



5.0 priority projects

5.1 Overview of Priority Project Types

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5.2 Selection Process

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5.3 Profile of Recommended Projects

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5.0 priority projects

Over the next 15 years, Long Beach will be dramatically transformed by innovative, pedestrian-supportive public realm improvement projects

This chapter provides a detailed profile of specific improvement projects that have been prioritized through conversations with City staff, key stakeholders, and Long Beach residents. The chapter is divided into the following sections:

- 5.1 Overview of Priority Project Types
- 5.2 Selection Process
- 5.3 Profile of Recommended Projects

Recommended High Priority Projects

| | Project Name | Type | Est. Cost (\$ millions) |
|-------------------------------|--|------------------------|-------------------------|
| 1 | Pacific Station Neighborhood Greenway | Neighborhood Greenway | 7.86 |
| 2 | 5th Street Station Neighborhood Greenway | Neighborhood Greenway | 5.23 |
| 4 | 4th Street Stitch Street | Stitch Street | 5.61 |
| 6 | 6th Street Stitch Street | Stitch Street | 5.35 |
| 8 | 1st Street Pedestrian Gallery | Shared Street | 2.90 |
| 9 | Metro Beach Access Gap Closure | Transit Access Project | 4.98 |
| 15 | 1st Street Station Green Alley Network | Green Alley | 3.16 |
| 16 | Pacific Street Green Alley Network | Green Alley | 1.45 |
| 18 | Anaheim Stitch Street | Stitch Street | 9.87 |
| 20 | 11th Street Streetlet and Stitch Street | Stitch Street | 3.24 |
| 24 | Esther Streetlet and Stitch Street | Stitch Street | 3.41 |
| 30 | Willow Station Transit Access Project | Transit Access Project | 6.73 |
| 31 | Wardlow-Pacific Place Transit Access Project | Transit Access Project | 5.61 |
| 33 | Del Mar Greenbelt | Greenbelt | 5.28 |
| TOTAL FOR ALL PROJECTS | | | \$70.68 million |

5.1 Priority Project Types

The seven priority project types include a range of improvements, from a greenbelt connecting two Metro Stations, to the first shared street with a pedestrian rambla in Southern California.

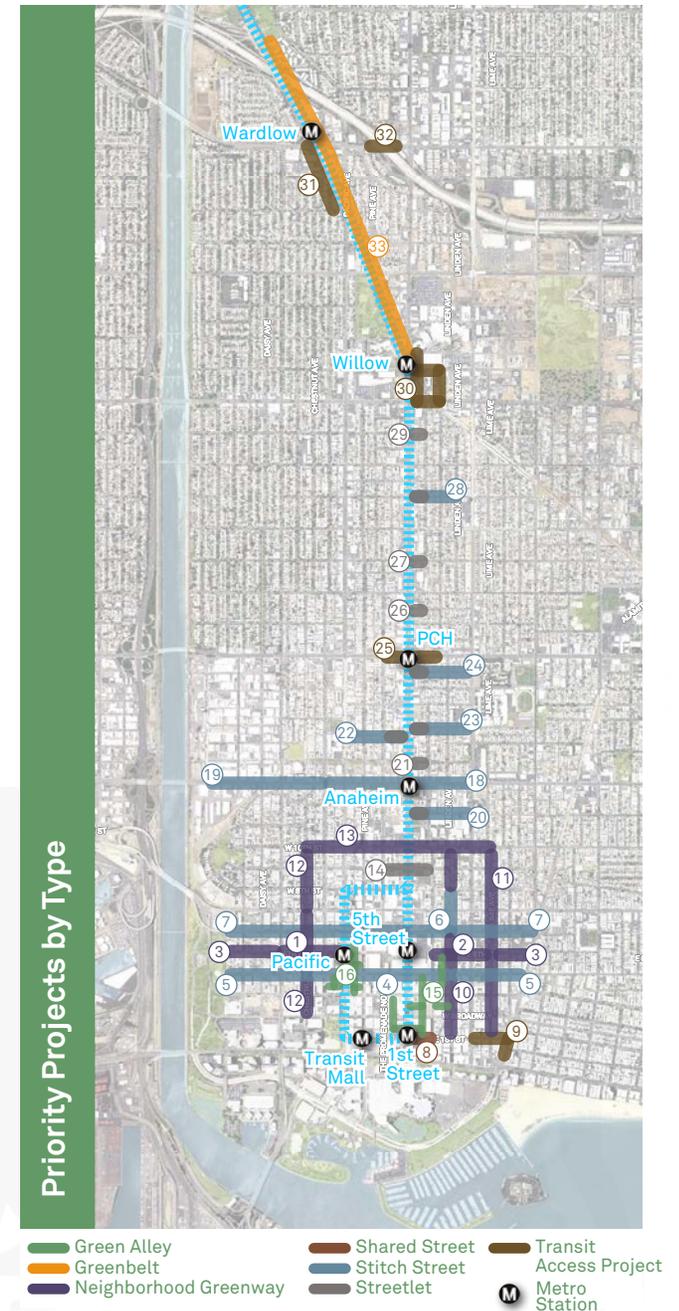
Fully 33 project concepts were developed for The Downtown and TOD Pedestrian Master Plan (PMP). These projects are presented on the table and map at right. They represent seven types of priority projects, which are profiled in the following pages.

Priority Project Types

- Stitch Street
- Neighborhood Greenway
- Green Alley
- Shared Street
- Streetlet
- Greenbelt
- Transit Access Projects

Priority Projects

| | |
|----|---|
| 15 | 1st Street Station Green Alley Network |
| 16 | Pacific Station Green Alley Network |
| 17 | Green Alley Strategic Improvement Project |
| 33 | Del Mar Greenbelt |
| 1 | Pacific Station Stitch Street and Neighborhood Greenway |
| 2 | 5th Street Station Neighborhood Greenway - Phase 1 |
| 3 | 5th Street Neighborhood Greenway - Phase 2 |
| 6 | 6th Stitch and Linden Neighborhood Greenway |
| 10 | Linden Neighborhood Greenway - Phase 2 |
| 11 | Lime Neighborhood Greenway |
| 12 | Chestnut Neighborhood Greenway - Phase 2 |
| 13 | 10th Street Neighborhood Greenway |
| 8 | 1st Street Pedestrian Gallery |
| 4 | 4th Street Stitch Street - Phase 1 |
| 5 | 4th Street Stitch Street - Phase 2 |
| 7 | 6th Stitch Street - Phase 2 |
| 18 | Anaheim Stitch Street - Phase 1 |
| 19 | Anaheim Stitch Street - Phase 2 |
| 20 | 11th Streetlet and Stitch Street |
| 22 | 15th Street West Streetlet and Stitch Street |
| 23 | 15th Street East Streetlet and Stitch Street |
| 24 | Esther Streetlet and Stitch Street |
| 28 | 23rd Street Streetlet and Stitch Street |
| 14 | 9th Street West Streetlet |
| 21 | 14th Street Streetlet |
| 26 | Rhea Streetlet |
| 27 | 21st Street Streetlet |
| 29 | 25th Street Streetlet |
| 9 | Metro Beach Access Gap Closure |
| 25 | PCH Station Transit Access Project |
| 30 | Willow Station Transit Access Project |
| 31 | Wardlow Pacific Place Transit Access Project |
| 32 | Pedestrian Crossing Improvement at NB 405 On-ramp |



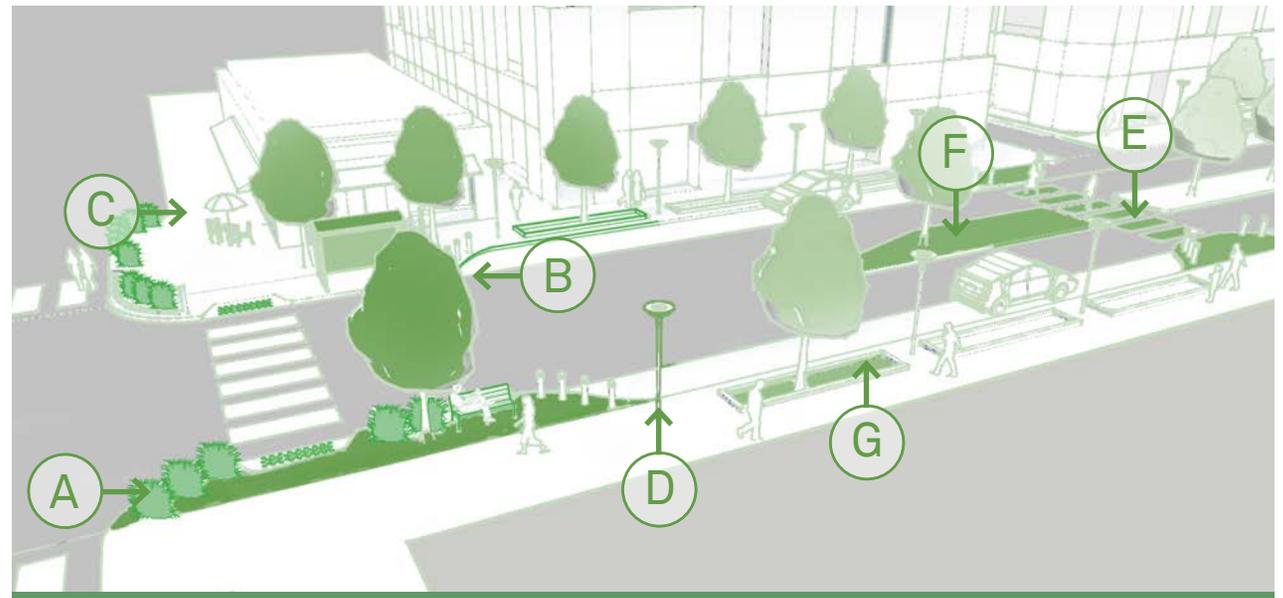
- A** **Curb Extensions** *to visually and physically narrow the roadway, creating safer and shorter crossings for pedestrians.*
- B** **Street Trees**
- C** **Street Furniture** *Street furniture and lighting that are unified and reflect the community's desire to retain unique street features and historic character elements. These combined efforts will encourage pedestrian activity while contributing to a sense of place.*
- D** **Pedestrian Lighting**
- E** **Mid-block Crosswalks** *to facilitate crossings to places that people want to go but that are not well served by the existing street network*
- F** **Landscaped Medians**
- G** **Bioswale Parkway** *are open, gently sloped vegetated channels with curb cuts that clean and infiltrate stormwater during rain events*

5.1.1 Stitch Streets

Stitch Streets are the backbone of the Downtown Long Beach pedestrian network, connecting residents to the Anaheim Avenue, 5th Street, Pacific Avenue, 1st Street and Downtown Long Beach stations.

They encourage pedestrians to walk further through wayfinding elements and safety improvements. Enhanced crosswalks at existing intersections shorten the crossing distance between curbs, while new mid-block crosswalks promote walking within key retail districts. Planted medians encourage

drivers to slow down through the use of key visual cues. The eclectic and unique character of downtown Long Beach is carried into unique streetscape amenities such as bike racks, pedestrian lighting, and seating.



