

May 2023

LA 2028 Olympic Legacy Street Improvements Plan

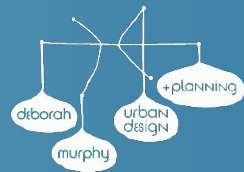
Comprehensive Presentation
City of Los Angeles Public Works Committee



Preparation of this study was made possible by the combined efforts of the:

City of Los Angeles Council Offices,
Community Representatives,
Community Advisory Community,
Technical Advisory Committee,
Departments Public Works, Bureau of Streets Services (StreetsLA),
and Consultants:

Nelson\Nygaard Consulting Associates, Inc. (Nelson\Nygaard)
Deborah Murphy Urban Design + Planning
Estolano Advisors
Fehr & Peers
Leland Saylor Associates
Psomas





What are we covering today?

- 1 Project Overview
- 2 Project Inputs
- 3 Project Recommendations
- 4 Next Step

Project Overview



About this Project

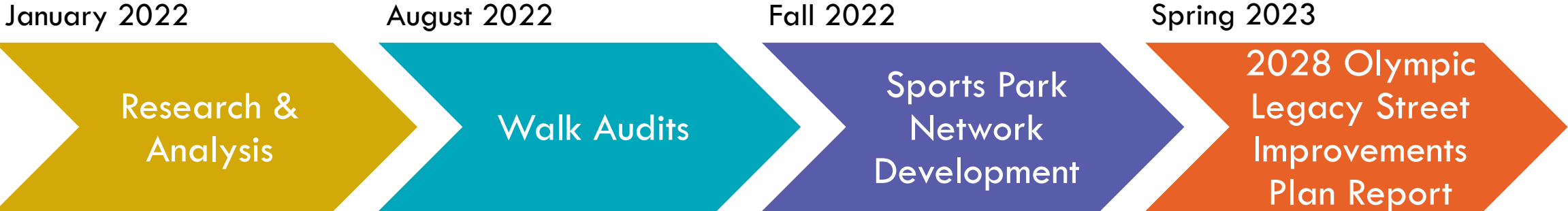
- Guided by six City goals: accessibility, equity, public health, resiliency, safety, and sustainability
- Uses asset condition and management framework to identify needs
- Informed by Community Advisory Committee, Technical Advisory Committee, and Walk Auditors
- Identify both maintenance and “legacy” projects that enhance venue experience on streets during and beyond 2028 Games



Project Budget

CALTRANS (Sustainable Transportation Planning Grant):	\$497,250
<u>City Local Match:</u>	<u>\$111,750</u>
Total Funds:	\$609,000

Project Schedule



Project Process

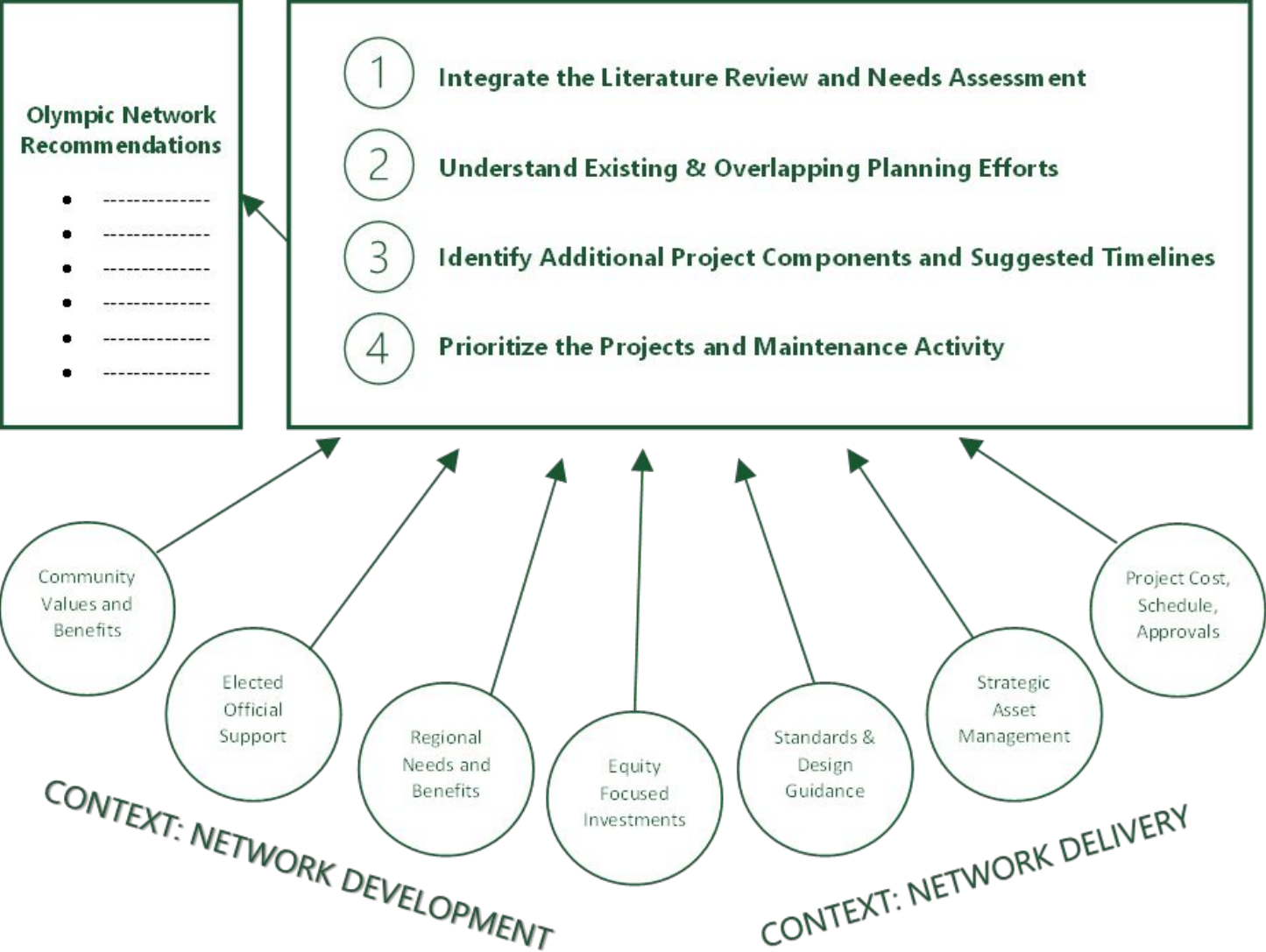


KEY:

- 👥 Community Engagement Activities
- ★ TAC + CAC Coordination



Project Identification



Project Prioritization

- Provides permanent/legacy benefits after the Games
- Provides benefits during the Games
- Ease of implementation/coordination



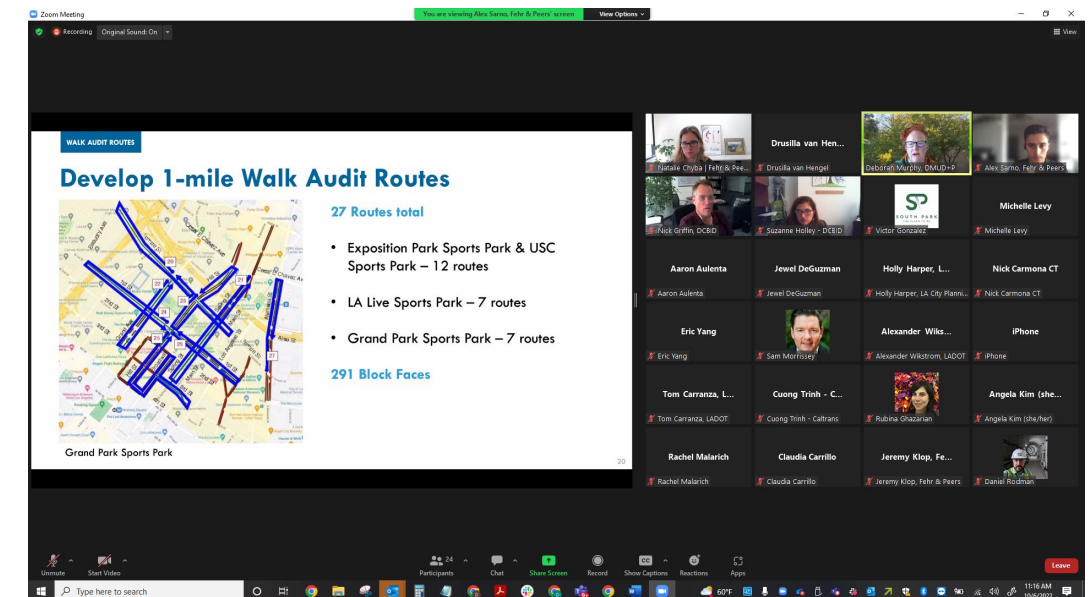
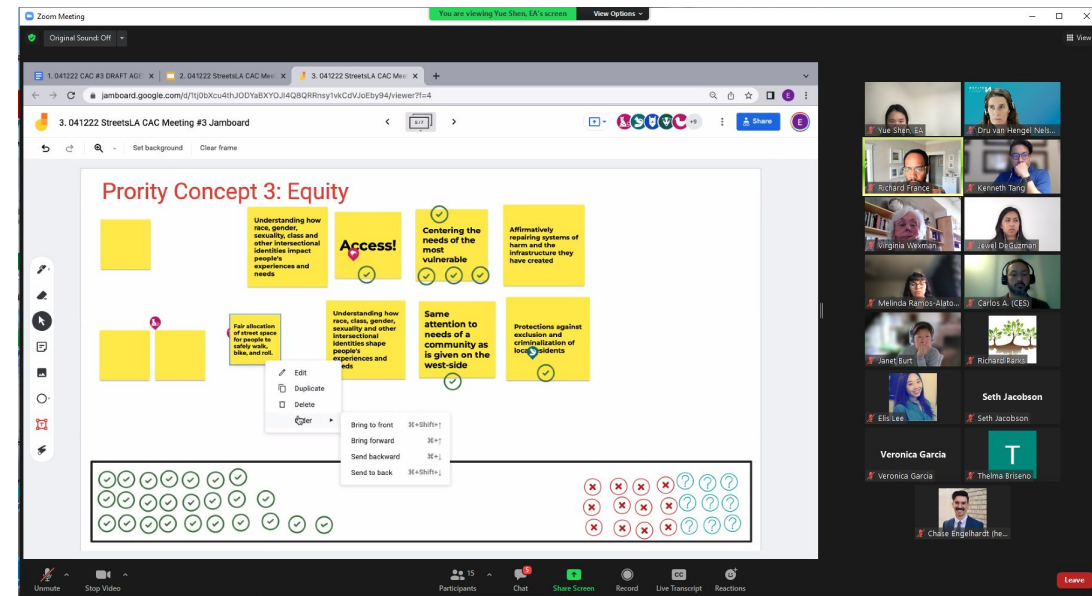
Project Inputs

2



Engagement

- **Community Advisory Committee**
 - Identified access barriers and challenges
 - Helped refine criteria for needs assessment
 - Supported outreach and recruitment for walk audit
 - Provided input on network recommendations
- **Technical Advisory Committee**
 - Shared knowledge of planned and programmed projects
 - Informed grouping of street assets by City goals
 - Provided input on network recommendations



Needs Assessment

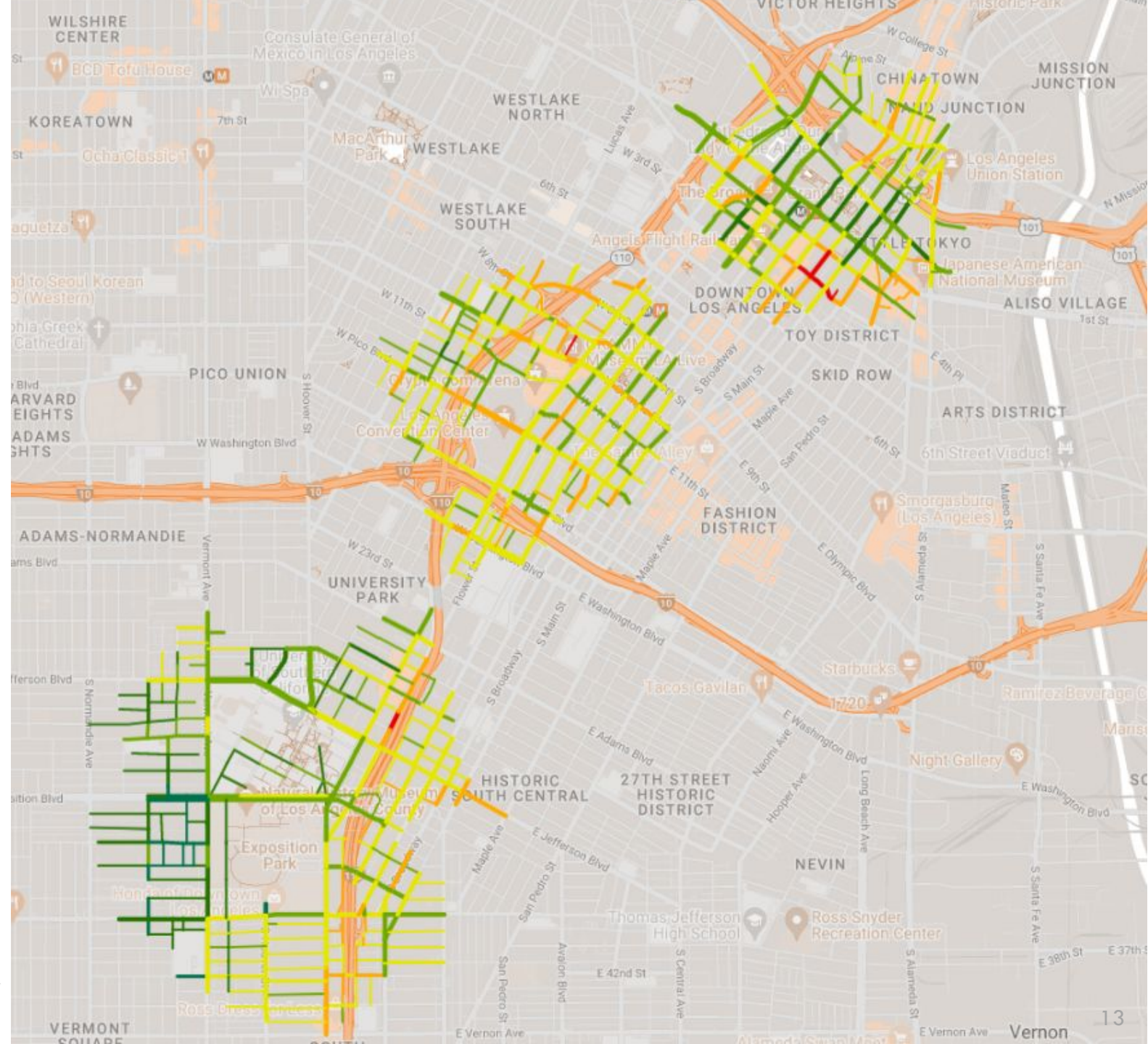
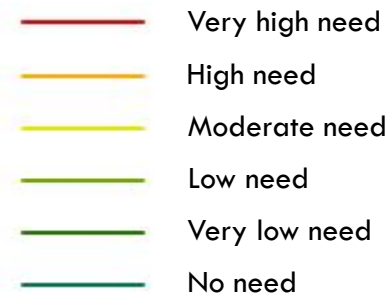
- Streets meeting criteria for several indicators demonstrated higher need
- Basis for identifying which streets to audit
- Basis for identifying network recommendations
- Received input from CAC and local CBOs for final street selection

