

ZEB Program Alternative Delivery

Pre-Procurement Work Plan Project Scope

Definition









Today's Agenda

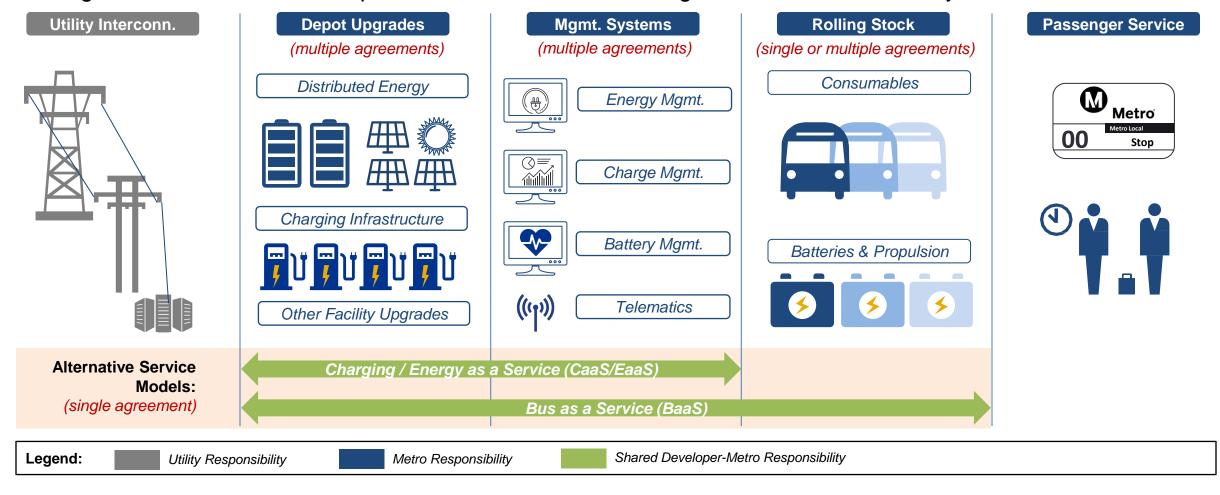
- 1. ZEB Ecosystem & Service Delivery Models
- 2. Pre-Procurement Work Plan Status
- 3. Project Scope Definition Workshop Objectives & Takeaways
- 4. Opportunities and Risks of Including Vehicles in the Bundle
- 5. Project Scope Recommendation
- 6. Proposed Next Steps

Appendix: Alternative Delivery Project Division Bundle Selection Criteria



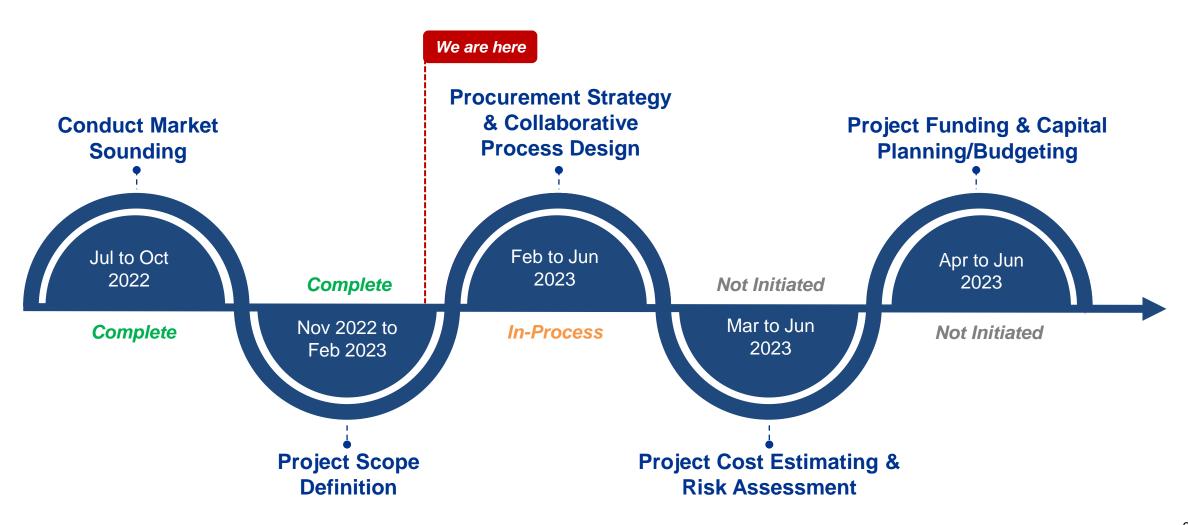
An Examination of the ZEB Ecosystem & Alternative Service Models