BEFORE



AFTER



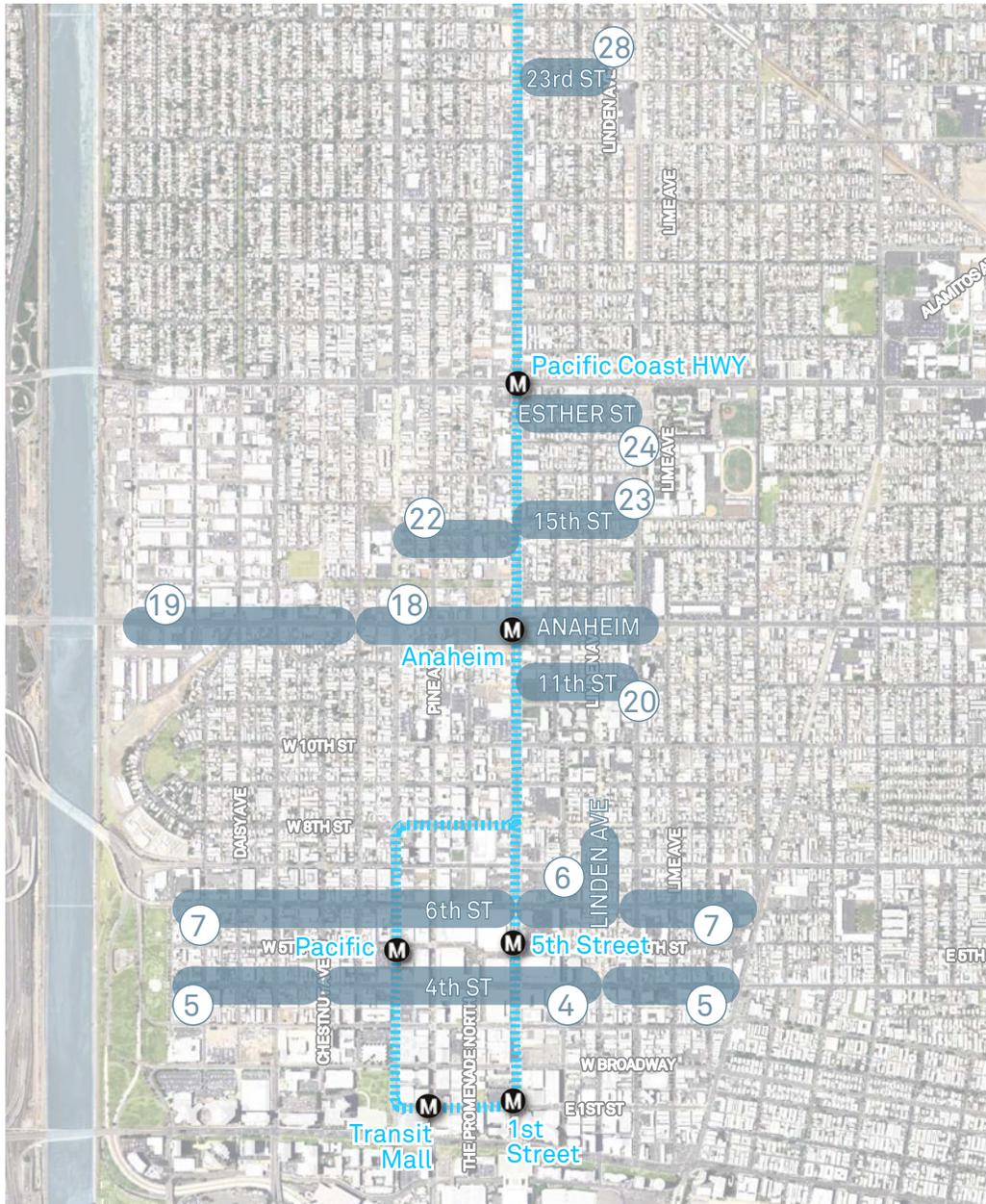
Precedents



Figure 5.1 NE Fremont St. Oregon



Location of Stitch Streets



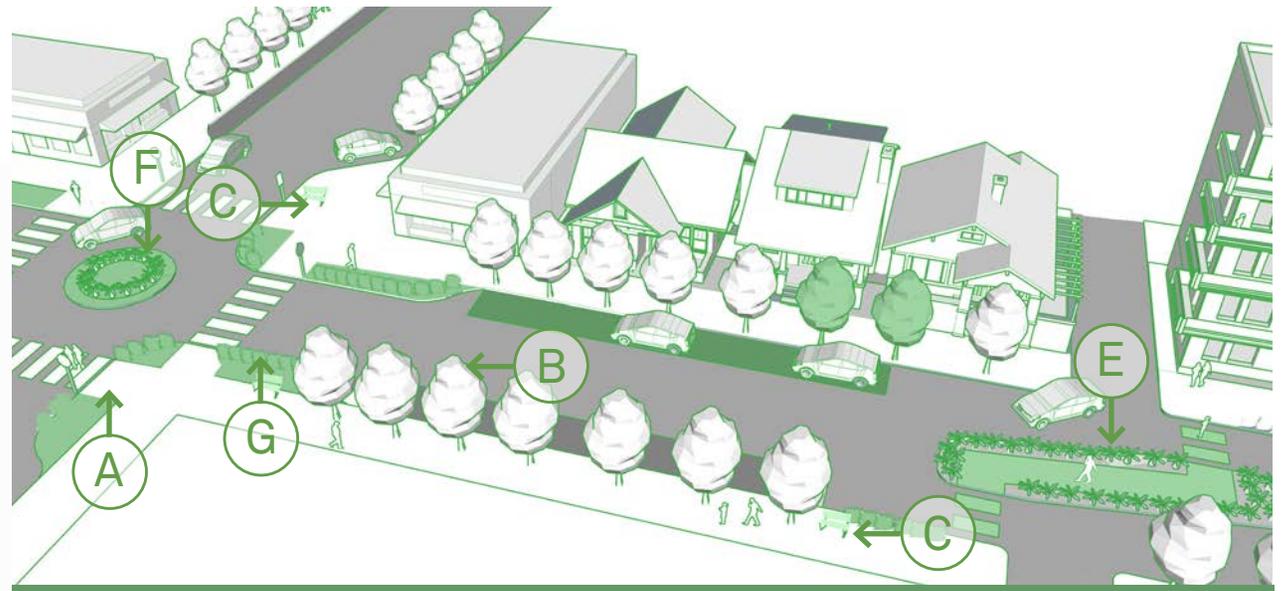
| | |
|----|--|
| 4 | 4th Street Stitch Street - Phase 1 |
| 5 | 4th Street Stitch Street - Phase 2 |
| 6 | 6th Street Stitch Street - Phase 1 |
| 7 | 6th Street Stitch Street - Phase 2 |
| 18 | Anaheim Stitch Street - Phase 1 |
| 19 | Anaheim Stitch Street - Phase 2 |
| 20 | 11th Streetlet and Stitch Street |
| 22 | 15th Street West Streetlet and Stitch Street |
| 23 | 15th Street East Streetlet and Stitch Street |
| 24 | Esther Streetlet and Stitch Street |
| 28 | 23rd Street Streetlet and Stitch Street |

- A** Curb Extensions
- B** Street Trees
- C** Streetscape Furniture
- D** Pedestrian Lighting
- E** Traffic Diverters
- F** Traffic Circles
- G** Bioswale Parkways

5.1.2 Neighborhood Greenways

Neighborhood Greenways are secondary, lower-volume collector streets that link residential areas to the main arterials of the plan area.

Several of these corridors are also classified as “bike boulevards” and encourage the use of bikes or walking over vehicular through traffic. These streets are important connections for neighborhood residents and provide a known “path” to transit and popular destinations. Neighborhood greenways include several toolkit projects that help to calm traffic and encourage more pedestrians to walk to Metro Blue Line stations.



BEFORE



AFTER



Precedents



Figure 5.2 Norton/Laurel, West Hollywood

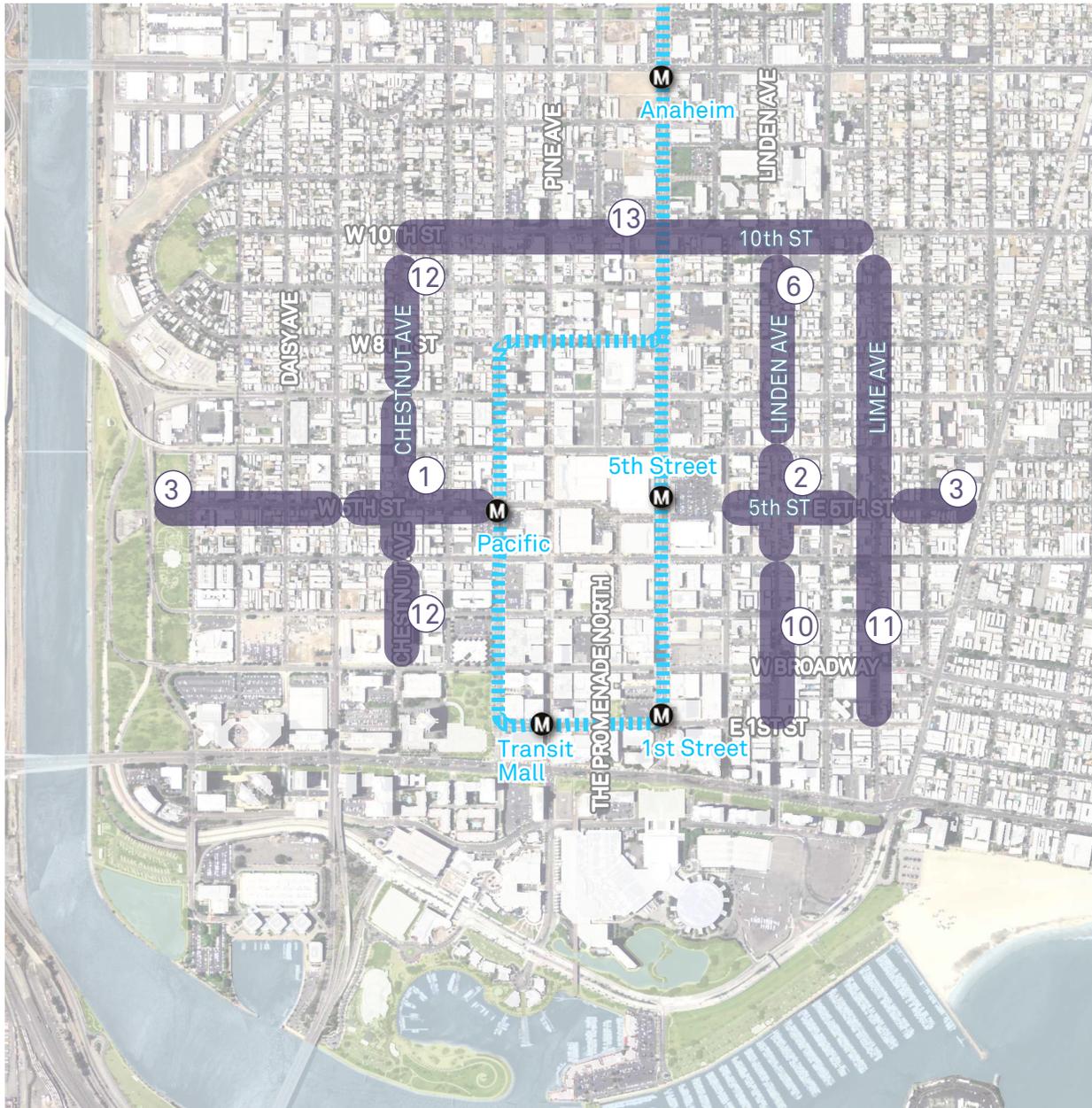


Figure 5.3 12th St., Oregon



Figure 5.4 40th St., Minneapolis

Location of Neighborhood Greenways



| | |
|----|---|
| 1 | Pacific Station Stitch Street and Neighborhood Greenway |
| 2 | 5th Street Station Neighborhood Greenway - Phase 1 |
| 3 | 5th Street Neighborhood Greenway - Phase 2 |
| 6 | 6th St Stitch and Linden Neighborhood Greenway |
| 10 | Linden Neighborhood Greenway - Phase 2 |
| 11 | Lime Neighborhood Greenway |
| 12 | Chestnut Neighborhood Greenway - Phase 2 |
| 13 | 10th Street Neighborhood Greenway |