City Goals	Need Indicator
Accessibility	<ul style="list-style-type: none">• Missing sidewalk• Missing ADA curb ramp
Equity	<ul style="list-style-type: none">• Likelihood of residents using transit
Public Health	<ul style="list-style-type: none">• High levels of Particulate Matter 2.5• High levels of Diesel Particulate Matter
Resiliency	<ul style="list-style-type: none">• Poor pavement conditions
Safety	<ul style="list-style-type: none">• Designated High Injury Network corridor• High level of traffic stress• Low street light density
Sustainability	<ul style="list-style-type: none">• Tree canopy• Land surface temperature



Needs Assessment

Composite score of streets with highest need across all City goals.

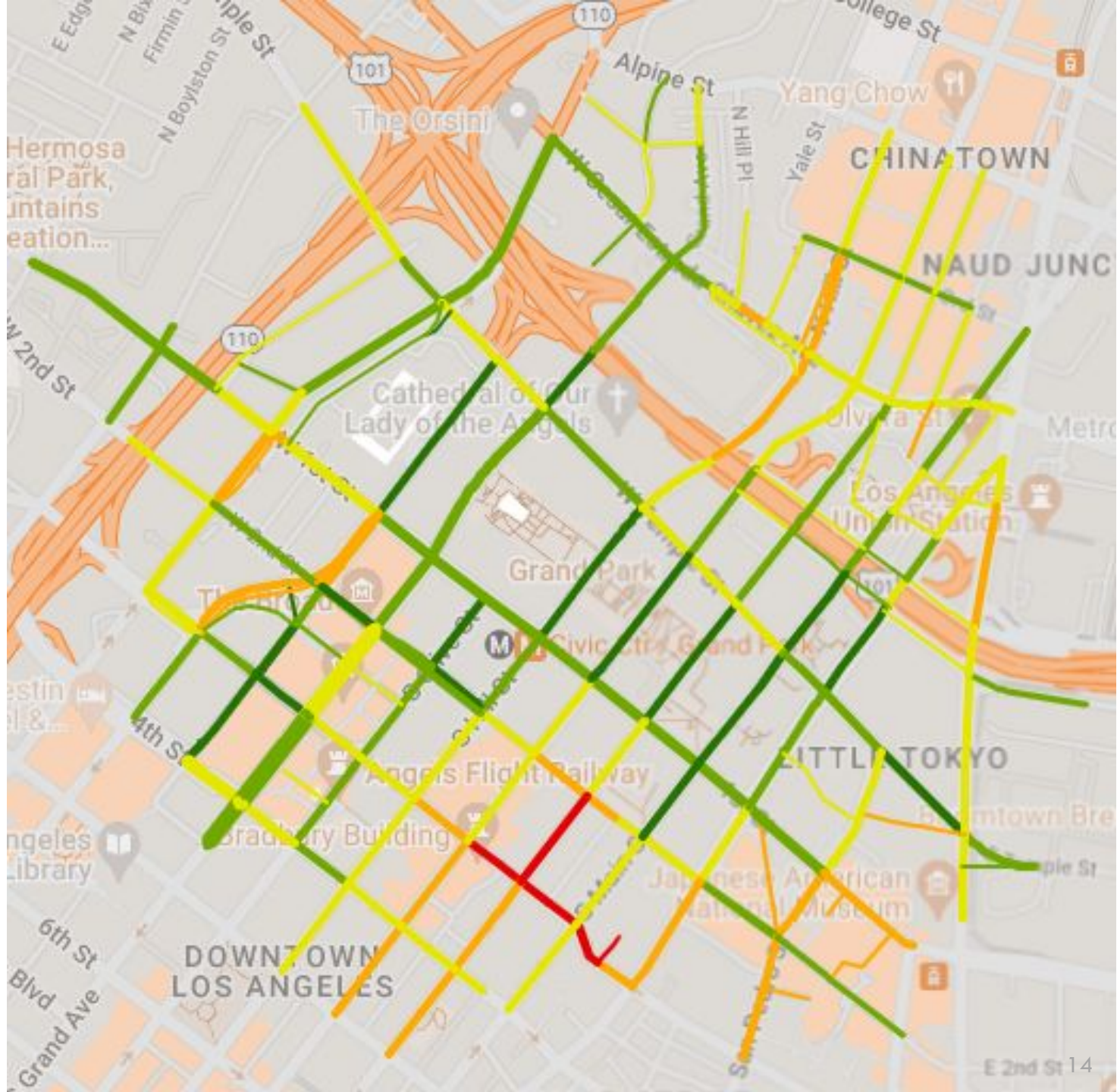
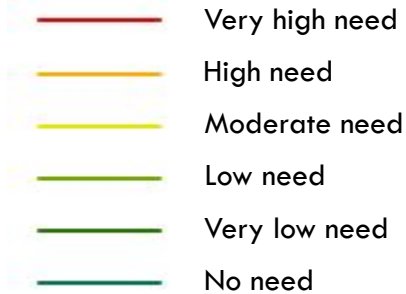


Sample Needs Assessment Results

Grand Park

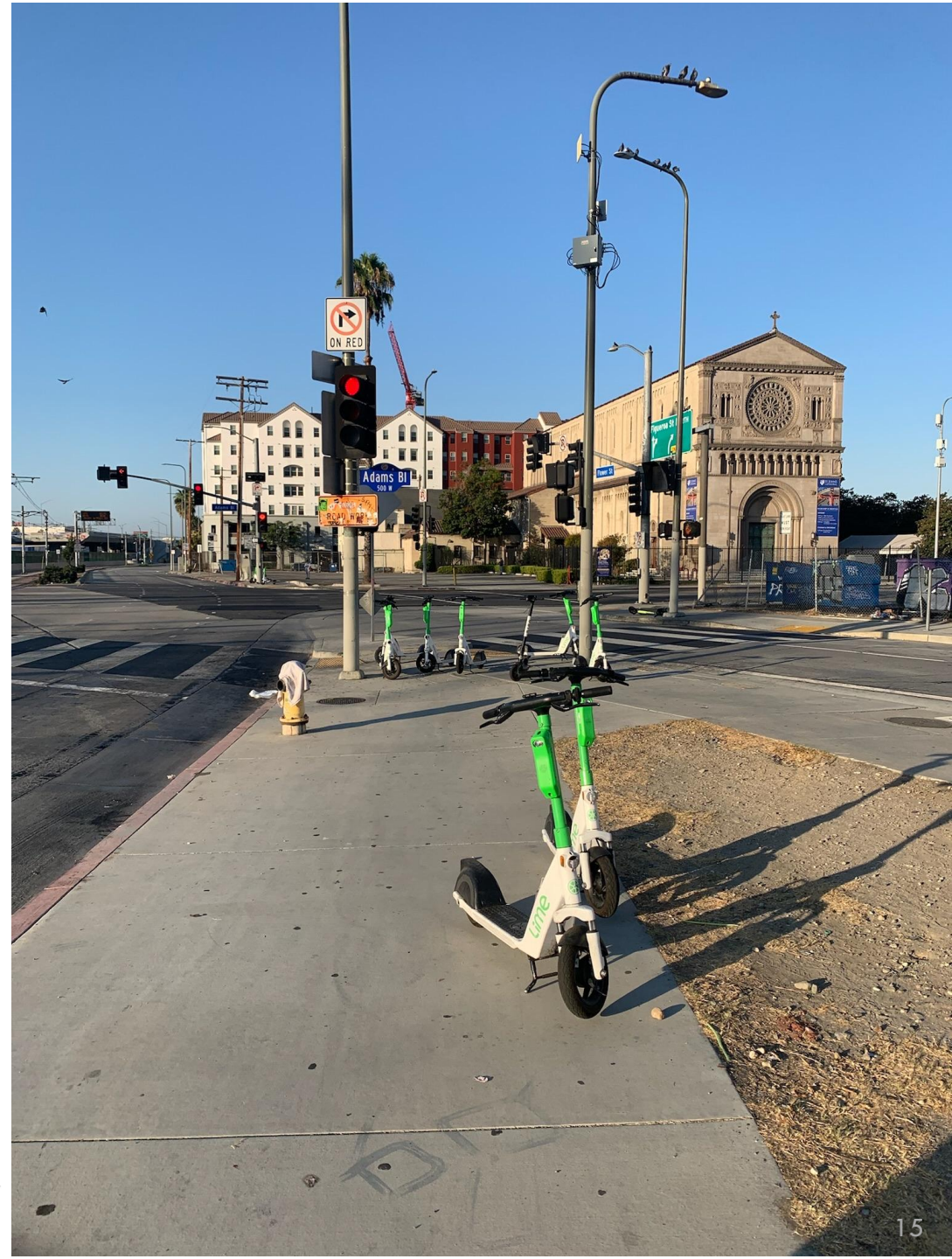
Areas of high need according to desktop analyses:

- 3rd St.
- Spring St.



Walk Audit Overview

- Qualitative questions to understand experiential aspects of walking and rolling
- Walk Auditors recruited from CAC, CBOs and local community representatives
- Walk Audit Application developed with digital map and questions for use with a Smart Phone/Tablet
- 28 auditors completed 15 routes on high need streets



Smart Phone/Tablet Application Interface

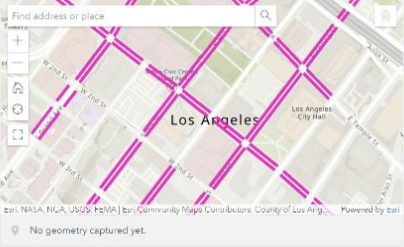
Street Walk Audit

Auditor Name*

Auditor Email*

Map*

Find address or place



Los Angeles

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, County of Los Ang... Powered by Esri

No geometry captured yet.

Sidewalk

Street

Bicycle & Transit

Crossings

Place

Photo

Select image file

Submit

Sidewalk

1. How is the supply of sidewalk lighting fixtures?*

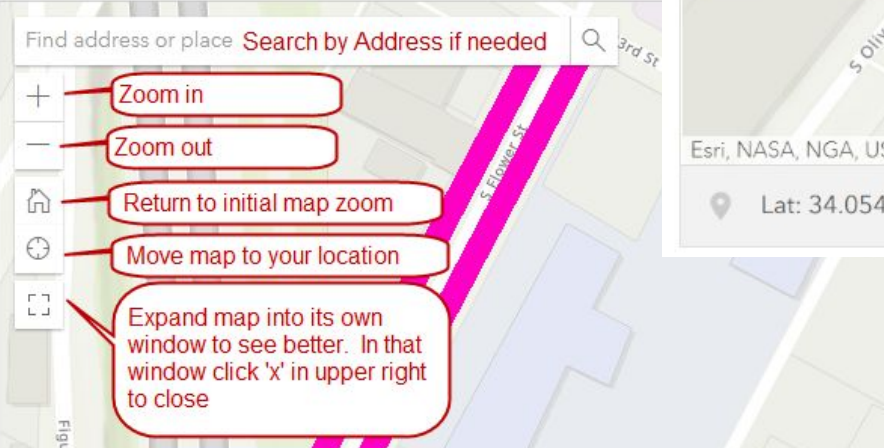
Not Enough Enough Too Much

2. Are there cracks and uplifts in sidewalk?*

Low Medium High

Map*

Find address or place Search by Address if needed



Zoom in

Zoom out

Return to initial map zoom

Move map to your location

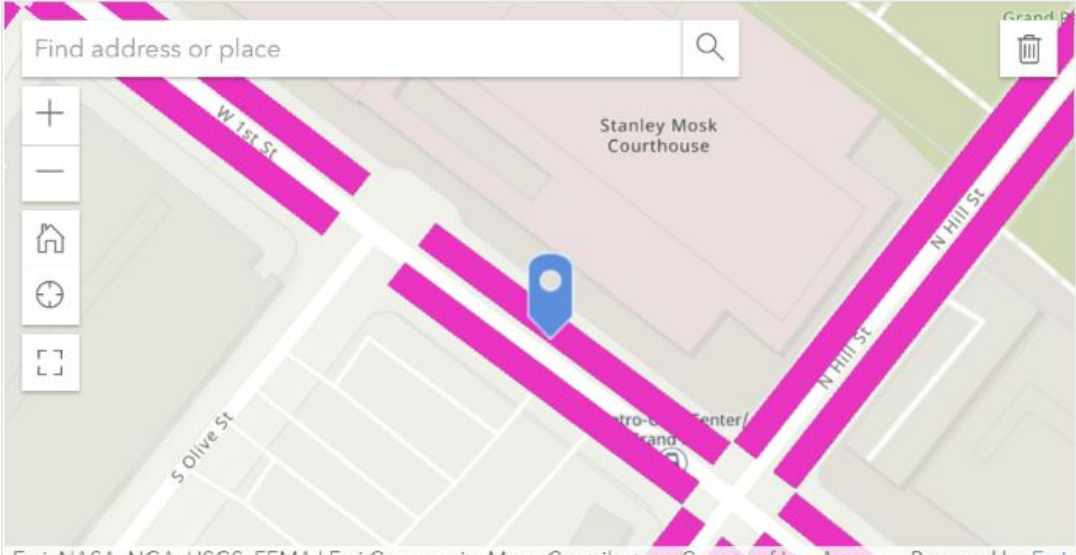
Expand map into its own window to see better. In that window click 'x' in upper right to close

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, County of Los Ang... Powered by Esri

No geometry captured yet.