The Alternative Delivery Working Group (ADWG) examined the current ZEB ecosystem to develop a holistic view of the program's development and identify opportunities for alternative delivery to mitigate risks through service-based models, performance-based contracting, or collaborative delivery:





Pre-Procurement Work Plan Timeline



O3
Project Scope Definition Workshop
Objectives & Takeaways

Project Scope Definition Workshop Objectives & Takeaways

The project scope definition phase of the Work Plan began in November and OSI, Operations, and relevant subject matter experts within the ADWG completed a series of workshops across five project areas:

- 1. Division Bundle
- 2. Facilities Assets & Management Systems
- 3. Vehicle & Fleet Assets
- 4. Utility Coordination
- 5. Service Planning & Continuity of Service



Opportunities & Risks by Including the Buses in the Bundle

- Align vendor incentives (mitigate schedule delivery mismatch)
 - Mitigates schedule delivery mismatch between vehicles and chargers
 - Risk: Creates single critical path for ZEB transition (and aggregates delay risk)
 - Pays for vehicles only when ready to receive them
 - Mitigates bus/charger/systems integration risk and upgrades throughout period of performance
- Single vehicle contract (instead of three contracts of ~250 vehicles each)
 - Potential economy of scale at acquisition
 - Risk: Limited and challenged U.S. bus market due to Buy America & manufacturing capacity
 - Size of the purchase could incentivize participation from non-U.S. based OEMs
 - Vehicle uniformity across the fleet and potential improved O&M performance
 - Risk: Bet on future performance of a single OEM (requires extensive qualifications-based selection)
 - Reduced agency administrative burden
- Turnkey solution and single point of contact for full ZEB ecosystem
 - Expands options for vehicle procurement
 - **Risk:** Similar projects in implementation are international (though strong U.S. market interest)



Alternative Delivery Project Scope Recommendation

- Division Bundles: Proceed with Divisions 15, 13, 3 and 5 in the alternative delivery bundle as they best fit the selection criteria and minimize third-party challenges (e.g. SHPO, SCE, City of LA, etc.)
 - **Division 3** 630 W Ave 28, Los Angeles
 - Division 5 5425 S Van Ness Ave Los Angeles
 - Division 13 920 N Vignes St, Los Angeles
 - Division 15 11900 Branford St, Sun Valley
 - Selection criteria included the current ZEB transition sequence, equity considerations, capital cost, utility territory, site quality, solar / energy storage potential, etc. A list of the Alternative Delivery Project Division Bundle selection criteria can be found in the Appendix.
- Facilities Assets & Management Systems: Include a general scope for facilities and technology assets from the
 meter to the vehicle (e.g. structures, DERs, management systems, charging equipment, etc.) to deliver the full CaaS
 ecosystem and ensure a single investment and intervention. Balance SGR upgrades and non-revenue / employee
 charging against cost/benefit.
- Vehicles & Fleet Assets: Include vehicles for further examination under the alternative delivery scope