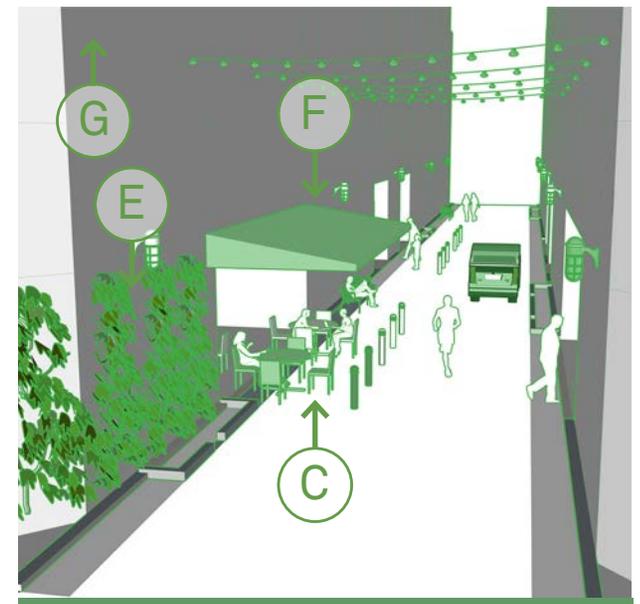
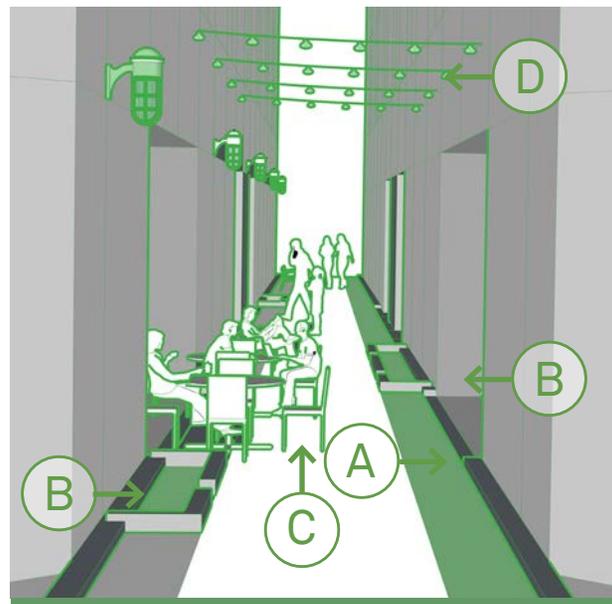
- A** Permeable Pavers
- B** Trash Consolidation
- C** Streetscape Furniture
- D** Pedestrian Lighting/ Accent Lighting
- E** Bioswale Planters
- F** Storefront/ Restaurant Activation
- G** Public Art/ Murals

5.1.3 Green Alleys

Green alleys serve as an urban trail that can provide important alternate and accessible routes for pedestrians.

Downtown Long Beach features a number of alleyways that are not wide enough to accommodate delivery trucks. These alleyways, acting as a secondary street grid, are typically less than 20' wide, offering just enough space for pedestrians and small gathering areas. Permeable pavers, catchment basins, bioswales can help to manage stormwater and the alleys can also have a secondary use as gallery space for local artists, supported by a public mural

program, through ample lighting, benches and encouraging adjacent property owners to orient restaurants and retail to the alleys. The green alleys can also become lively, human-scaled spaces that offer safe and alternative connections to transit and the blue line stations. Standard alleys can also accommodate one-way vehicles and pedestrian amenities.



BEFORE



AFTER



Precedents



Figure 5.5 EaCa Pedestrian Alley, Hollywood



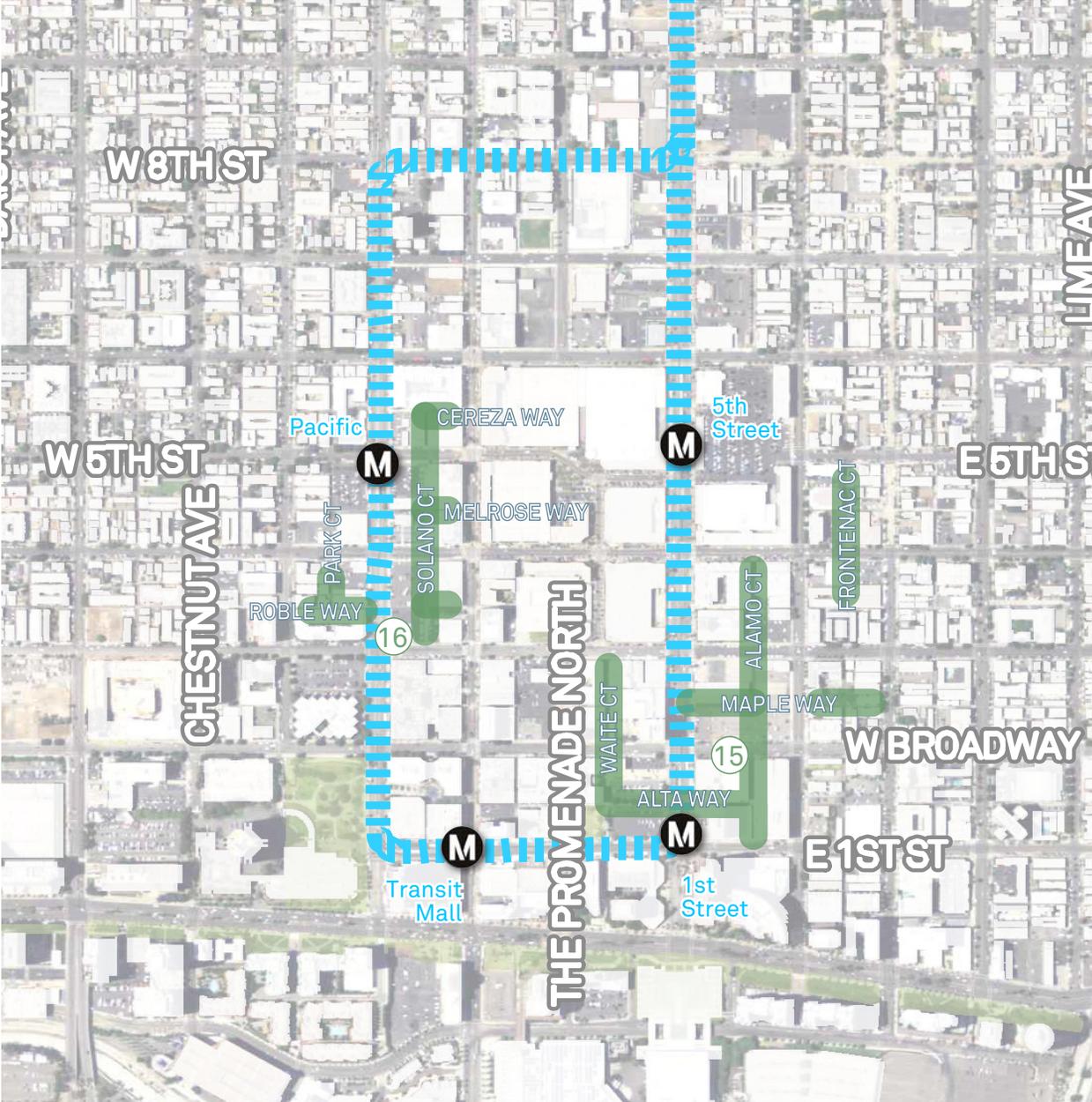
Figure 5.6 Green Alley, Midtown Detroit

Figure 5.7 Linden Alley, San Francisco



Figure 5.8 Hayes Valley, San Francisco

Location of Green Alleys



| | |
|----|---|
| 15 | 1st Street Station Green Alley Network |
| 16 | Pacific Station Green Alley Network |
| 17 | Green Alley Strategic Improvement Project |

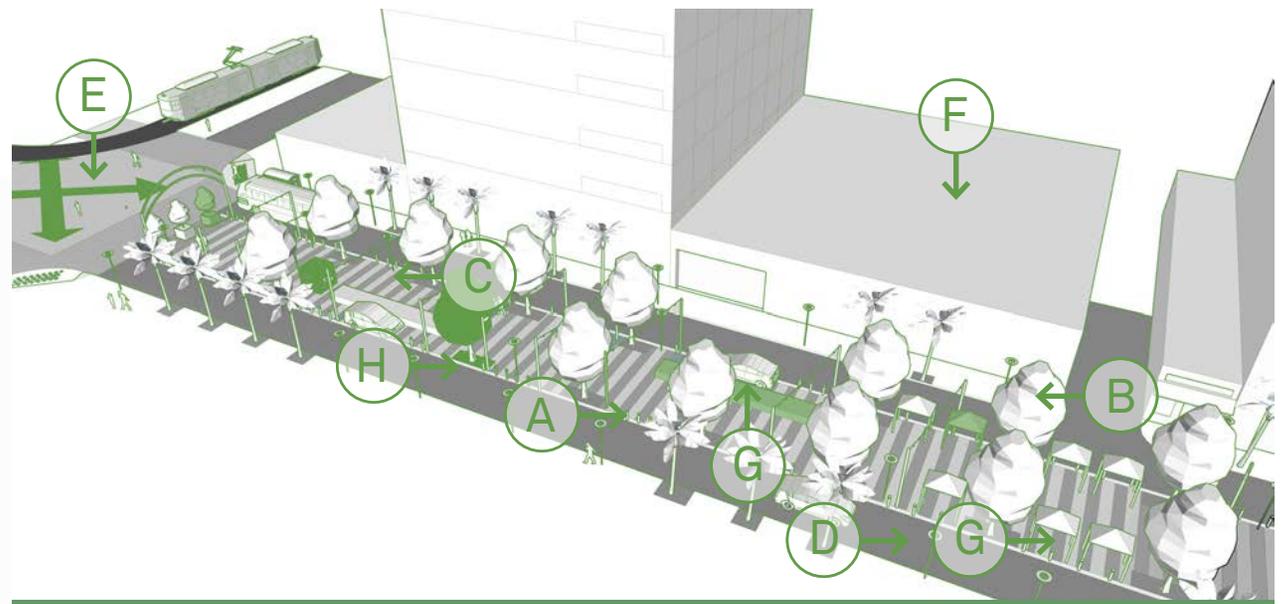
- A Pedestrianized “Rambla”
- B Street Trees
- C Streetscape Furniture
- D Pedestrian Lighting
- E Scramble Crosswalk
- F Public Art
- G Temporary micro-businesses
- H Bollards
- I Gallery Paving

5.1.4 Pedestrian Gallery

An exciting new way to experience Long Beach street life, the Pedestrian Gallery will serve as a flexible space that can accommodate events and traffic, all in a protected, shared environment

Just east of the 1st Street Station, walking will take center stage in the Long Beach Pedestrian Gallery. Modeled after the famous Rambla in Barcelona, Spain, a 30'-wide path created exclusively for pedestrians will offer a safe walking environment, places to sit, opportunities for kiosks and public art, while

maintaining access for buses and other vehicles. During festivals and other events, the Pedestrian Gallery can be completely pedestrianized, providing a seamless connection between the Blue Line and East Village’s premier community event space.