Map*

Find address or place



Stanley Mosk Courthouse

W 1st St

N Hill St

S Olive St

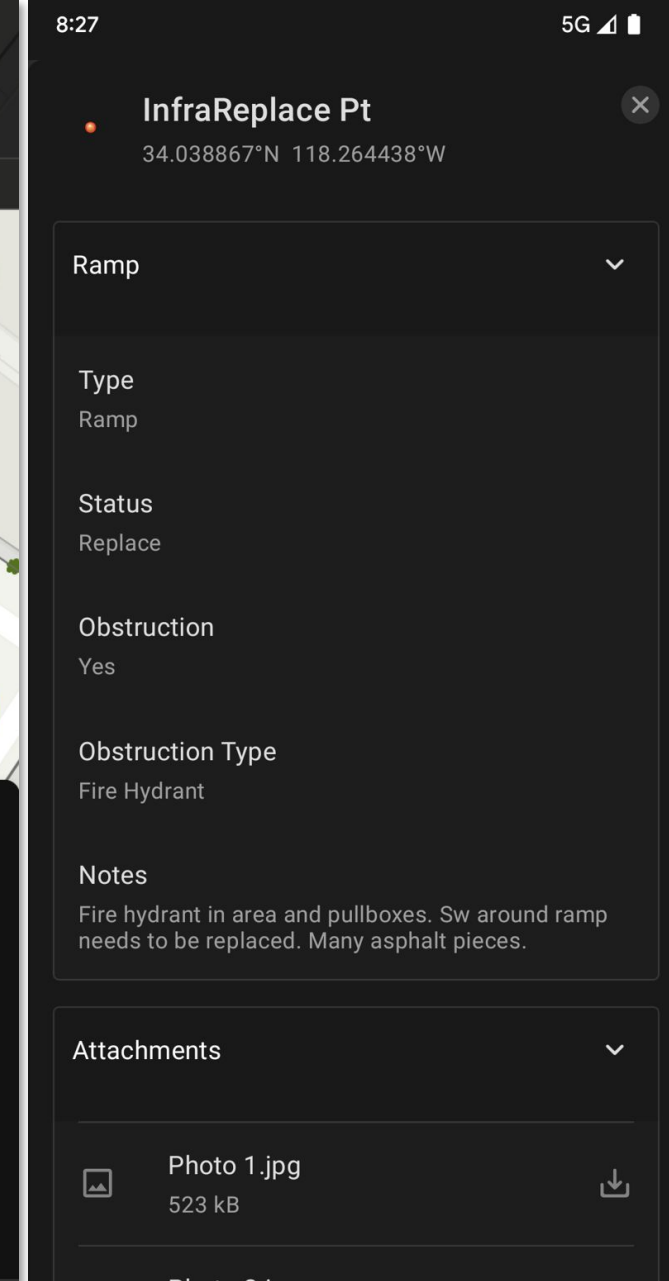
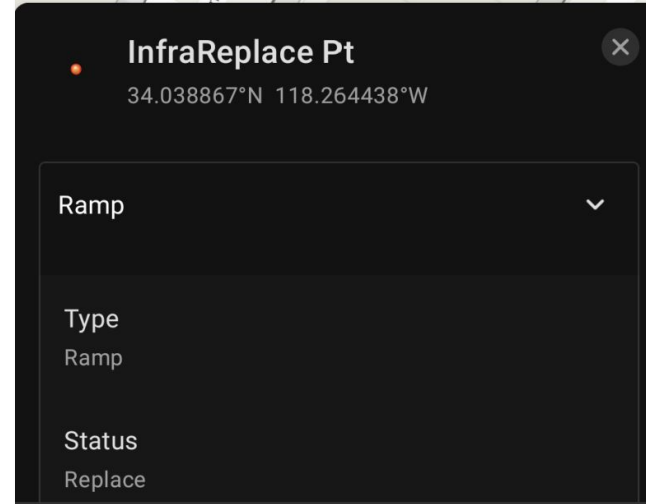
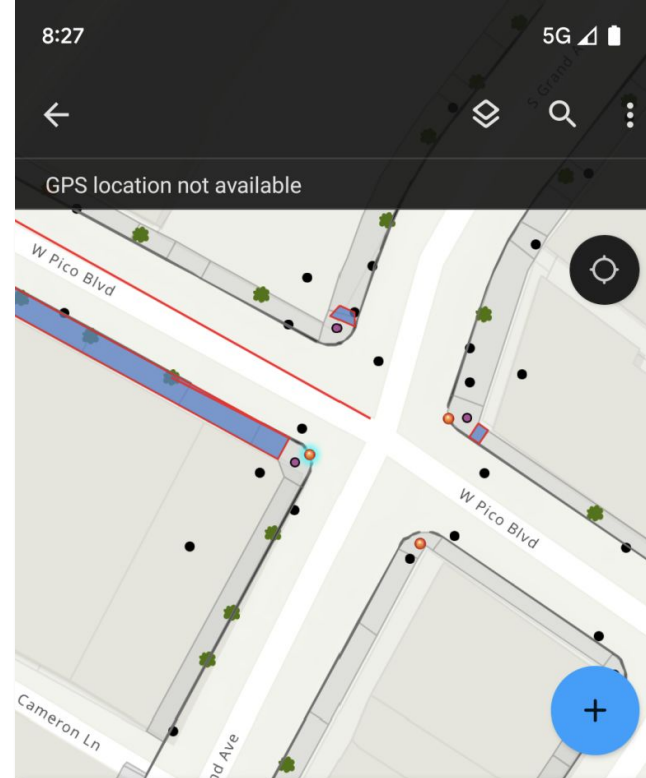
Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, County of Los Ang... Powered by Esri

Lat: 34.054732 Lon: -118.247163











New Data Tool

- Tried new method for identifying asset maintenance and improvement projects using a new data collection tool
- Collected asset data on select streets and bundled into sample projects
- Developed conceptual cost estimates



Tying the User Experience to City Goals

Walk Audit Experience	Accessibility	Equity	Public Health	Resiliency	Safety	Sustainability
 Sidewalks <i>(supply, quality, and cleanliness)</i>	●	●	●	●	●	
 Intersections <i>(speeding and perceived safety)</i>	●	●				
 Transit Stops <i>(quality, wayfinding, and seating)</i>	●				●	
 Bikeways <i>(supply, quality, and activity)</i>	●				●	
 Complete Streets <i>(functional for all users, where people are enjoying themselves)</i>		●		●		●
 Shelter <i>(protection from the elements)</i>						●
 Maintenance <i>(frequency and quality)</i>	●	●	●	●	●	●
 Personal Safety		●	●		●	



Sample Walk Audit Routes

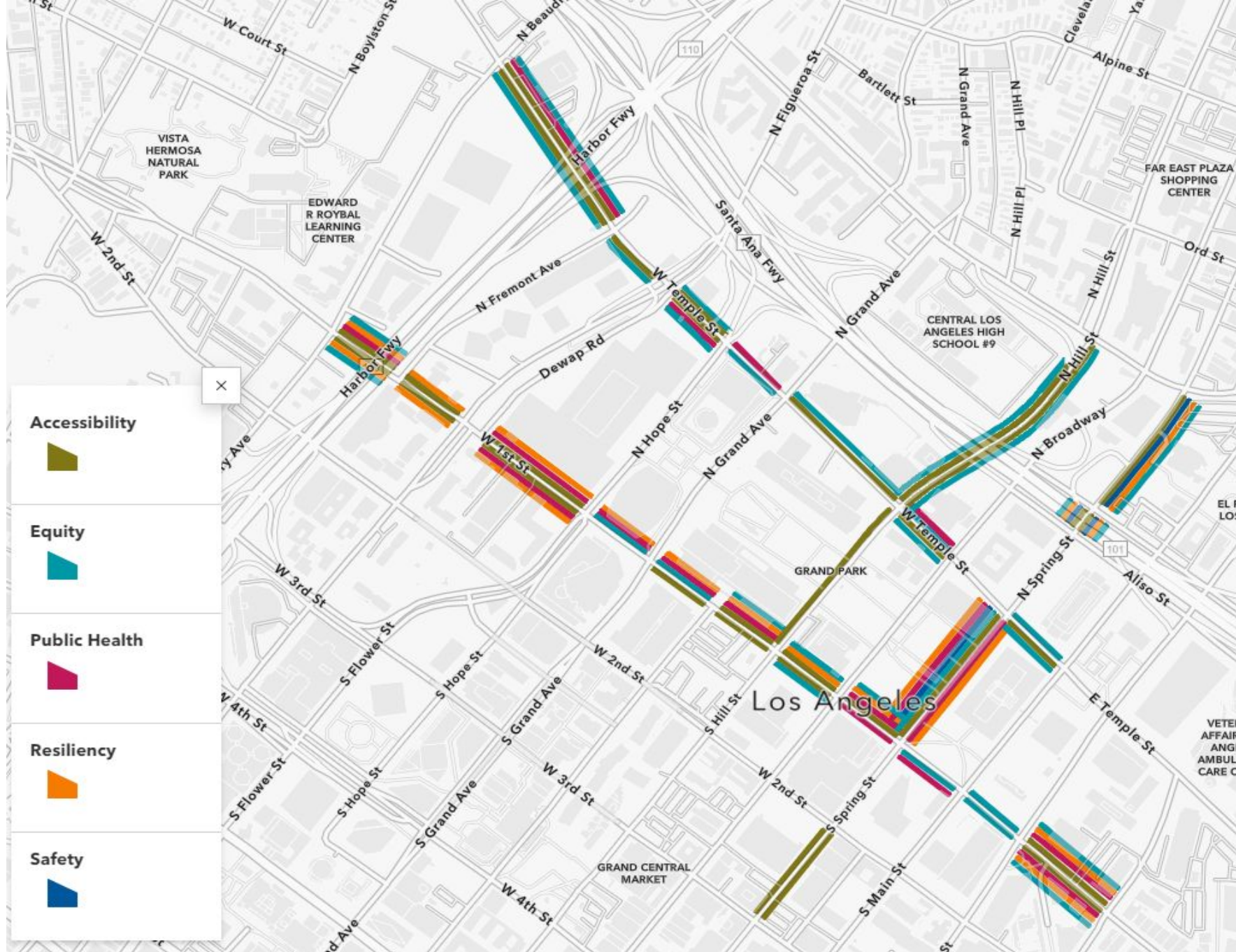
Grand Park



Calibrating Needs Assessment with Walk Audit Findings (sample)

Grand Park

Areas where auditors expressed negative sentiments, but technical needs assessment demonstrated low need.