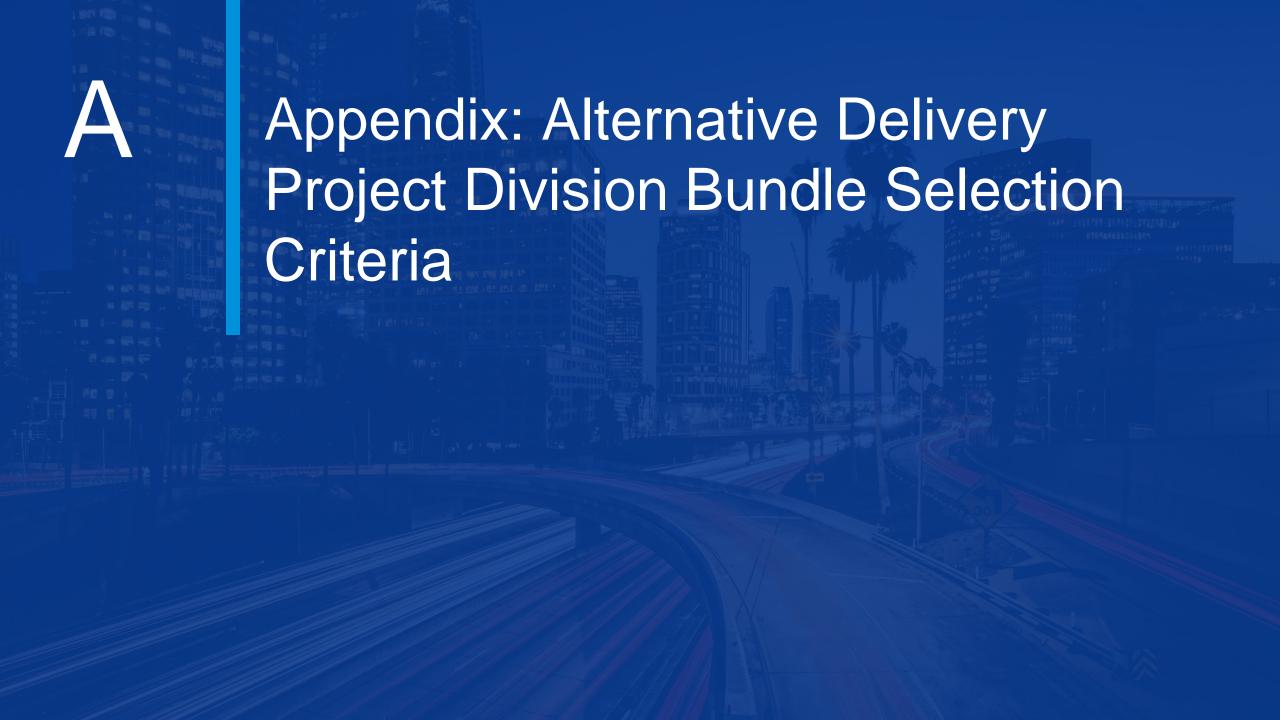
Alternative Delivery Project Scope Recommendation Continued

- Utility Coordination: A key risk and schedule driver for the whole program (not only for alternative delivery). Develop programmatic utility engagement strategy (i.e. inter-agency MOU)
- Service Planning Impacts & Continuity of Service: Engage Service Development at least one year prior to commencement of construction to ensure temporary service plan ready six months prior



ZEB Alternative Delivery Pre-Procurement Work Plan Next Steps

- Advance to next phase of the Work
 - Frame-out general parameters of the CaaS Developer scope
 - Frame-out procurement approach for a collaborative process to engage a Developer
 - Develop alternative delivery options assessment that outlines scope and procurement strategies
 - Develop procurement options assuming vehicles included while retaining off-ramps
 - Estimate project costs and payments associated with alternative delivery options
- Advance utility strategy to streamline coordination with LADWP, prepare project-level agreement, and execute prior to any procurement
- Investigate CEQA permitting requirements and develop compliance strategy prior to any procurement



Alternative Delivery Project Division Bundle Selection Criteria

 The following evaluation criteria were identified to select the preferred Division bundle (with potential backup locations) among remaining Divisions (1 / 2 / 3 / 5 / 7 / 13 / 15):

- 1. Current transition sequencing / delivery schedule
- 2. DACs & equity consideration/priority
- 3. Capital costs
- 4. Utility territory
- 5. Utility coordination anticipated lead time
- 6. Available power & Utility upgrade needs (anticipated loads at Division)
- 7. Solar potential at Division location
- 8. DER readiness / real estate needs for solar/storage
- 9. ZEB fleet size / service out of Division

- 10. Site quality
- 11. Environmental approvals / permitting needed
- 12. Dependency on other Divisions during transition
- 13. Service impacts during construction
- 14. Construction optimization/complexity opportunity
- 15. Design Progress
- 16. O&M optimization/complexity opportunity
- 17. On-route charging needs
- 18. On-site labor / Metro functions at each Division
- 19. Co-location potential for other Metro functions