BEFORE



AFTER



Precedents



Figure 5.9 La Rambla, Barcelona, Spain

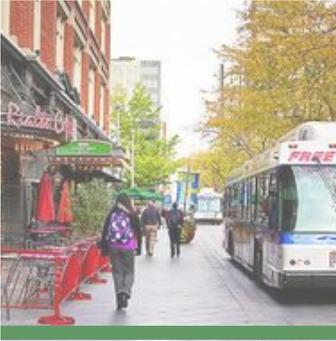
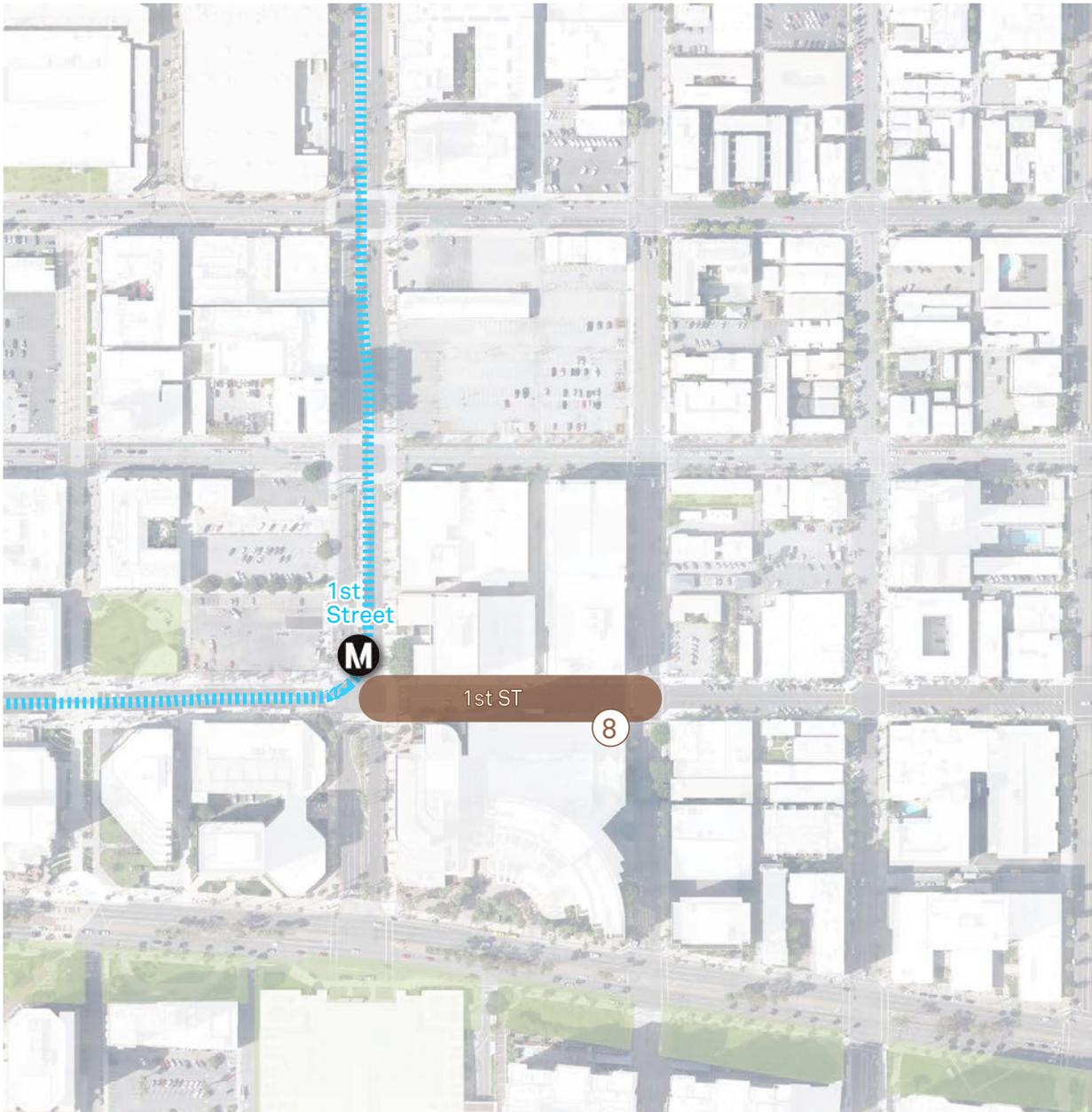


Figure 5.10 16th Street Transit Mall, Denver, CO

Location of Shared Street



8 1st Street Pedestrian Gallery



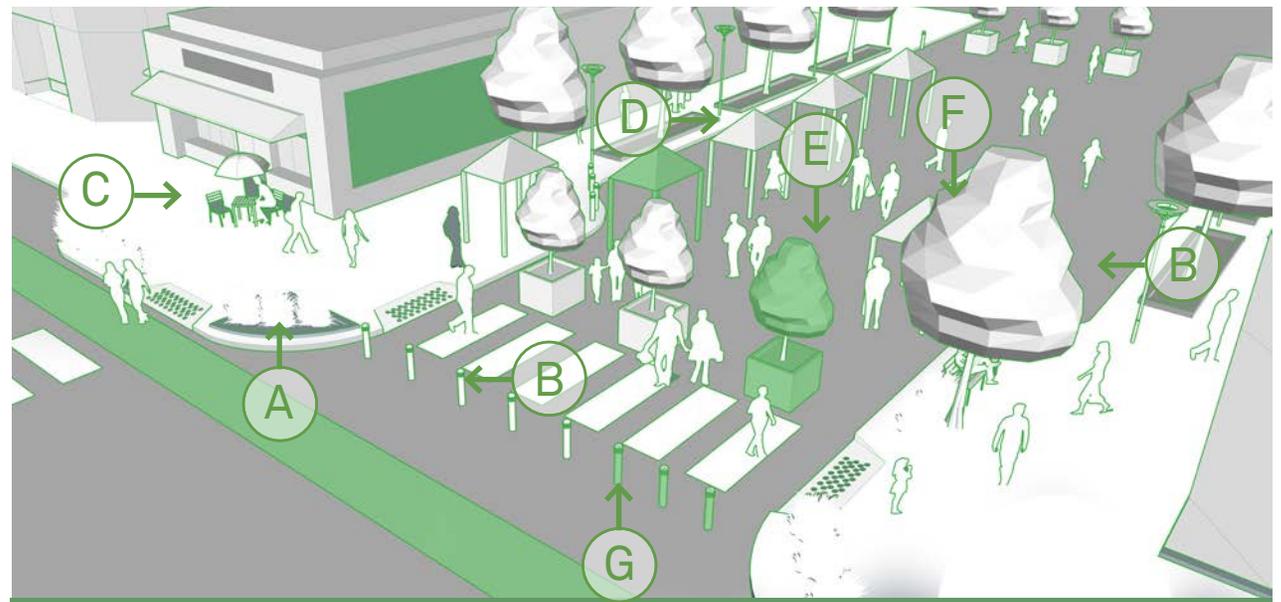
- A** Curb Extensions
- B** Street Trees
- C** Streetscape Furniture
- D** Farmers Market/ Temporary Micro-business
- E** Movable Planters
- F** Public Art Installations
- G** Pop up Bollards

5.1.5 Streetlets

Typically occurring at mid-block crossings or at T-intersections, Streetlets improve pedestrian connections to major transit corridors and provide shade and resting places for pedestrians.

A re-purposed parking lot or missing link in the street grid can facilitate connections to surrounding amenities and provide intermittent open space access. Streetlets can also host events such as farmers markets, street fairs, and art installations.

These Streetlets are intended to be social gathering places, where the community takes ownership of the space and directs the eventual use, design and maintenance of the new space.



BEFORE



AFTER



Precedents



Figure 5.11 Public Events



Figure 5.12 Benjamin Franklin Parkway, Philadelphia, PA



Figure 5.13 Pocket Park

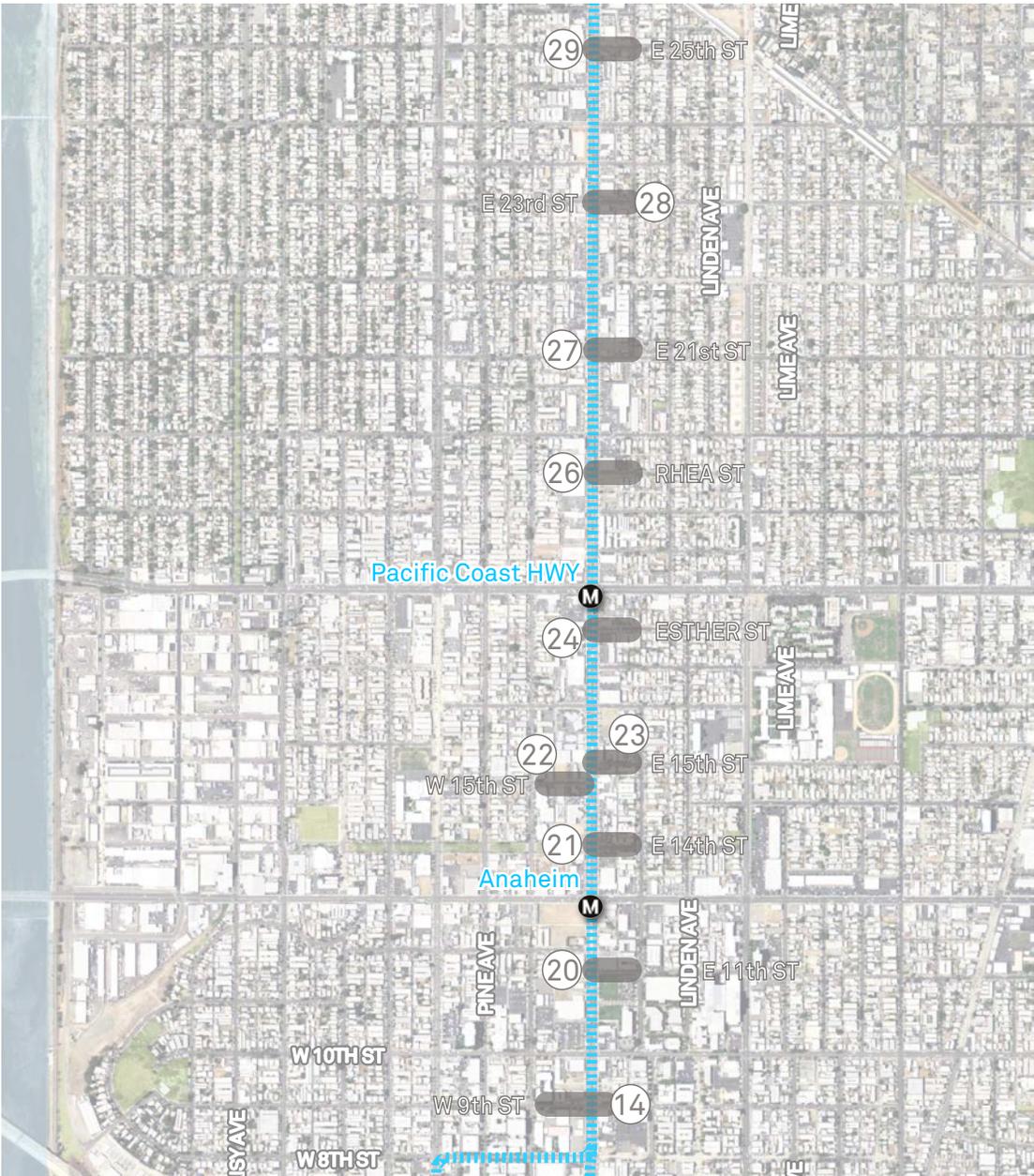


Figure 5.14 Interactive events



Figure 5.15 Annie Street Plaza, San Francisco, CA

Location of Streetlets



| | |
|----|--|
| 14 | 9th Street West Streetlet |
| 20 | 11th Streetlet and Stitch Street |
| 21 | 14th Street Streetlet |
| 22 | 15th Street West Streetlet and Stitch Street |
| 23 | 15th Street East Streetlet and Stitch Street |
| 24 | Esther Streetlet and Stitch Street |
| 26 | Rhea Streetlet |
| 27 | 21st Street Streetlet |
| 28 | 23rd Street Streetlet and Stitch Street |
| 29 | 25th Street Streetlet |

5.1.6 Del Mar Greenbelt

The Greenbelt will serve to provide neighborhoods near the Wardlow and Willow Stations with a safe, direct pedestrian connection

With an abundance of underutilized Metro right of way, there is an opportunity to build a continuous link between the Wardlow and Willow stations. Part of this link will be shared with Del Mar Avenue, a section which is slated to become a bike boulevard. Greenbelts have been successfully implemented in other parts of the country, including Minneapolis, where

the Midtown Greenway draws thousands of commuters on a daily basis. The Midtown Greenway, connected to Metro Transit's Blue Line in Minneapolis, has catalyzed the development of thousands of housing units in the Uptown neighborhood, and sustains a vibrant network of fix-it shops and bicycle-oriented retail.