Project Recommendations

3



One Infrastructure Tiered Investments

1
TIER

Investments that can be completed as part of ongoing maintenance internal to an agency (e.g., *planting trees in empty tree wells*)

2
TIER

Investments that require minor site modifications and some multiagency/community collaboration (e.g., *constructing new tree wells and planting trees in them*)

3
TIER

Transformational investments that will require additional funding through grants or other resources, detailed design efforts, and a change in how the public right-of-way is allocated (e.g., *widening sidewalks and planting trees in new planter strip*)

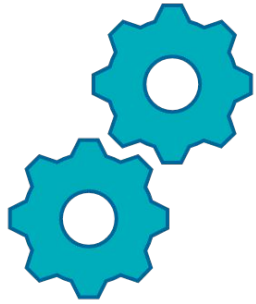


ONEINFRASTRUCTURE

TIER 1: STREETS LA CORE PROGRAM SERVICES
TIER 2: QUICK-BUILD PROJECTS W/ OTHER CITY AGENCIES
TIER 3: LARGE GRANT-FUNDED PROJECTS W/ CONSULTANTS



Network Improvements



Systemic Improvements



Connectivity



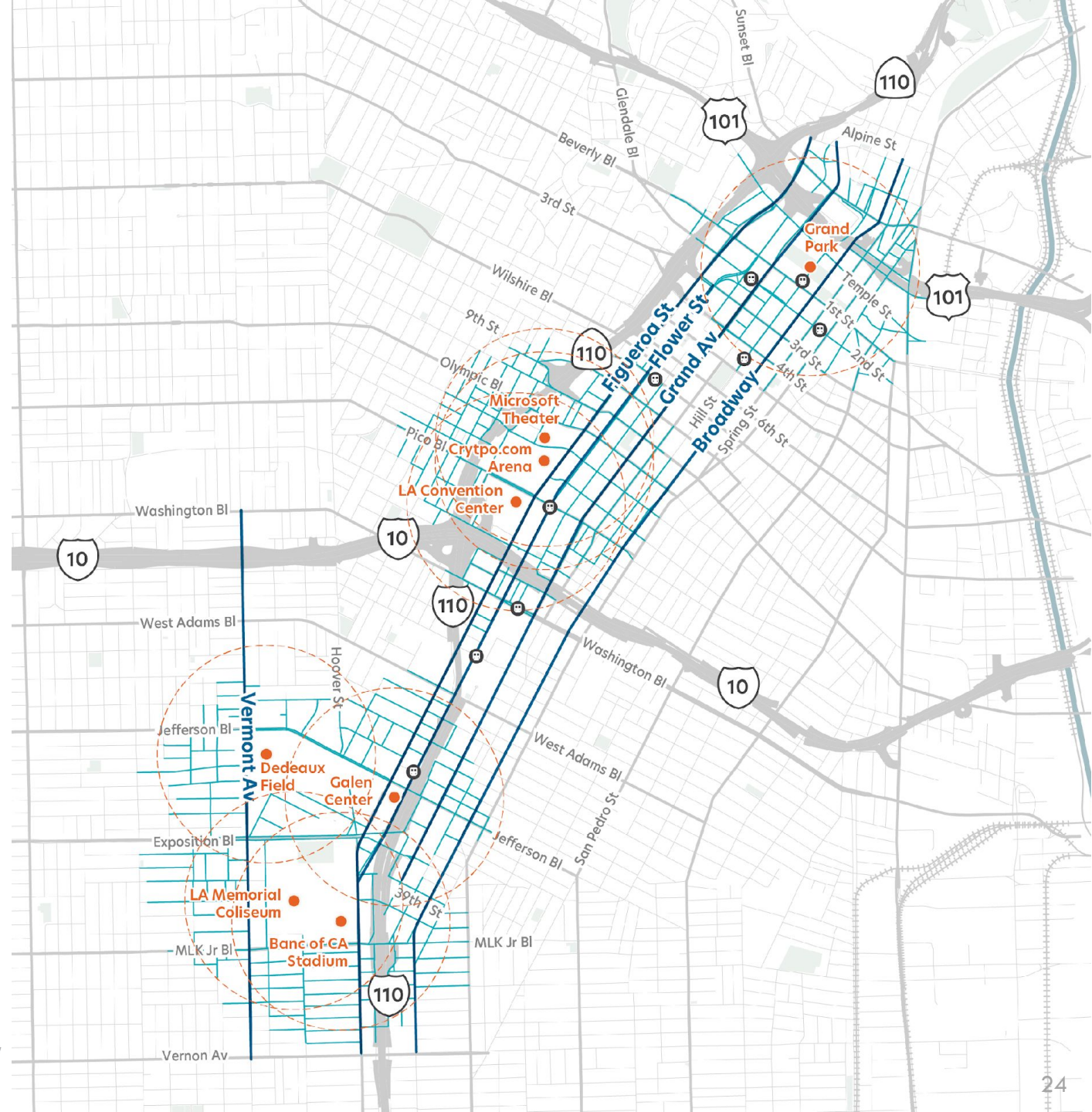
Venue Access



Olympics Legacy Network

-  Connectivity Investments
-  Systemic Investments
-  Venue Access Investments
-  Metro Rail Stations

-  3 TIER
-  1 TIER
-  2 TIER
-  1 TIER
-  2 TIER
-  3 TIER



Network Improvements



**Systemic
Improvements**








Connectivity



Venue Access

Systemic Improvements

- Identified top five assets that provide most benefits across City goals
- Informed by TAC

		Accessibility	Equity	Public Health	Resiliency	Safety	Sustainability
1 TIER	 Bus Shelter	●	●	●	●	●	
2 TIER	 Underpass Improvements <i>(widened sidewalks, lighting, landscaping, public art, and placemaking)</i>	●	●	●	●	●	●
1 TIER	 Bike Facility Upgrades & Maintenance <i>(upgrading existing quick-build bike facilities to hardscape/permanent installation)</i>	●	●	●	●	●	
2 TIER	 Alternative Shade Structures		●	*	●	*	●
1 TIER	 Pavement Markings <i>(Bikeways)</i>	●	●	●	●	*	

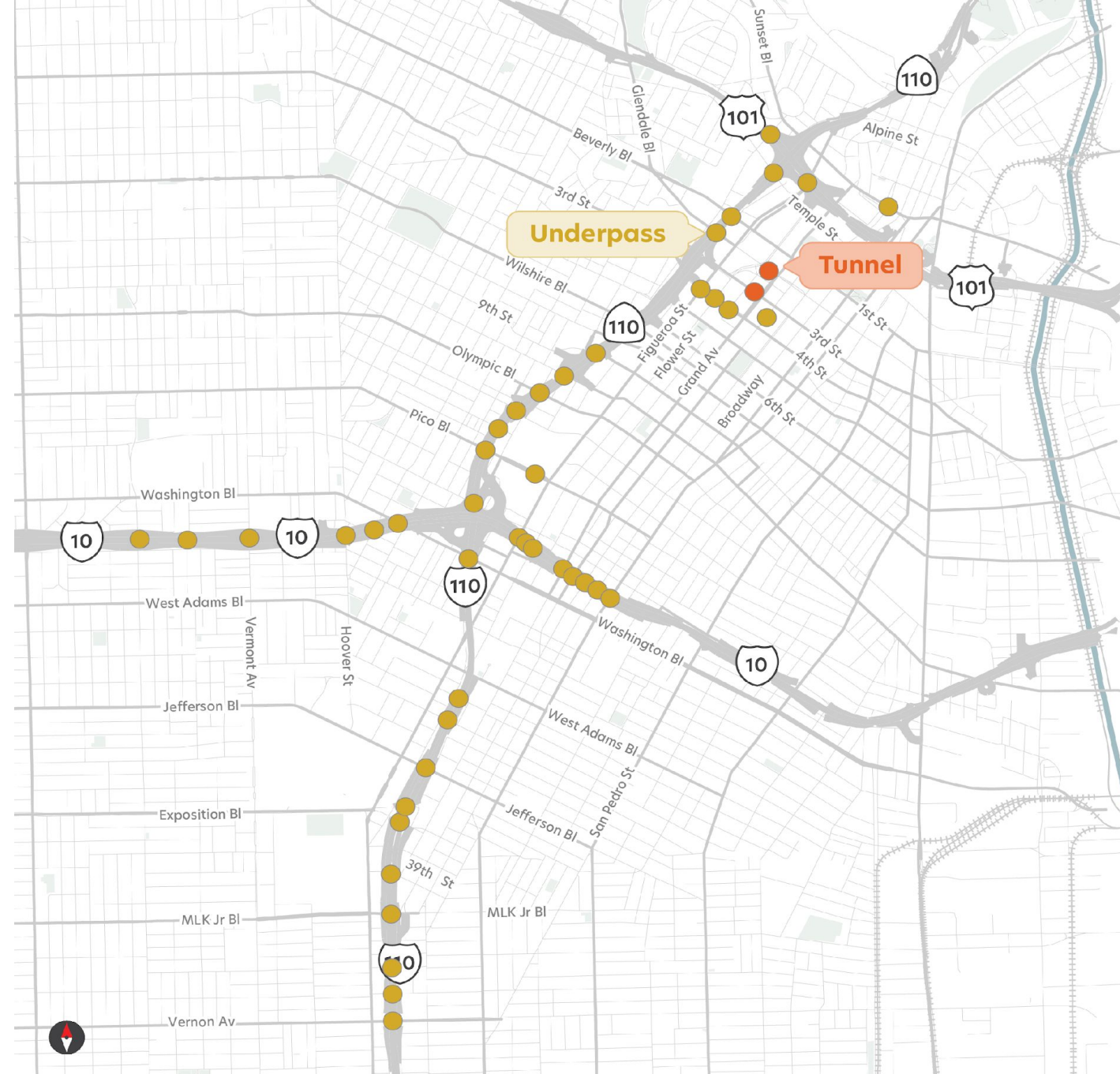
* The project's Literature Review documented that this asset helps meet the goal.



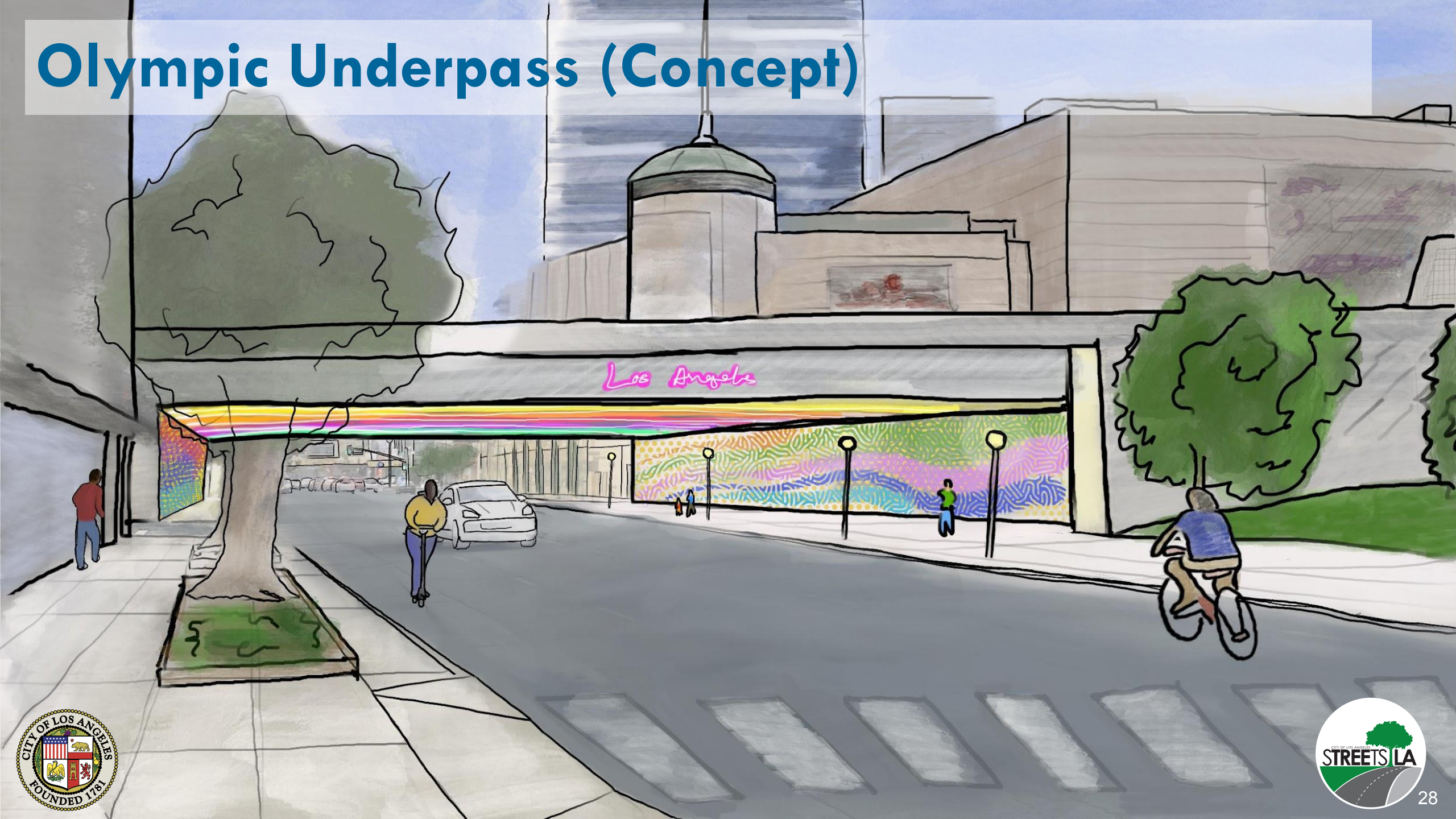
Underpasses

2
TIER

- 47 freeway underpasses and tunnels in the vicinity of our study area
- I-10 and I-110 underpasses are particularly significant for this project
- Similar conditions exist at all locations, including:
 - Dim to no light
 - Unsanctioned graffiti
 - Blocked sidewalks



Olympic Underpass (Concept)



Tiers 1 & 2 Projects via Data Collection Tool

- Assets were categorized as missing, needing repair, or needing replacement

Points

Count

Ramp / Alley
Ramp
Tree / Tree Well
Bus Stop
Signal Pole
Streetlight
Sidewalk
Catch Basin

Lines

Linear Feet

Bike Lane
Curb and Gutter
Median Curb
Other

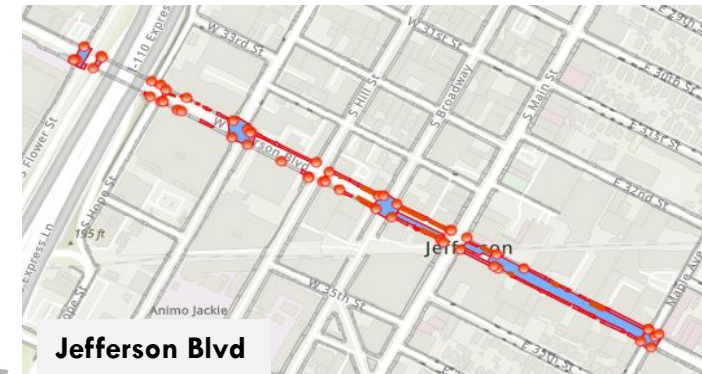
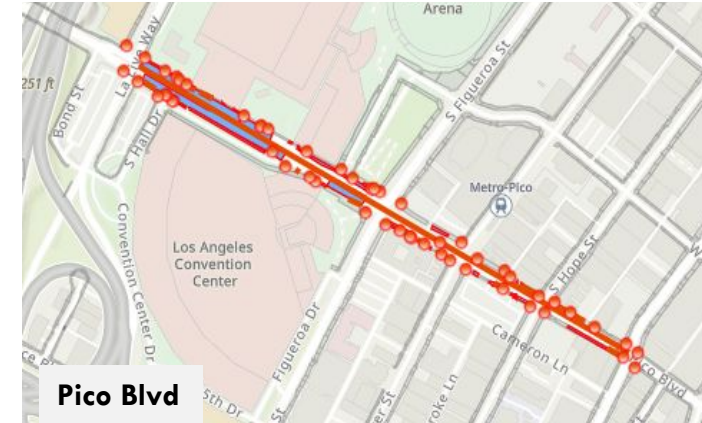
Polygons

