b>	March 2021
<b>7. Funding and Affordability Assessment and Procurement Strategy</b>	September 2021
<b>8. Value for Money Update/Refresh based on LPA</b>	Winter 2021/2022
<b>9. Update P3 Procurement Documents and Contract per VfM/LPA</b>	Winter/Spring 2022
<b>10. Issue P3 Solicitation</b>	Upon Enabling Works Contract Award

**9. Project Funding Plan**

Metro staff has developed a funding plan for the initial project, cost, and schedule that was included in the Measure M sales tax ordinance approved by voters in 2016. The ordinance identifies approximately \$1 billion for a FY28 project from Artesia to the Green Line, and approximately \$3 billion for a FY41 project to downtown Los Angeles (in 2015 dollars). The funding plan includes funds for the cost of expected inflation and has been distributed to the Metro Board, public, State, and Federal Transit Administration. Metro has already secured \$300 million of State SB1 funding in 2018 for construction of the project. The balance of planned State and federal grant funding was to be sought as the project nears construction.

However, Metro is currently evaluating alternative funding strategies and an accelerated schedule for the project. The cost associated with this is being refined and anticipated to be discussed with the Board in March 2021. A revised funding plan may need to be developed based on the selected LPA cost, and schedule agreed to by the Board, notwithstanding the Metro cost management policy that, for any cost increase, scope reductions and value engineering are evaluated prior to allocating more funding, and funding within the subregion and corridor are evaluated prior to the use of countywide or regional funding.

Should the Board direct staff to pursue a higher cost alternative, staff will attempt to identify and secure an achievable amount of funding for the gap. In anticipation of an accelerated and potentially higher cost alternative, staff has initiated a capital investment grants strategy that will identify the Metro projects to be pursued for federal funding and schedule of activities. This strategy will be discussed with the Board during the first part of 2021 and may include the pursuit of New Starts grants for the project. Alternatively, the Board could opt to phase implementation of the LPA to match funding availability and timing.

The updated funding plan for the project will be prepared in conjunction with an updated Metro 2021 Short Range Transportation Plan financial forecast, which will reflect revised assumptions on revenues, costs, and service levels, as a result of the economic recession and related COVID pandemic. The updated financial forecast will include a

significant reduction in sales tax revenue, certain State SB1 programs, and operating revenue. These reductions will hamper the development of a credible, updated funding plan for the project.

The updated funding plan will reflect any presumed P3 delivery and financing for the project, as Metro staff is coordinating with Metro's P3 consultants on the preparation of the planned business case and affordability analysis, as well as detailed technical assumptions on the use of any private debt. A P3 delivery will affect the composition of the funding plan but will not likely add to or reduce the available funding for the project.