BEFORE



AFTER



Precedents



Figure 5.16 Metro Orange Line, Los Angeles, CA

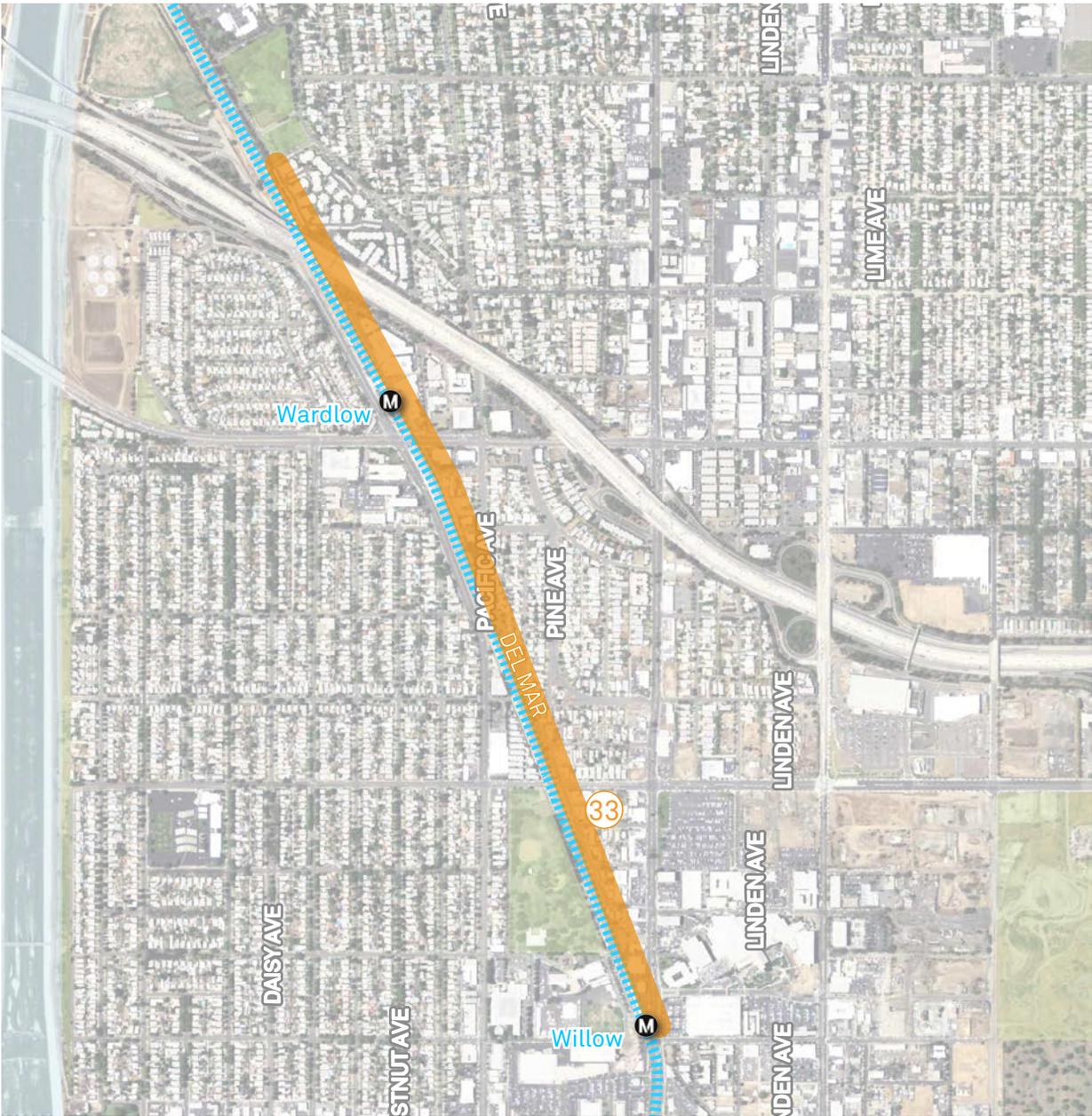


Figure 5.17 Exposition Corridor, Los Angeles, CA



Figure 5.18 Midtown Greenway, Minneapolis, MN

Location of Greenbelt



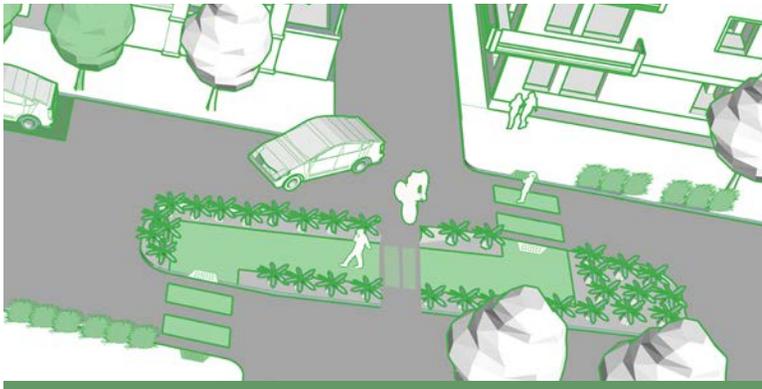
33 Del Mar Greenbelt



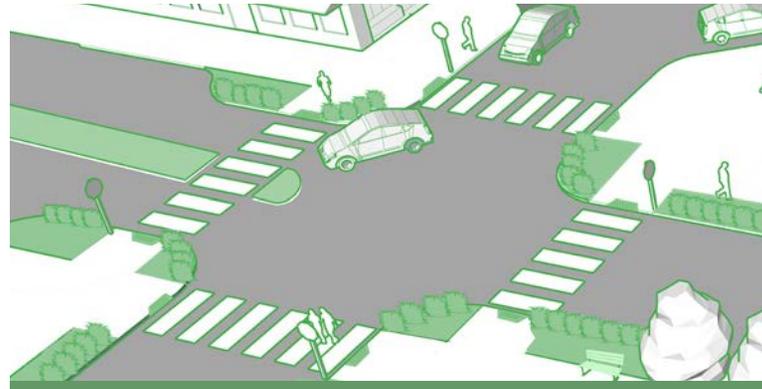
5.1.7 Transit Access Projects

These smaller, more strategic projects will make a significant impact on the safety and livability of neighborhoods near the Metro Blue Line.

Transit access projects utilize curb extensions, mid-block crosswalks, bollards, and other toolkit projects to calm traffic and create safer connections to the Blue Line.



Diverter



Pedestrian Refuge Island

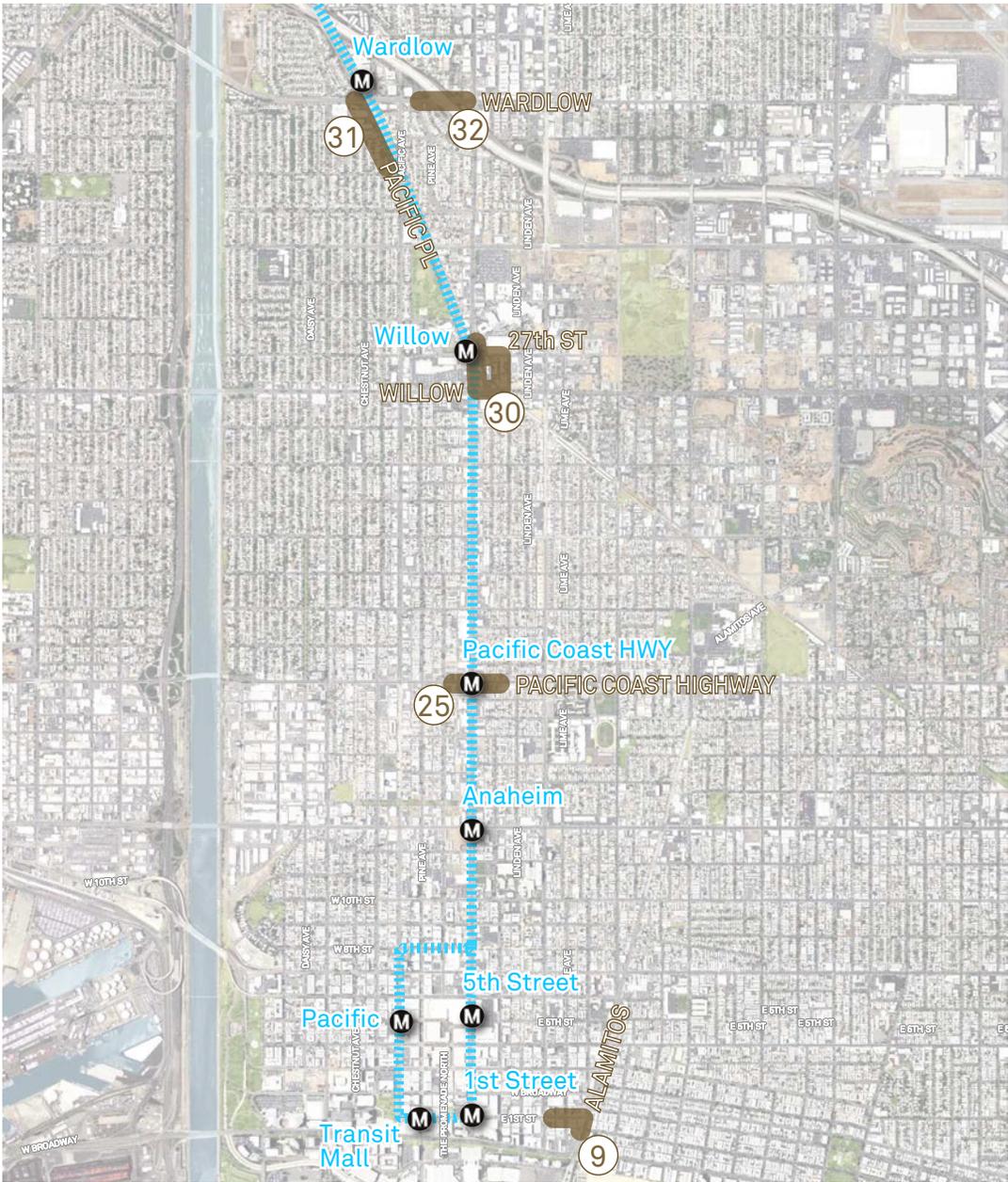


Traffic Circle



Table Crosswalk

Location of Transit Access Projects



| | |
|----|---|
| 9 | Metro Beach Access Gap Closure |
| 25 | PCH Station Transit Access Project |
| 30 | Willow Station Transit Access Project |
| 31 | Wardlow Pacific Place Transit Access Project |
| 32 | Pedestrian Crossing Improvement at NB 405 On-ramp |



5.2 Selection Process

Priority projects were selected through rigorous analysis, community and stakeholder engagement, and staff involvement

The Long Beach Downtown and TOD Pedestrian Master Plan (PMP) supports the following vision: *accessible, safe, and livable neighborhoods near the Metro Blue Line.*

To implement this vision, the PMP identifies public realm investments that the City of Long Beach can make over the next 15 years, supported by cost estimates, design guidelines, and an implementation plan with policies, programs, and funding strategies. These projects have been grouped into high priority (1-5 years), medium priority (6-10 years) and low priority (11-20 years). The team prioritized projects using a comprehensive selection process, outlined at right. Steps 1, 2, and 4 are covered in other chapters, while the results of the Decision Matrix exercise are presented on the following pages.

Figure 5.19: Priority Project Selection Process



Step 1: Policy and Plan Analysis

Refer to Chapter 2 of PMP

An inventory of infrastructure projects, programs, and policies that have been identified by previous plans



Step 2: Community & Stakeholder Involvement

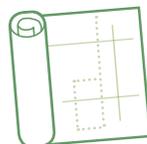
Refer to Chapter 3 of PMP

Review of priority project types by the community to understand issues and priorities for future infrastructure projects



Step 3: Decision Matrix

An analysis of current conditions in the built environment, demographics, collisions, proximity to the Blue Line, and other factors that influence the selection of priority projects



Step 4: Staff Review

Refer to Chapter 3 of PMP

Review by City of Long Beach staff to determine feasibility

5.2.1: Step 3: Decision Matrix

Comprehensive List of Priority Projects

The priority project types emerged from discussions with the Community, staff, and review of existing conditions and previous plans and policies. Some documents, such as the Metro Blue Line Bicycle and Pedestrian Access Improvement Plan, identified specific improvements at intersections and along corridors in the study area. The project team also reviewed the City’s Bicycle Master Plan, Downtown Plan, and recently-adopted Mobility Element, which include design guidelines and profiles of long-range capital improvement projects designed to improve the pedestrian realm.