Square Feet

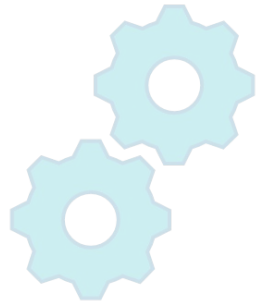
Sidewalk
Asphalt Area
Driveway
Concrete Area
Other

Obstructions

Ped Buttons
Manhole
Pull Box (various)
Fire Hydrant
Sign Post
Bike Rack
Water Valves
Trash Bin
Parking Meter
Utility Vault



Network Improvements



Systemic
Improvements



Connectivity



Venue Access

Connectivity

3
TIER

■ Five North/South Corridors:

- Vermont Corridor
- Figueroa Street
- Flower Street
- Grand Avenue
- Broadway



Global Recommendations


- Provide consistent pedestrian-scaled street lighting
- Provide a consistent tree canopy
- Provide consistent bus stop amenities, including a place to sit and shade at a minimum
- Improve pedestrian conditions at all underpasses through placemaking and safety investments


Other considerations:

- All Class IV facility recommendations are for bidirectional facilities on two-way roads, and two-way, single sided facilities on one-way roads.
- Recommendations should remain compatible with the proposed DTLA Streetcar alignment

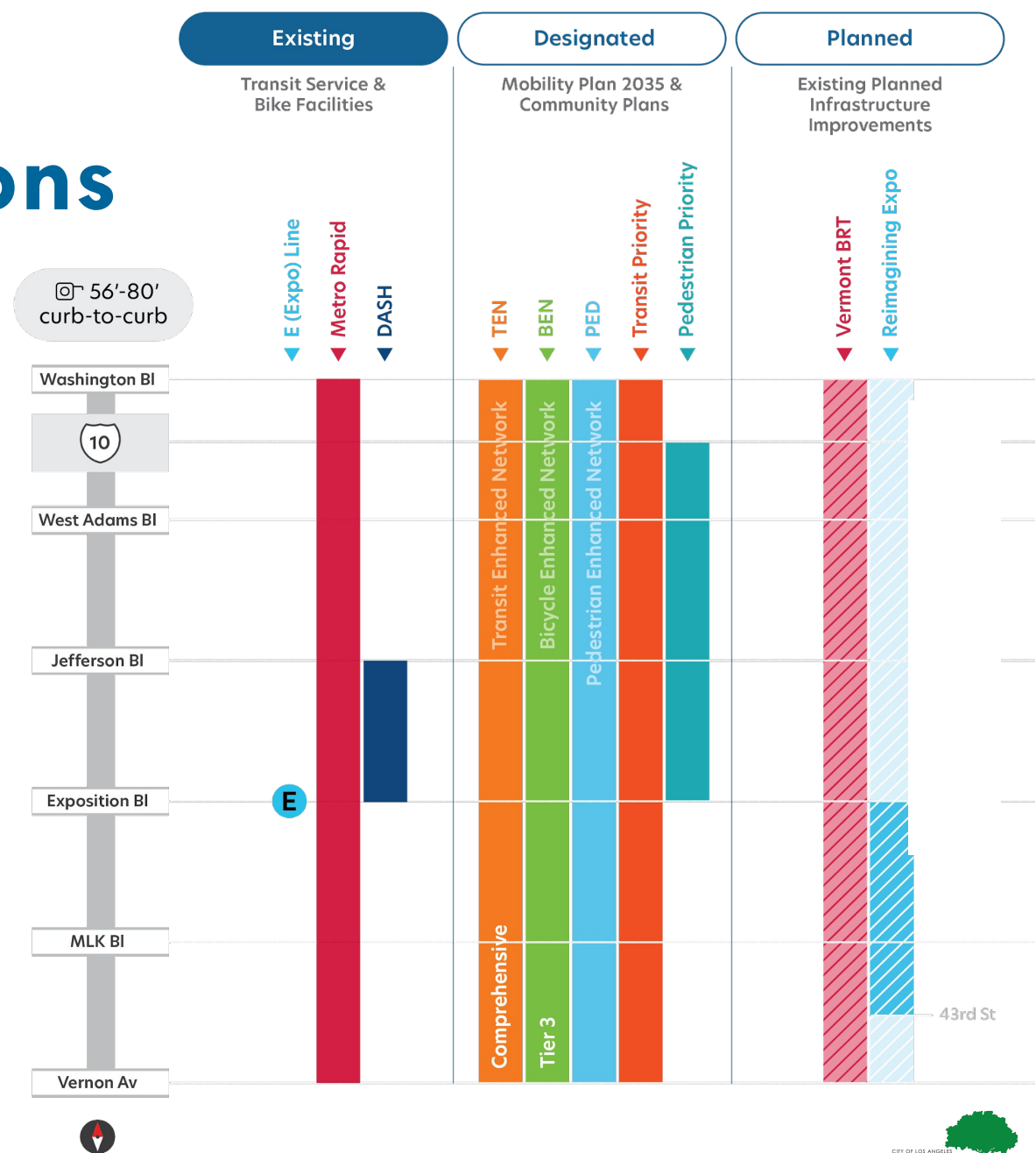


Vermont Recommendations

- Implement Reimagining Expo 
 - Project components
 - Improved and new crosswalks
 - Landscape and pedestrian improvements (e.g., street furniture, public art, wayfinding, intersection design, etc.)
 - New parklets
 - New signage
 - Extend pedestrian enhancements included in Reimagining Expo throughout the corridor

- Implement Vermont BRT 
 - Project components
 - BRT, with potential to upgrade to rail in the future
 - Streetscape enhancements
 - Bike facility enhancements
 - Implement a shared bus/bike lane where right of way is more constrained, for example between MLK and Exposition

 High priority project



Reimagining Expo Square

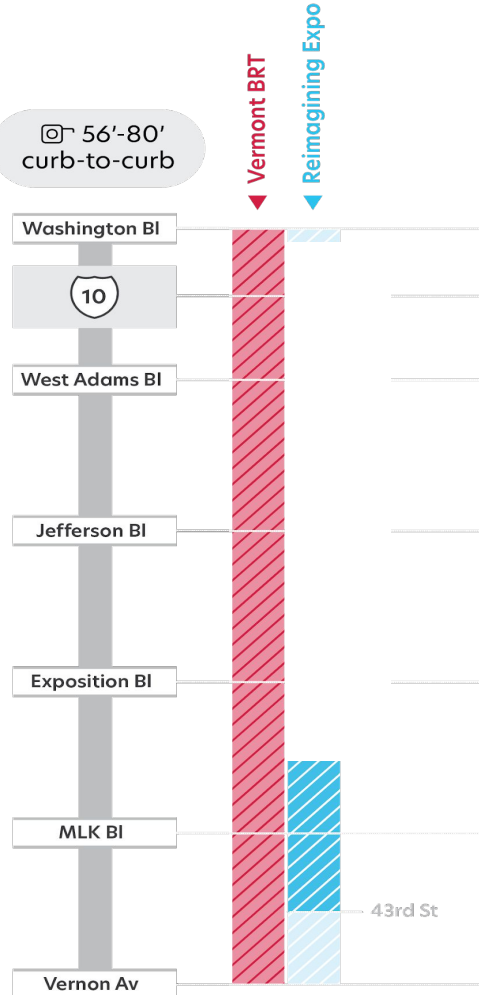
Vermont Ave @ W 42nd St – Proposed Parklet