Once the priority project types were developed, the project team created a list of 33 specific priority projects, using the following selection criteria:

- A** An equitable distribution of projects throughout the Wardlow/Willow, Midtown, and Downtown planning areas
- B** Comprehensive, high-impact projects, preferably with a minimum construction cost of \$2 million
- C** Associated “Lighter, quicker, cheaper” projects that serve to demonstrate the value of priority projects in the short-term

The list of all 33 priority projects, organized by type, is presented at right.

Priority Projects

| | |
|----|---|
| 15 | 1st Street Station Green Alley Network |
| 16 | Pacific Station Green Alley Network |
| 17 | Green Alley Strategic Improvement Project |
| 33 | Del Mar Greenbelt |
| 1 | Pacific Station Stitch Street and Neighborhood Greenway |
| 2 | 5th Street Station Neighborhood Greenway - Phase 1 |
| 3 | 5th Street Neighborhood Greenway - Phase 2 |
| 6 | 6th Stitch and Linden Neighborhood Greenway |
| 10 | Linden Neighborhood Greenway - Phase 2 |
| 11 | Lime Neighborhood Greenway |
| 12 | Chestnut Neighborhood Greenway - Phase 2 |
| 13 | 10th Street Neighborhood Greenway |
| 8 | 1st Street Pedestrian Gallery |
| 4 | 4th Street Stitch Street - Phase 1 |
| 5 | 4th Street Stitch Street - Phase 2 |
| 7 | 6th Stitch Street - Phase 2 |
| 18 | Anaheim Stitch Street - Phase 1 |
| 19 | Anaheim Stitch Street - Phase 2 |
| 20 | 11th Streetlet and Stitch Street |
| 22 | 15th Street West Streetlet and Stitch Street |
| 23 | 15th Street East Streetlet and Stitch Street |
| 24 | Esther Streetlet and Stitch Street |
| 28 | 23rd Street Streetlet and Stitch Street |
| 14 | 9th Street West Streetlet |
| 21 | 14th Street Streetlet |
| 26 | Rhea Streetlet |
| 27 | 21st Street Streetlet |
| 29 | 25th Street Streetlet |
| 9 | Metro Beach Access Gap Closure |
| 25 | PCH Station Transit Access Project |
| 30 | Willow Station Transit Access Project |
| 31 | Wardlow Road & Pacific Place Transit Access Project |
| 32 | Pedestrian Crossing Improvement at NB 405 On-ramp |



Decision Matrix Criteria

A healthy pedestrian network is vital to the city of Long Beach and with limited resources available, it is crucial to propose pedestrian projects that have public support and supporting data to back up the decision process.

Informed by the Existing Conditions Analysis and PMP goals and objectives, the team developed a list of 11 factors to use in the decision matrix. For each factor, projects were assigned up to five points, with 55 total points possible. The decision matrix factors, along with the source of supporting data, point values, and applicable PMP goals is presented in the table at right.

Decision Matrix Factors

| | Evaluation Criteria | Existing Conditions Supporting Factors | Point Values | PMP Goals Met |
|---|---|--|--|--|
| A | Bicycle/Pedestrian Collisions | Bicycle/Pedestrian Collisions Analysis | High (5); Medium (3); Low (1) | Public Health & Safety |
| B | Linear Distance to Station | Walkshed Analysis | 1/4 mi. (5); 1/2 mi. (3); >1/2 mi. (1) | Legibility, Equity, Alternative Transportation |
| C | Elements Proposed in Previous Plan(s) | Policy Analysis | Yes (3); No (1) | |
| D | Cost per Linear Foot | Cost Estimates | 4th quartile (1); 3rd Quartile (2); 1st/2nd Quartile (5) | Economic Development |
| E | High Jobs/Residential Density | Job Density, Residential Density | High (5); Medium (3); Low (1) | Equity |
| F | Serves Transit-Dependent Population | Senior Population (>65), Youth Population (<18) | High (5); Medium (3); Low (1) | Equity, Public Health & Safety, Alternative Transportation |
| G | Leverages Development Opportunities | Vacant Parcels, Parking Lots, Publicly-Owned Properties, Recent Redevelopment Projects in Vicinity, City-identified Redevelopment Area | High (5); Medium (3); Low (1) | Economic Development, Placemaking |
| H | Removes Major Barriers to Walking | Opportunities & Constraints Analysis, Sidewalk Inventory | Significant (5); Moderate (3); Few 9 | Legibility, Equity |
| I | Enhances Access to Key Destinations | Pedestrian Activity Generators | 2 or more (5); 1 (3); 0 (1) | Legibility |
| J | Ridership | Modal Split, Metro and LBT Ridership Data | >50% walk (5); 25%-50% walk (3); <25% walk (1) | |
| K | Current Condition of Walking Environment | Opportunities & Constraints Analysis | Poor (5); Moderate (3) Good (1) | |

5.2.2: Step 2: Decision Matrix Results

| Project Number and Name | | Bike/Pedestrian Collisions | Linear Distance to Station | Some/All Elements Proposed in Plans | Proximity to Schools | High Job/Residential Density | Serves Transit-Dependent Population | Leverages Development Opportunities | Removes Major Barriers to Walking | Enhances Access to Key Destinations | Modal Split at Nearest Blue Line Station | Current Condition of Walking Environment | Total Points (55 possible) | Rank (out of all projects) |
|-------------------------|--|----------------------------|----------------------------|-------------------------------------|----------------------|------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|--|--|----------------------------|----------------------------|
| 2 | 5th Street Station Neighborhood Greenway - Phase 1 | 3 | 5 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 3 | 48 | 1 |
| 1 | Pacific Station Neighborhood Greenway | 5 | 5 | 3 | 3 | 5 | 4 | 5 | 2 | 5 | 3 | 3 | 43 | 2 |
| 6 | 6th Street Stitch Street/ Linden Ave Neighborhood Greenway | 3 | 5 | 3 | 5 | 5 | 3 | 5 | 2 | 4 | 5 | 3 | 43 | 3 |
| 34 | Long Beach Boulevard Character Change | 3 | 5 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 3 | 1 | 43 | 4 |
| 33 | Del Mar Greenbelt | 3 | 5 | 1 | 3 | 4 | 5 | 3 | 5 | 4 | 5 | 4 | 42 | 5 |
| 4 | 4th Street Stitch Street - Phase 1 | 3 | 5 | 3 | 3 | 4 | 3 | 5 | 2 | 5 | 5 | 3 | 41 | 6 |
| 18 | Anaheim Stitch Street - Phase 1 | 5 | 5 | 3 | 5 | 3 | 4 | 3 | 2 | 3 | 3 | 5 | 41 | 7 |
| 8 | 1st Street Pedestrian Gallery | 2 | 5 | 3 | 1 | 5 | 3 | 5 | 3 | 5 | 5 | 3 | 40 | 8 |
| 20 | 11th Street West Streetlet and Stitch Street | 2 | 5 | 3 | 3 | 4 | 5 | 3 | 4 | 5 | 3 | 3 | 40 | 9 |
| 31 | Wardlow Road and Pacific Place Transit Access Project | 2 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 3 | 5 | 40 | 10 |
| 15 | 1st Street Station Green Alley Network | 2 | 5 | 1 | 3 | 4 | 3 | 5 | 3 | 5 | 5 | 3 | 39 | 11 |
| 16 | Pacific Station Green Alley Network | 2 | 5 | 1 | 3 | 4 | 3 | 5 | 3 | 5 | 5 | 3 | 39 | 12 |
| 24 | Esther Streetlet and Stitch Street | 4 | 5 | 3 | 5 | 3 | 4 | 4 | 3 | 2 | 3 | 3 | 39 | 13 |
| 9 | Metro Beach Access Gap Closure | 2 | 5 | 3 | 1 | 4 | 3 | 4 | 2 | 5 | 5 | 4 | 38 | 14 |
| 17 | Green Alley Strategic Improvement Project | 2 | 5 | 1 | 3 | 4 | 2 | 5 | 3 | 5 | 5 | 3 | 38 | 15 |
| 30 | Willow Station Transit Access Project | 3 | 5 | 3 | 3 | 4 | 2 | 3 | 4 | 5 | 3 | 3 | 38 | 16 |
| 10 | Linden Ave Neighborhood Greenway - Phase 2 | 3 | 5 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 5 | 3 | 37 | 17 |
| 12 | Chestnut Avenue Neighborhood Greenway - Phase 2 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 5 | 3 | 36 | 18 |

5.2.2: Step 2: Decision Matrix Results

Continued

| | | Bike/Pedestrian Collisions | Linear Distance to Station | Some/All Elements Proposed in Plans | Proximity to Schools | High Job/Residential Density | Serves Transit-Dependent Population | Leverages Development Opportunities | Removes Major Barriers to Walking | Enhances Access to Key Destinations | Modal Split at Nearest Blue Line Station | Current Condition of Walking Environment | Total Points (55 possible) | Rank (out of all projects) |
|----|--|----------------------------|----------------------------|-------------------------------------|----------------------|------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|--|--|----------------------------|----------------------------|
| 7 | 6th Street Stitch Street - Phase 2 | 2 | 3 | 3 | 5 | 3 | 4 | 3 | 2 | 4 | 3 | 3 | 35 | 19 |
| 13 | 10th Street Bike Boulevard Pedestrian Improvements | 4 | 3 | 3 | 5 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 35 | 20 |
| 19 | Anaheim Street Stitch Street - Phase 2 | 5 | 3 | 3 | 5 | 2 | 2 | 3 | 2 | 2 | 3 | 5 | 35 | 21 |
| 21 | 14th Street East Streetlet | 3 | 5 | 3 | 5 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 35 | 22 |
| 25 | PCH Station Transit Access Project | 5 | 5 | 3 | 1 | 2 | 4 | 2 | 3 | 2 | 3 | 5 | 35 | 23 |
| 22 | 15th Street West Streetlet and Stitch Street | 3 | 5 | 3 | 5 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 34 | 24 |
| 23 | 15th Street East Streetlet and Stitch Street | 3 | 5 | 3 | 5 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 34 | 25 |
| 5 | 4th Street Stitch Street - Phase 2 | 3 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 4 | 3 | 3 | 33 | 26 |
| 11 | Lime Avenue Neighborhood Greenway | 3 | 1 | 3 | 5 | 4 | 4 | 3 | 2 | 2 | 3 | 3 | 33 | 27 |
| 26 | Rhea Streetlet | 3 | 5 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 33 | 28 |
| 3 | 5th Street Neighborhood Greenway - Phase 2 | 2 | 3 | 3 | 5 | 1 | 4 | 3 | 2 | 3 | 3 | 3 | 32 | 29 |
| 32 | Pedestrian Crossing Improvement at NB 405 on-ramp | 2 | 3 | 3 | 1 | 2 | 5 | 2 | 3 | 2 | 5 | 4 | 32 | 30 |
| 14 | 9th Street West Streetlet | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 31 | 31 |
| 29 | 25th Street Streetlet | 2 | 3 | 3 | 3 | 4 | 2 | 3 | 3 | 2 | 3 | 3 | 31 | 32 |
| 28 | 23rd Street Streetlet and Stitch Street | 2 | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 28 | 33 |
| 27 | 21st Street Streetlet | 2 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 27 | 34 |

5.3 Profile of Recommended Projects

A draft list of projects was developed by analyzing community input and comparing them with street classifications, sidewalk site conditions, and the pedestrian/vehicular collision data. The priority project designs and the specific toolkit item descriptions give a conceptual idea of the types of pedestrian improvements to be made.

The following section categorizes the elements from the previously described project types and identifies specific corridors for prioritization. It is the intent that these priority projects as presented

will create increased access to stations along the Metro Blue Line and significantly enhance the pedestrian experience throughout the City. The study area has been separated into three distinct parts that include the Downtown, Midtown, and Wardlow/Willow districts. Within these districts, the final project list was divided into three prioritization types. Type One (green) represents the highest priority of projects to be completed, Type Two (yellow) those of medium priority, and Type Three (red) the projects with the least priority for completion at this time.