Planned

Existing Planned
Infrastructure
Improvements

56'-80'
curb-to-curb



Source: Urban Design Studio – LA City Planning



Vermont BRT

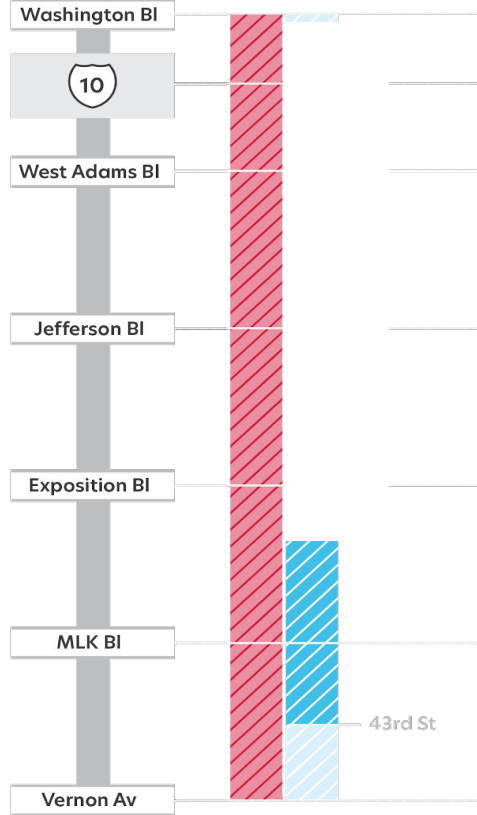
Planned

Existing Planned Infrastructure Improvements



📏 56'-80' curb-to-curb

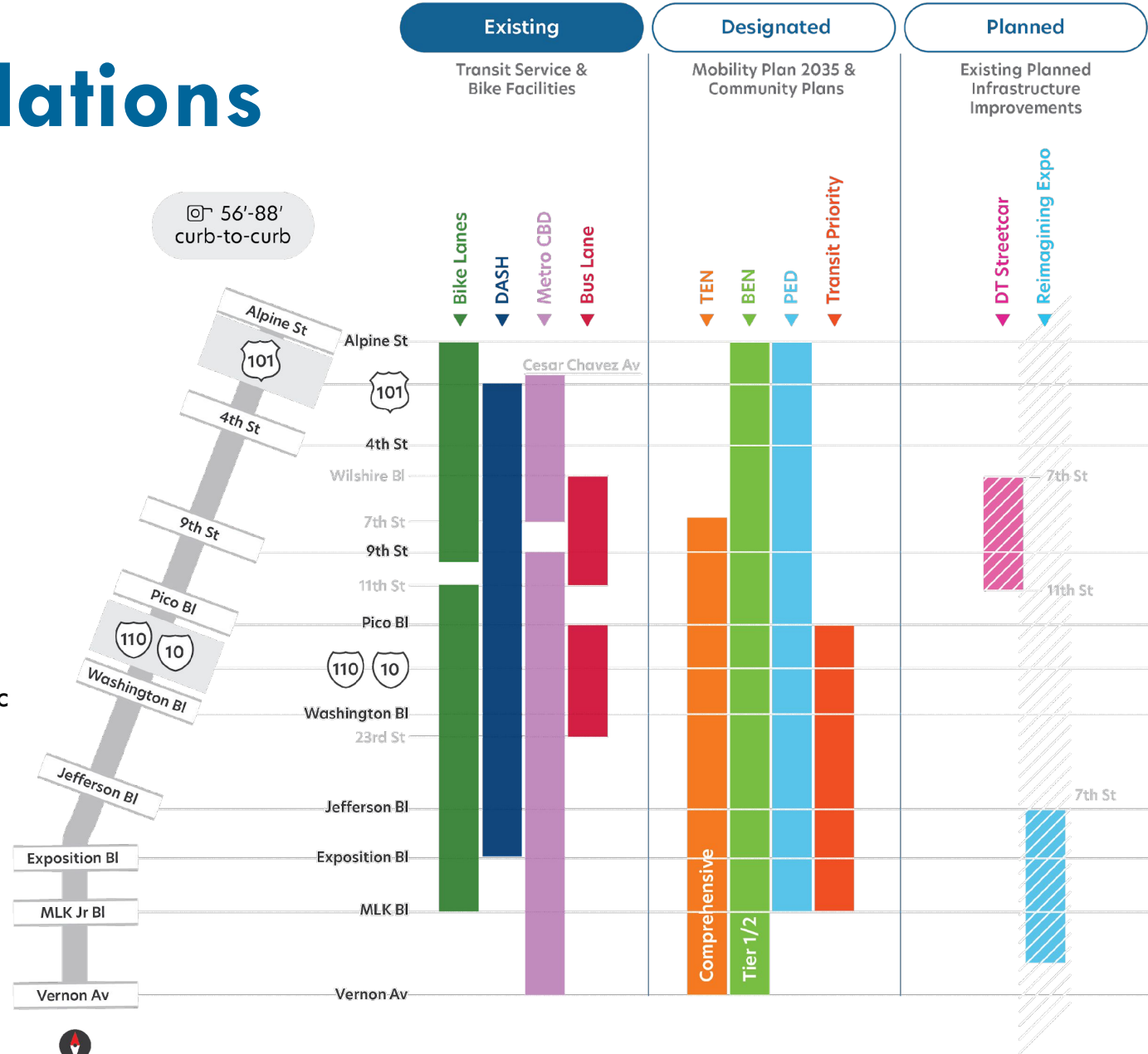
▼ Vermont BRT
▼ Reimagining Expo



Source: LA Metro

Figueroa Recommendations

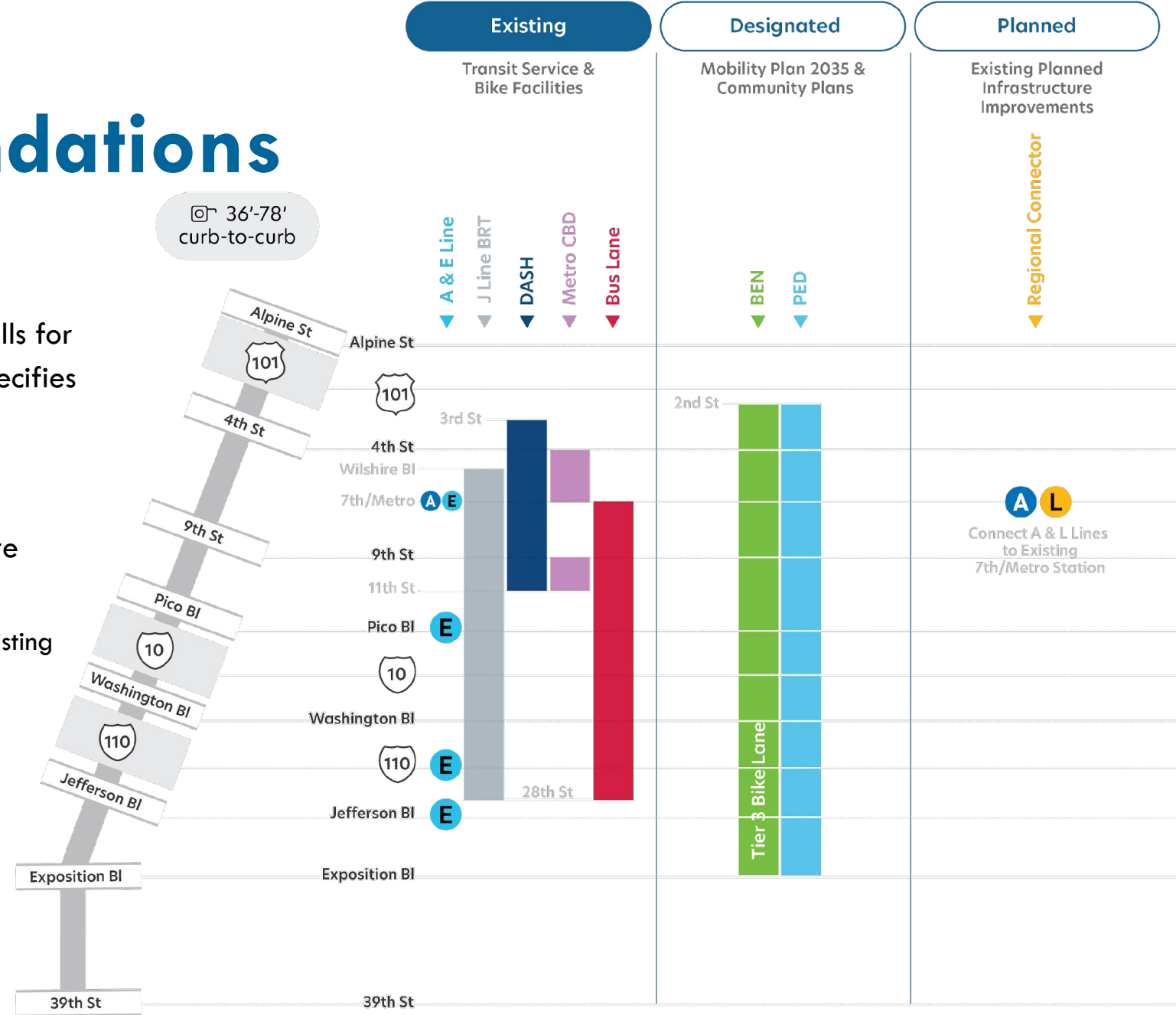
- Extend bus only lanes to cover full extent of the corridor, in alignment with the TEN designation
 - Incorporate other speed and reliability enhancements, including bus boarding islands, bus stop rebalancing, and transit signal prioritization
- Provide a continuous Class IV facility throughout the corridor by:
 - Upgrading existing Class II facility to a Class IV
 - Providing a two-way Class IV facility between 3rd and Olympic
 - Extending facility south to 42nd to provide a connection to the existing neighborhood route



Flower Recommendations

- Widen sidewalks to 15 feet, consistent with PED designation. Downtown Community Plan (Draft) calls for wider sidewalks throughout the Plan area, and specifies 15-foot in the Financial Core
- Consider a raised two-way cycle track along entire extent in alignment with BEN designation:
 - Southern terminus: 38th to provide a connection to existing facilities on Fig
 - Northern terminus: Hope/1st to provide connection to existing facilities on 1st

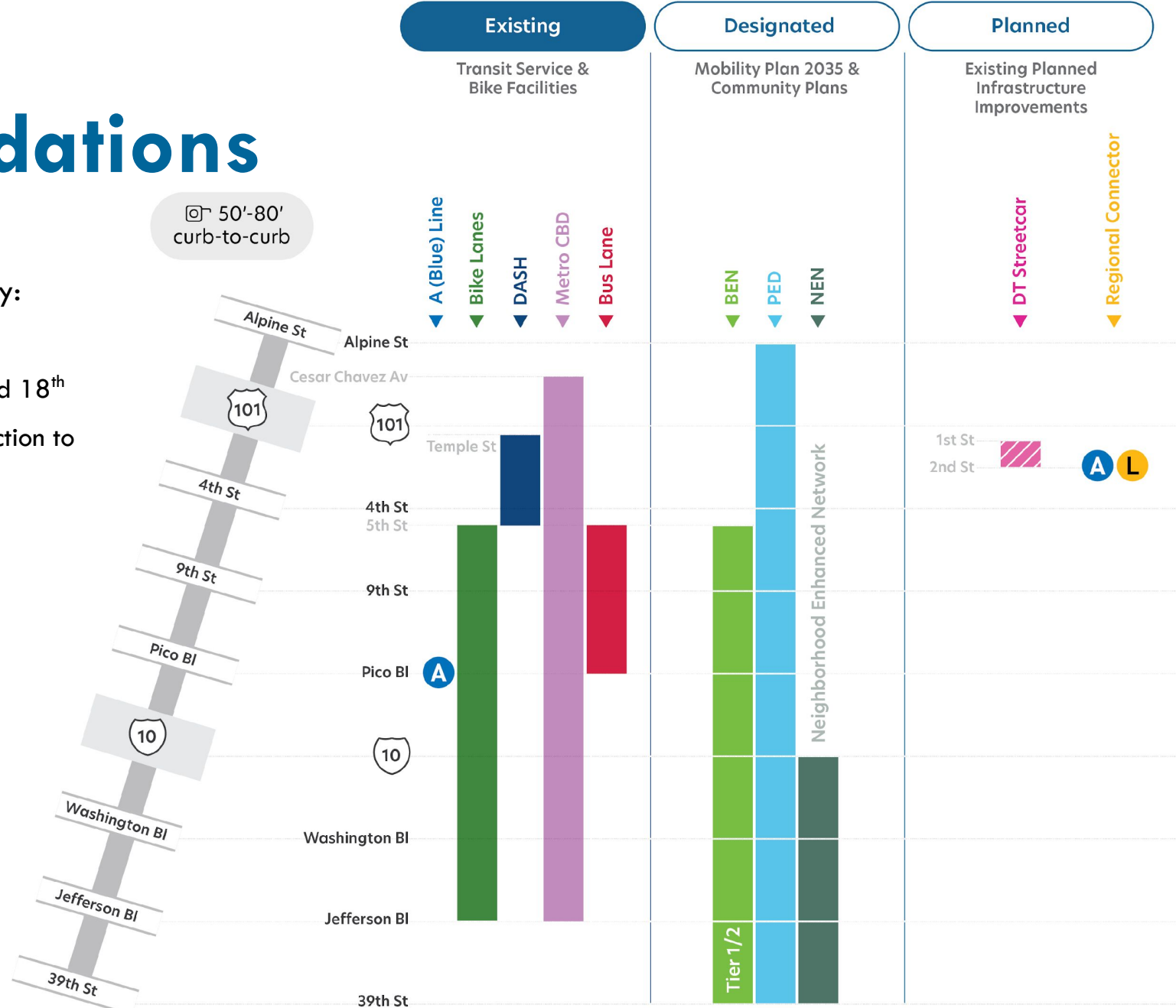
36'-78' curb-to-curb



Grand Recommendations

- Provide a continuous Class IV facility throughout by:
 - Upgrading existing Class II facility to a Class IV
 - Providing a two-way Class IV facility between 5th and 18th
 - Extending facility north to Temple to provide a connection to Grand Park

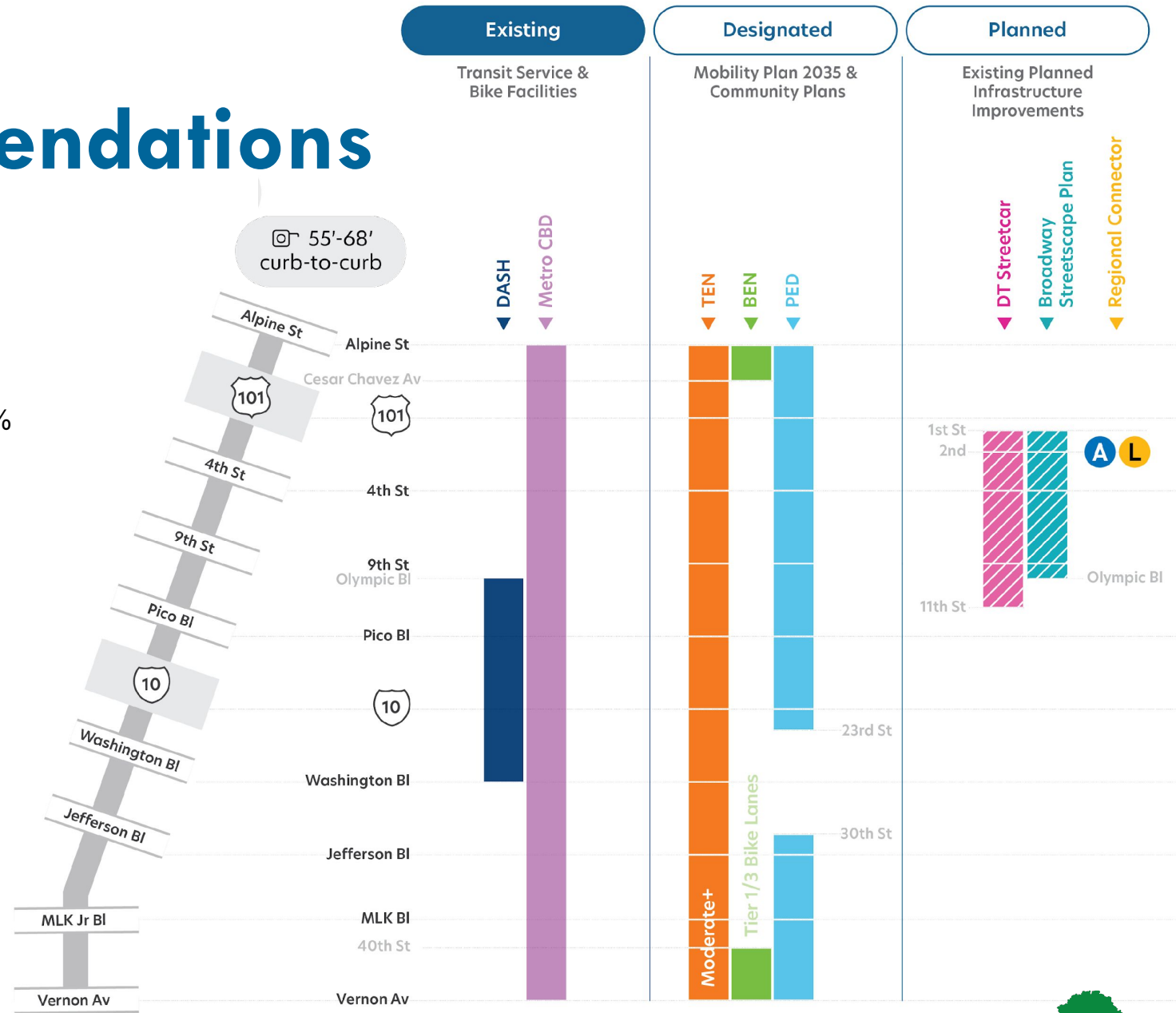
50'-80' curb-to-curb



Broadway Recommendations

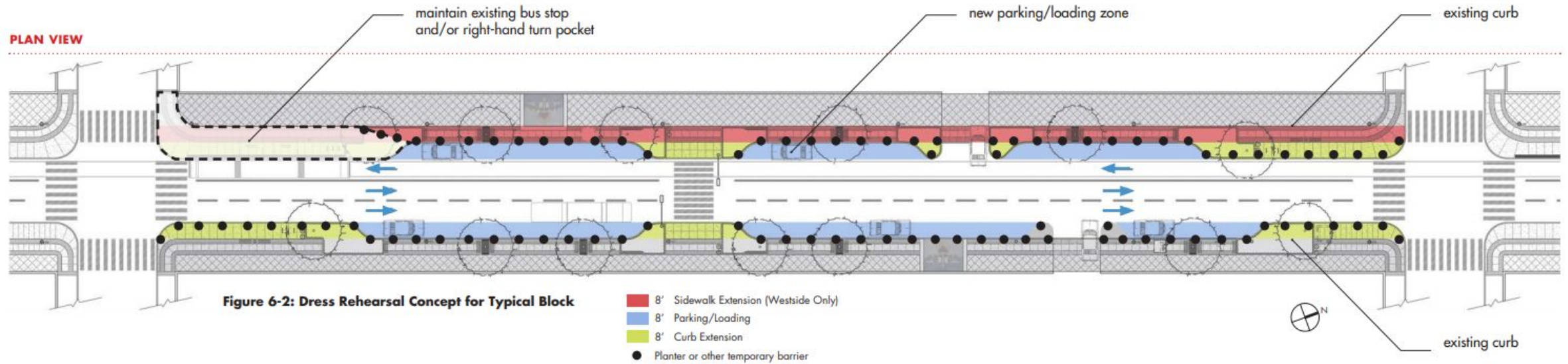
- Implement “BRT Lite” improvements* in alignment with the TEN “Moderate+” designation:
 - Enhanced bus stop amenities
 - Transit Signal Priority
 - Bus only lanes (at least 20% during peak periods and 10% during off-peak)
 - Intersection signal priority
- Implement Broadway Streetscape Plan:
 - Project components:
 - Street trees and landscaping
 - Lighting
 - Midblock crosswalk enhancements
 - Street furniture (e.g., bike racks, trash cans)
 - 8’ westside sidewalk widening
 - Transit stop improvements
 - Extend pedestrian enhancements included in Broadway Streetscape Plan north at least to Temple and south to MLK