Figure 5.20

Discussing opportunities during a City meeting on potential Priority Projects.



5.3.1 High Priority Projects

The goal of the PMP is to prioritize a list of pedestrian improvement projects that can be implemented over the next 15-20 years. To that end, larger, more comprehensive streetscape projects were divided into smaller projects for purposes of prioritization. This approach allows smaller projects, such as streetlets and green alleys, to be evaluated alongside more expensive streetscape projects that, if implemented as part of one phase, could take several years to plan, design, and construct. These high priority projects represent last-mile connections to the Metro Blue Line that will have the greatest impact on ridership, safety, and livability.

Five of the fourteen high priority projects presented here represent initial segments of projects that will be implemented over two phases. These include projects 1, 2, 4, 6, and 18, outlined in red in the table at right. The corridors include 5th Street West and Chestnut Avenue (Project 1), 5th Street East and Linden Avenue (Project 2), 6th Street (Project 6), 4th Street (Project 4), and Anaheim Street (Project 18). While only the high priority segments will be implemented in the short-term, the full extent of each corridor, including the high and medium-term segments, should be planned and designed at the same time. Construction of medium-priority projects can take place as part of a second phase. Gruen Associates

| | |
|----|--|
| 1 | Pacific Station Neighborhood Greenway |
| 2 | 5th Street Station Neighborhood Greenway - Phase 1 |
| 4 | 4th Street Stitch Street - Phase 1 |
| 6 | 6th Street Stitch Street/ Linden Ave Neighborhood Greenway |
| 8 | 1st Street Pedestrian Gallery |
| 9 | Metro Beach Access Gap Closure |
| 15 | 1st Street Station Green Alley Network |
| 16 | Pacific Station Green Alley Network |
| 18 | Anaheim Street Stitch Street - Phase 1 |
| 20 | 11th Street West Streetlet and Stitch Street |
| 24 | Esther Streetlet and Stitch Street |
| 30 | Willow Station Transit Access Project |
| 31 | Wardlow Road and Pacific Place Transit Access Project |
| 33 | Del Mar Greenbelt |

has developed conceptual designs for the high and medium-priority segments of these corridors. However, cost estimates were only prepared for high priority projects.

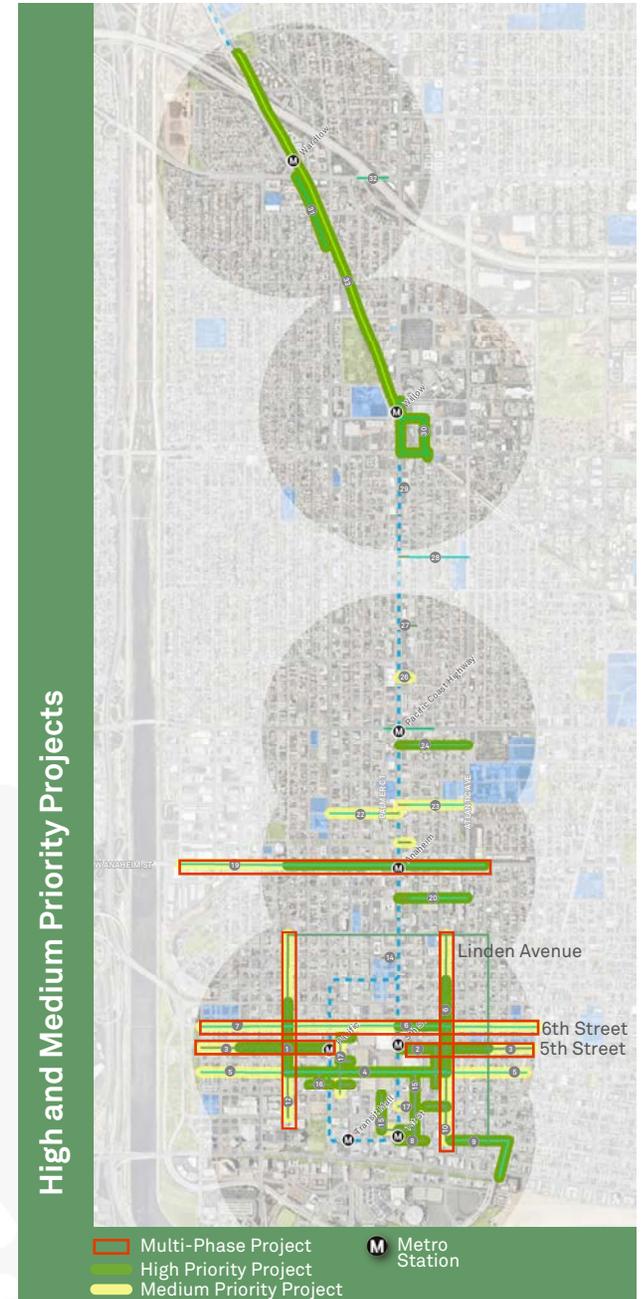


Pairing of Stitch Streets and Neighborhood Greenways

Projects 1, 2, and 6 include treatments for more than one corridor. Project 1 proposes a neighborhood greenway on West 5th Street between Pacific and Chestnut Avenues, and another neighborhood greenway between West 5th Street and 7th Street. Projects 2 and 6th also span multiple corridors, and propose stitch street treatments on East 5th Street and East 6th Street between Long Beach Boulevard and Linden Avenue. Initial phases of the Linden Avenue neighborhood greenway are also included in these

projects. While divided into three separate projects, the planning and design of 5th and 6th Streets and Linden Avenue should be done concurrently. The construction timelines for projects 2 and 6 should also be closely coordinated.

The following pages include descriptions, conceptual plans, and cost estimates for the 14 high priority projects.



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1 Pacific Station Neighborhood Greenway

Serving as a pedestrian-friendly, low traffic volume alternative to major arterials, this project provides a safe connection for pedestrians traveling to Pacific Station from residential neighborhoods west of Pacific Avenue. The project serves as a catalyst for the reconstruction of 5th Street West, with an initial segment between Pacific and Daisy. A future phase (Project #3) will connect Pacific Station to Cesar Chavez Park and the Los Angeles River. A bike boulevard is currently planned for Daisy Avenue, which will be a model for other proposed neighborhood greenways including Chestnut, Linden, and Lime. An initial segment of the

Chestnut neighborhood greenway, between 4th and 7th Streets, is included in this project. Overall, this project will feature pedestrian-friendly treatments typical of neighborhood greenways, such as curb extensions, traffic-calming chicanes, continental crosswalks, canopy trees, and traffic circles. In the Long Beach Bicycle Master Plan, both 5th Street and Chestnut Avenue are proposed to become bike boulevards. These corridors should receive typical bike boulevard treatments such as sharrows and wayfinding signage, and should follow specifications as per City standards.

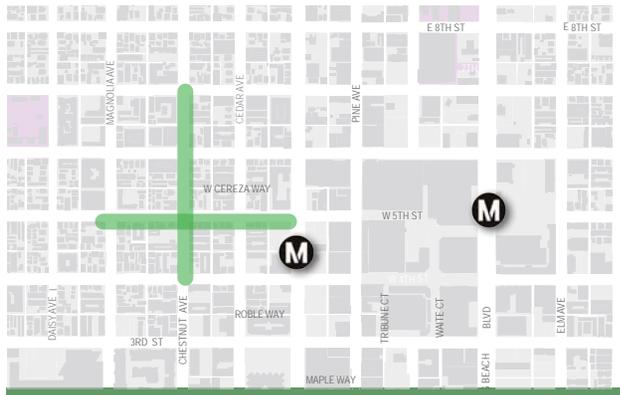


Figure 5.21 Key Map

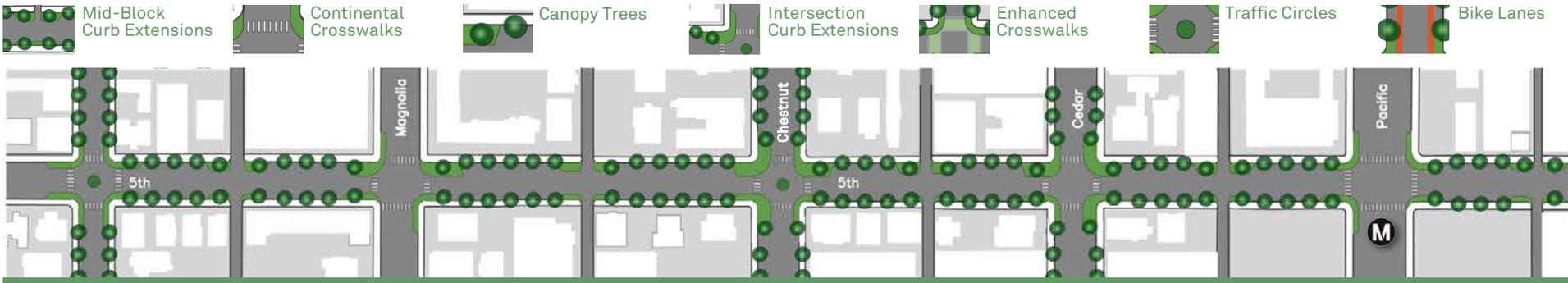


Figure 5.22 SEGMENT 1 - 5th Street- Daisy Avenue to Pacific Avenue

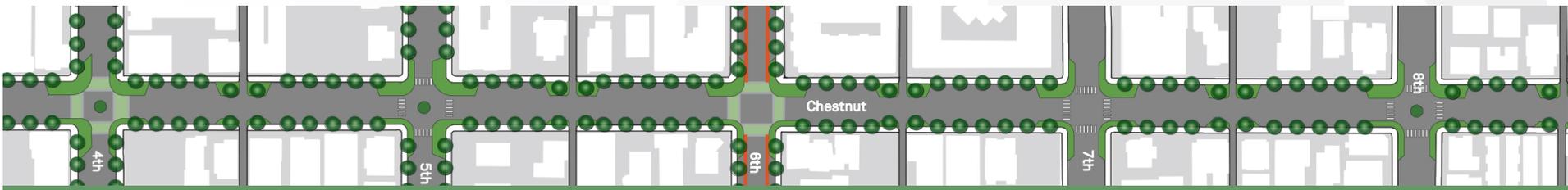


Figure 5.23 SEGMENT 2 - Chestnut Avenue- 4th Street to 7th Street

1 Pacific Station Neighborhood Greenway

Cost Estimate

\$7.86 million

total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$1,244,050 |
| Site Improvements | \$2,629,500 |
| Striping, Marking, Signals | \$121,600 |
| Drainage Improvements | \$825,500 |
| Wayfinding & Public Art | \$25,000 |
| Landscaping | \$449,720 |
| Irrigation | \$100,920 |
| Electrical & Lighting | \$425,000 |
| Site Furnishings | \$82,000 |
| Other | \$1,803,940 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Cross Section



Figure 5.24 5th Street West and Chestnut Avenue

2 5th Street Station Neighborhood Greenway

This project largely mirrors the Pacific Station Neighborhood Greenway. The first segment, along 5th Street East between Elm and Lime, provides an enhanced connection from 5th Street Station to proposed bicycle boulevards at Chestnut and Lime. A future project, not included in this list, could involve the creation of a pedestrian path through what is currently a surface parking lot, in order to directly connect residential areas with the station platform. This project is not included as part of the PMP. Project #3, a future medium-priority project, will complete the 5th Street East neighborhood greenway between Lime and Alamos.

A second segment of Project #2 includes part of the Linden Neighborhood Greenway between 4th and 6th Streets. Together with Project #6, another high-priority project, an initial stretch of the Linden Greenway will be completed between 4th and 9th streets. Project #10, a medium priority project, will extend the Linden Greenway to 10th and 1st streets. Special features in Project #2 include traffic circles along 5th Street at Linden and Lime Avenues. Unified wayfinding signage should be included to direct pedestrians between the Metro station and points of interest.