Note:
 *BRT Lite as defined by Metro’s “Visioning BRT” Bus Rapid Transit Design Guidelines (Nov 2020)

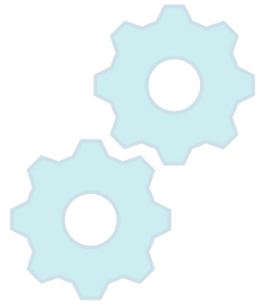


Broadway Streetscape Plan

3
TIER



Network Improvements



Systemic
Improvements



Connectivity



Venue Access



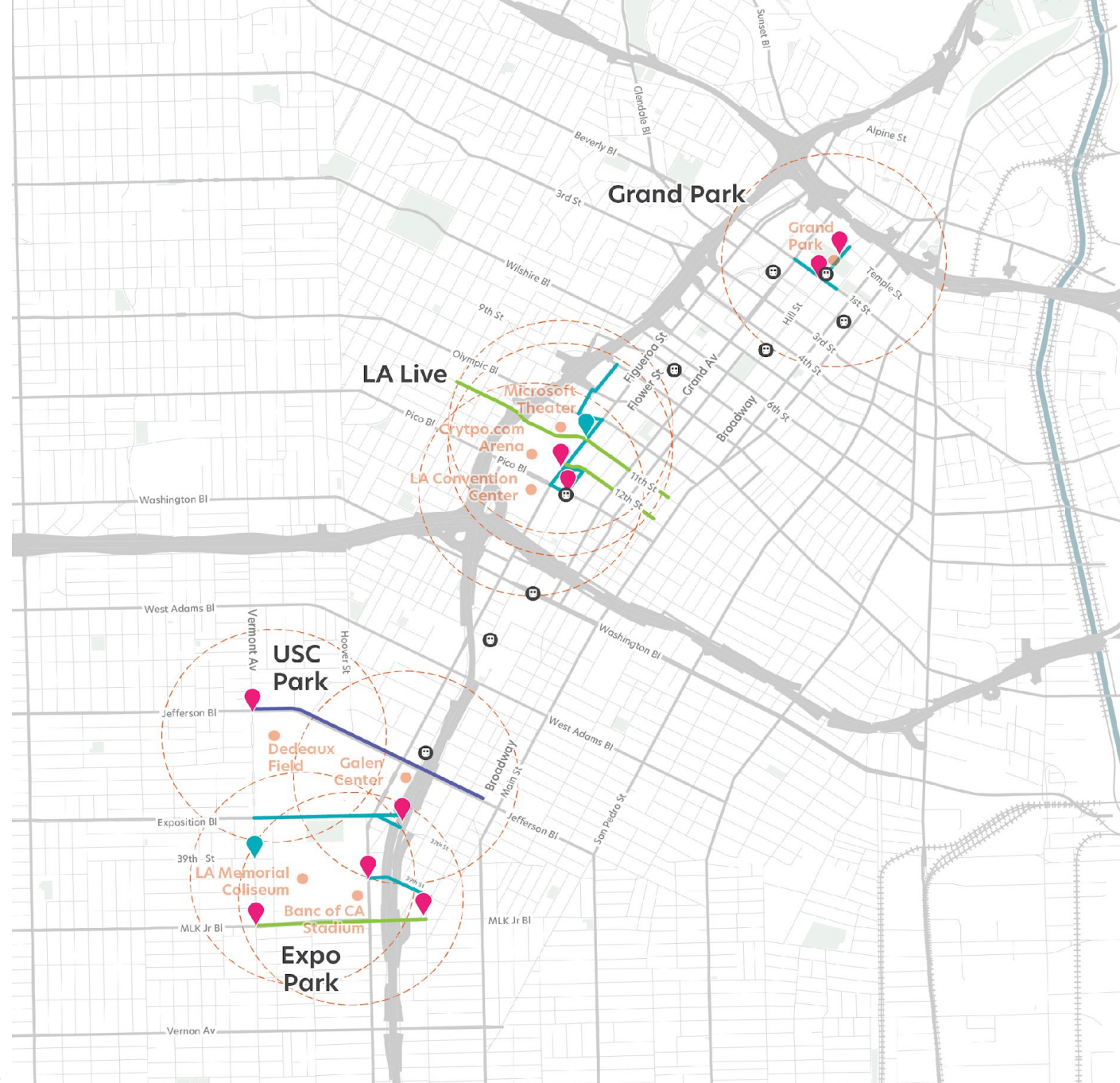
Venue Access



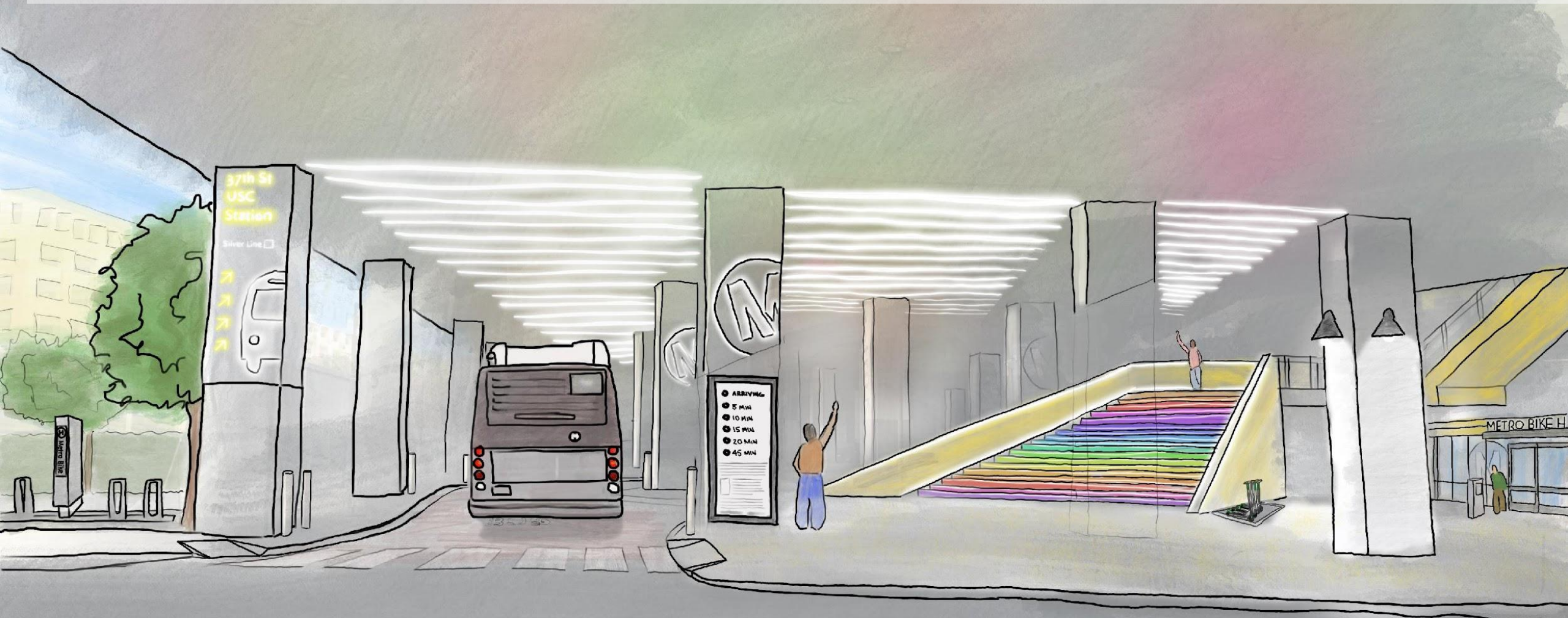
Four Sports Parks:

- Expo Park
- USC Park
- LA Live
- Grand Park

- Bike Access
- Pedestrian Access
- Complete Streets
- Crossing Improvements
- Mobility Hubs
- Venue Access Investments (Tier 1, 2, and 3)
- Metro Rail Stations



Mobility Hub @ 37th Street J Line Station (Concept)



Expo Park

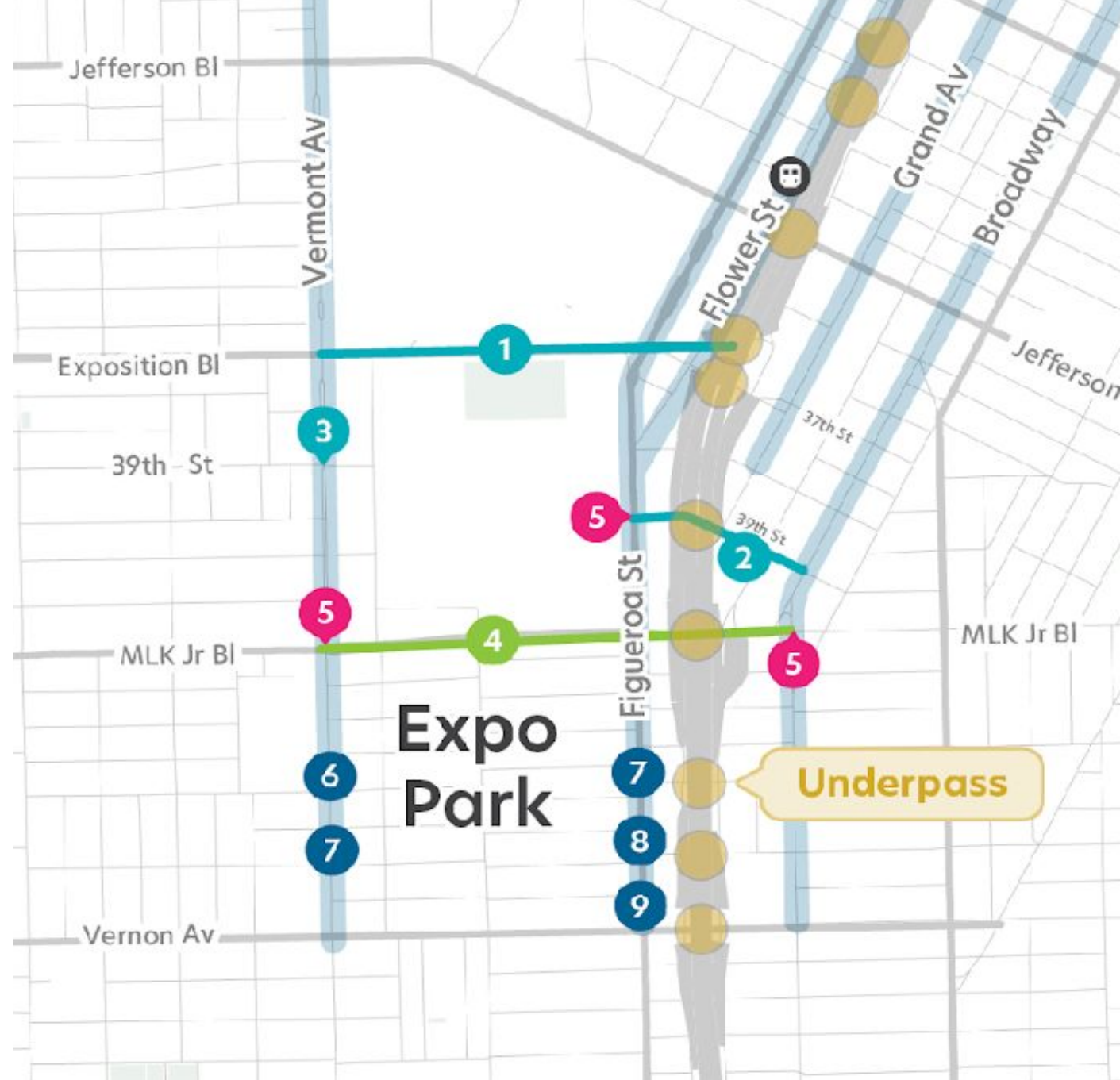
Transit to Venue Improvements

- 1 Widen south sidewalk on Exposition Boulevard
- 2 Sidewalk widening, street trees, and ped lighting along 39th
- 3 Vermont/39th Crossing Improvement
- 4 Reimagining Expo Square bike facility extension to Broadway ★
- 5 Mobility Hubs - Vermont/MLK, Broadway/MLK, Figueroa/39th

Overlapping Connectivity Improvements

- 6 Vermont BRT ★
- 7 Vermont/Figueroa Reimagining Expo Square
- 8 Figueroa dedicated bus lanes
- 9 Figueroa protected bike lanes

★ High priority project



USC Park

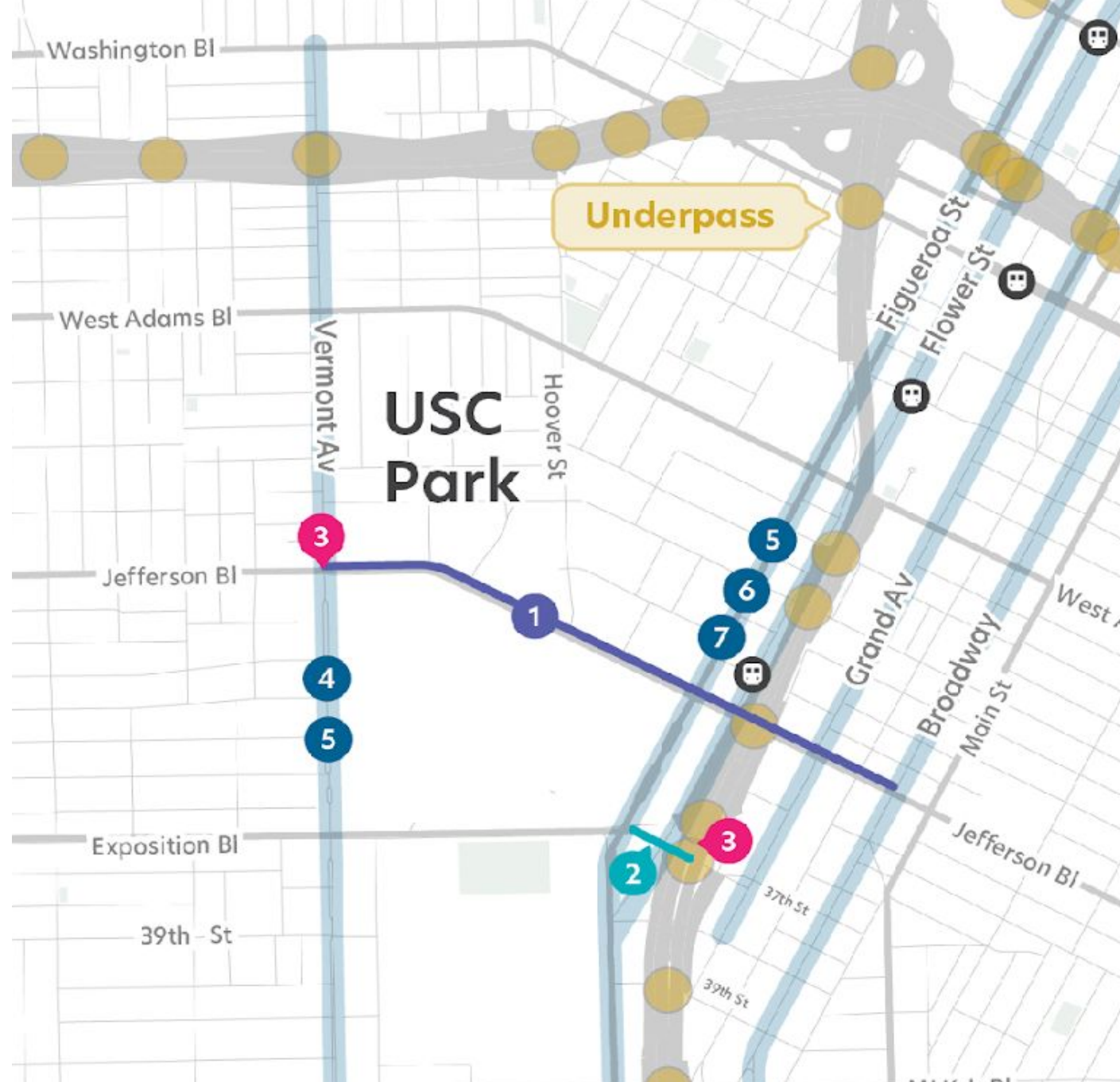
Transit to Venue Improvements

- 1 Jefferson Complete Streets Extension ★
- 2 Sidewalk widening, street trees, ped lighting, and crossing improvements along 37th
- 3 Mobility Hubs - Vermont/Jefferson, J Line Station at 37th

Overlapping Connectivity Improvements

- 4 Vermont BRT ★
- 5 Vermont/Fig Reimaging Expo Square ★
- 6 Figueroa dedicated bus lanes
- 7 Figueroa protected bike lanes

★ High priority project

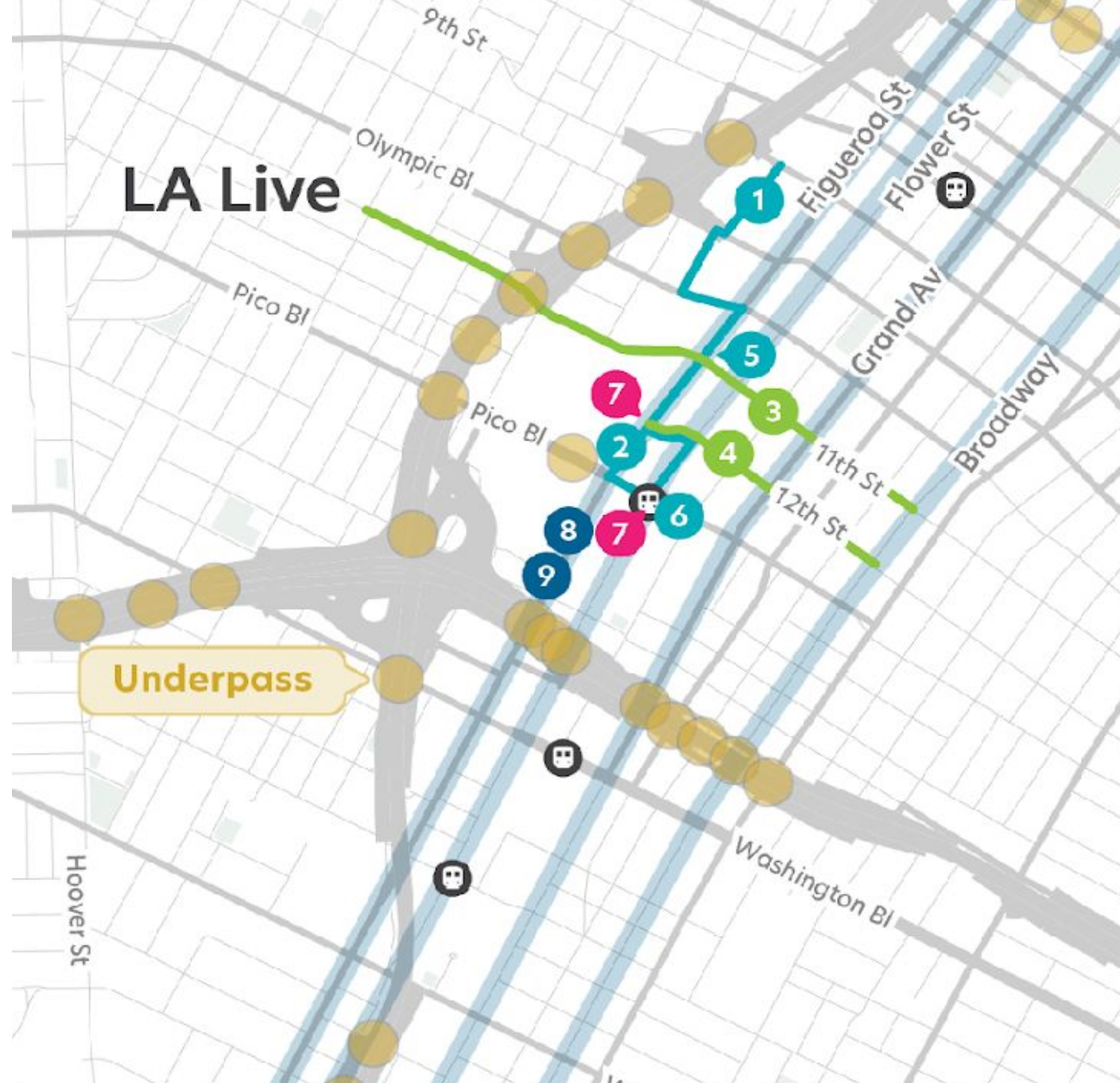


LA Live

- 1 Avenue of Angels Extension
- 2 Street trees and ped lighting between Pico Station and the venues
- 3 11th Street protected bike lane
- 4 12th Street protected bike lane
- 5 Figueroa/Chick Hearn crossing improvements
- 6 Pico station improvements (second platform and/or grade separation)
- 7 Mobility Hub – Figueroa/12th (Gilbert Lindsay Plaza), Flower/Pico

Overlapping Connectivity Improvements

- 8 Figueroa dedicated bus lanes
- 9 Figueroa protected bike lanes




Grand Park

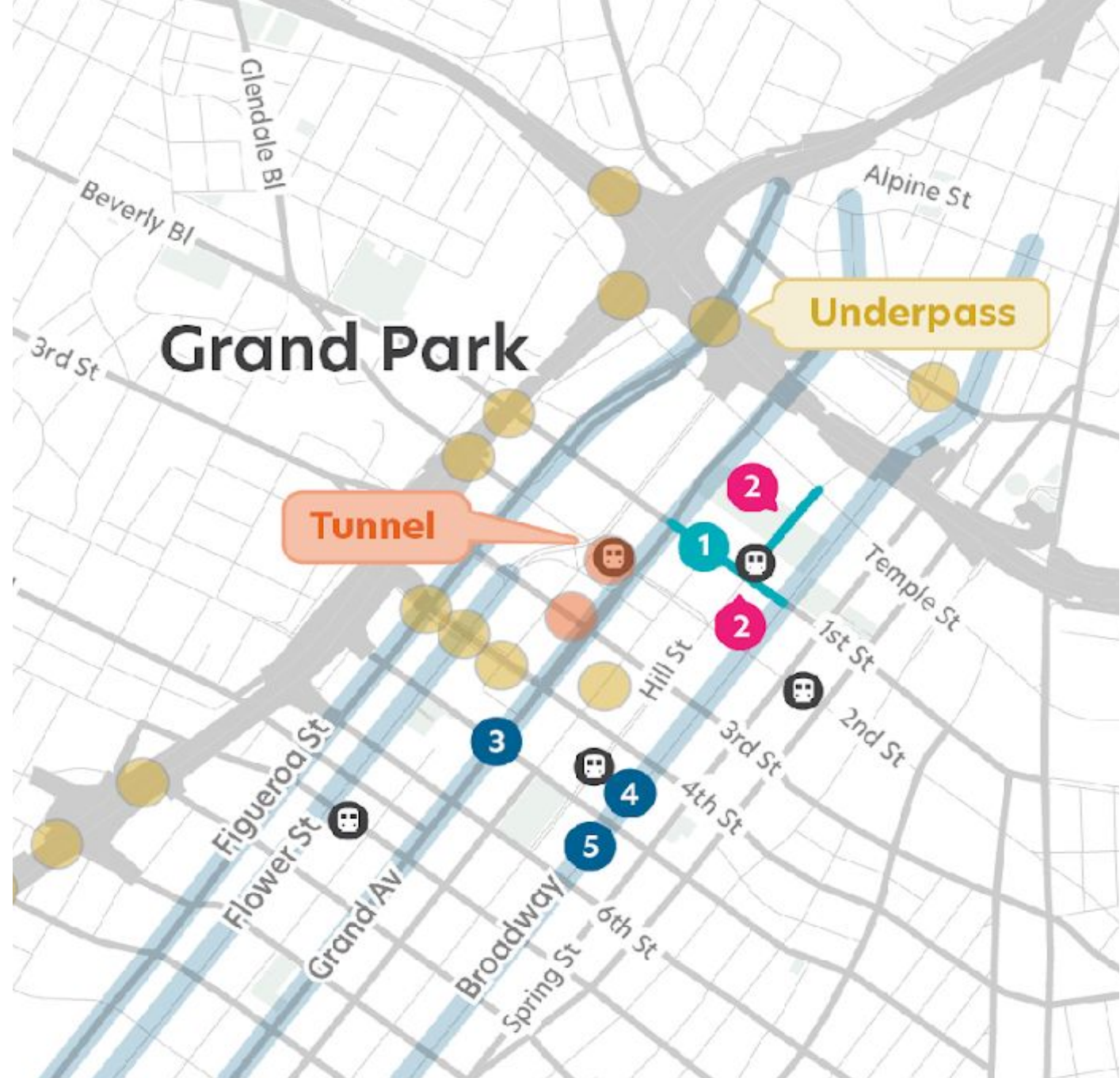
Transit to Venue Improvements

- 1 Sidewalk widening, street trees, and pedestrian lighting along 1st and Hill
- 2 Mobility Hubs at Grand Park station entrances

Overlapping Connectivity Improvements

- 3 Grand Avenue protected bike lanes
- 4 Broadway BRT Lite
- 5 Broadway Streetscape Plan 

 High priority project



Next Step

4



Next Step

- Advance funded high-priority projects and pursue additional funding where needed
- Continue to balance community-identified needs and technical asset information for project identification
- The Incorporate lessons learned from the Games Scaling Plan
- Continue research on pairing assets and walk audit factors with City goals
- Expand walk audit recruitment efforts
- Apply new methodology and tools developed by this project into the Bureau's asset management program and Citywide efforts
- Leverage Olympic-related investment for building a legacy beyond the 2028 Games
- Replicate and advance this work at other potential venue locations
- Collaborate in building systems of project planning, delivery, data collection, and data sharing that improve effectiveness and reputation citywide



Thank you!

If you have questions, please contact:

Sunil Rajpal | Principal Civil Engineer | sunil.rajpall@lacity.org

Prashant Konreddy | Senior Civil Engineer | prashant.konareddy@lacity.org