Figure 5.25 Key Map

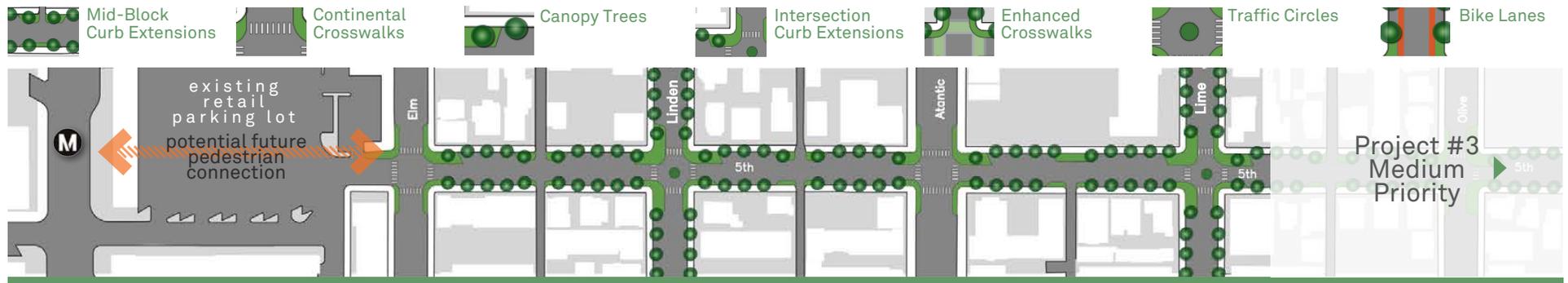


Figure 5.26 5th Street- Elm Avenue to Lime Avenue



Figure 5.27 Linden Avenue- 4th Street to 6th Street

2 5th Street Station Neighborhood Greenway

Cost Estimate

\$5.23 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$761,050 |
| Site Improvements | \$1,794,050 |
| Striping, Marking, Signals | \$115,180 |
| Drainage Improvements | \$455,000 |
| Wayfinding & Public Art | \$25,000 |
| Landscaping | \$292,580 |
| Irrigation | \$74,880 |
| Electrical & Lighting | \$300,000 |
| Site Furnishings | \$59,400 |
| Other | \$1,200,088 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Cross Section



Figure 5.28 5th Street East and Linden Avenue

4 4th Street Stitch Street - Phase 1

4th Street in Downtown Long Beach bisects some of the City's most unique and interesting destinations. From the Metro Blue Line station at Pacific, visitors can walk to Pine Avenue, a bustling, walkable commercial corridor that has recently been rebuilt. The PMP calls for repurposing a network of pedestrianized commercial and multi-use alleyways near the 4th Street Corridor, including Cereza, Roble, and Maple. As redevelopment occurs on large surface parking lots and parcels between Pacific and Pine, a medium-term project could also include reconstructing segments of Solano Court.

East of Pine, pedestrians can walk to City Place, a key shopping hub in Downtown Long Beach.

Metro passengers may also choose to alight at 5th Street Station, where they can walk to 4th Street and enter Long Beach's East Village district. A cluster of commercial activity east of Elm will be enhanced by wayfinding installations, mid-block crossings, and enhanced crosswalks.

The 4th Street improvement project will link these key activity centers to the Pacific and 5th Street Metro stations. Landscaped medians will help to calm traffic and provide secure mid-block crossings, effectively making the corridor safer for pedestrians. Project #5, a medium-priority project, will eventually extend the 4th Street corridor to Cesar Chavez Park to the west and Alamitos Avenue to the east.

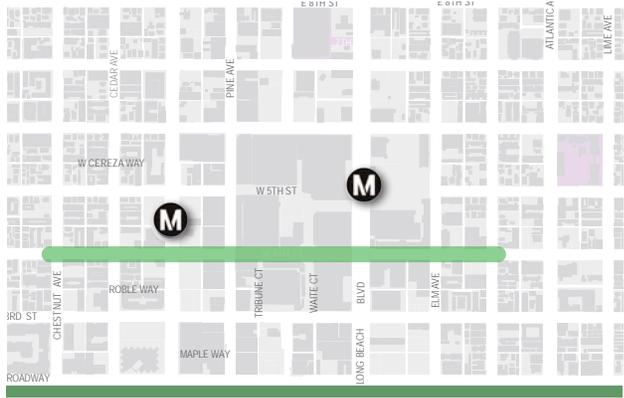


Figure 5.29 Key Map



Figure 5.30 4th Street- Chestnut Avenue to Linden Avenue

4 4th Street Stitch Street - Phase 1

Cost Estimate

\$5.61 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$706,700 |
| Site Improvements | \$2,038,170 |
| Striping, Marking, Signals | \$78,200 |
| Drainage Improvements | \$545,000 |
| Wayfinding & Public Art | \$25,000 |
| Landscaping | \$345,600 |
| Irrigation | \$67,600 |
| Electrical & Lighting | \$300,000 |
| Site Furnishings | \$64,200 |
| Other | \$1,287,500 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

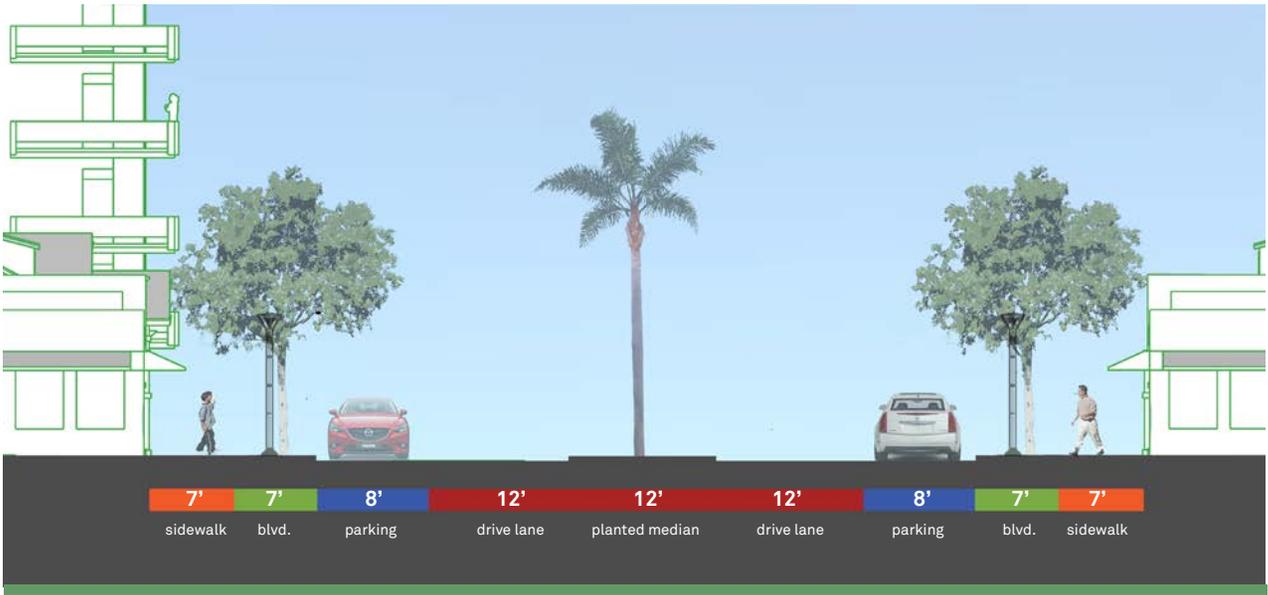


Figure 5.31 4th Street

6 6th Street Stitch Street/Linden Avenue Neighborhood Greenway

Project #6 proposes a stitch street along 6th between Long Beach Boulevard and a continuation of the Linden Neighborhood Greenway north of 6th Street. When paired with project #2 the first phase of the Linden Neighborhood Greenway will be completed between 4th and 8th Streets. The goals of this priority project are to implement an initial phase of proposed bike improvements along 6th Street, and to provide a more direct connection between residential neighborhoods and the 5th Street Metro Blue Line station. There are also several schools in the neighborhood, including Stevenson Elementary School, St. Anthony High School, and Franklin Middle School east of Alamitos.

This improvement project, when combined with Project #7, a medium-priority extension of 6th Street, can offer safer sidewalks and connections for students.

Sixth Street is currently a one-way eastbound corridor, paired with westbound 7th Street. The City's Bicycle Master Plan proposes Class II bike lanes for 6th Street as part of a conversion of the corridor to two-way traffic. The City is also planning for a reconstruction of Shoemaker Bridge at the 7th Street crossing of the Los Angeles River. Therefore, projects #6 and 7 should only be considered once these related planning projects are more fully developed.



Figure 5.32 Key Map

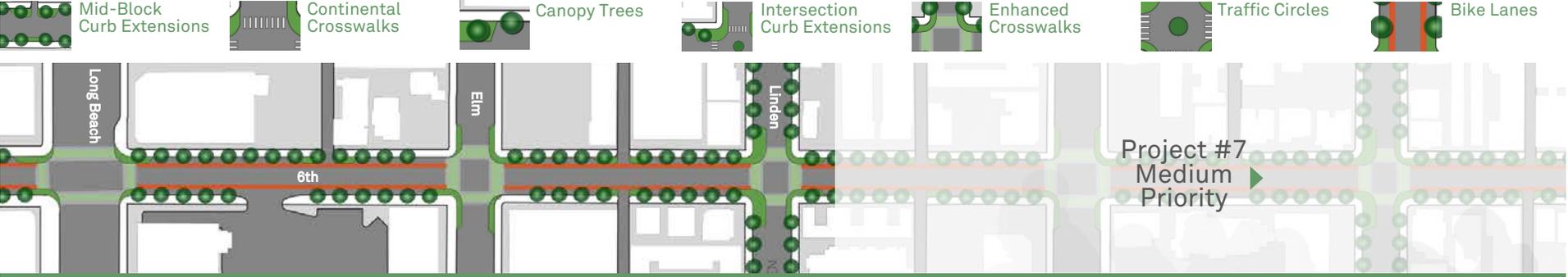


Figure 5.33 6th Street - Long Beach Boulevard to Linden Avenue

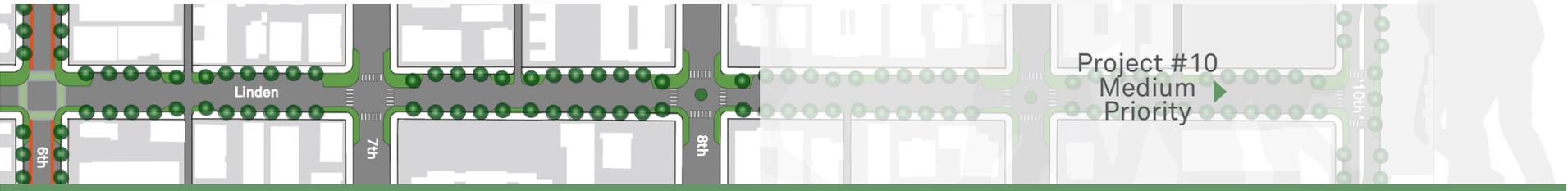


Figure 5.34 Linden Avenue - 6th Street to 8th Street

6 6th Street Stitch Street/Linden Avenue Neighborhood Greenway

Cost Estimate

\$5.35 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$741,050 |
| Site Improvements | \$2,024,450 |
| Striping, Marking, Signals | \$98,800 |
| Drainage Improvements | \$413,500 |
| Wayfinding & Public Art | \$30,000 |
| Landscaping | \$283,740 |
| Irrigation | \$78,640 |
| Electrical & Lighting | \$250,000 |
| Site Furnishings | \$50,400 |
| Other | \$1,227,933 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Cross Sections



Figure 5.35 6th Street



Figure 5.36 Linden Avenue

8

1st Street Pedestrian Gallery

The 1st Street corridor between Long Beach Boulevard and Elm Avenue is currently framed by a parking structure, hotel, and office buildings that do not add vitality or life to the pedestrian realm. This stands in stark contrast to the corridor east of Elm, which features a diverse mix of local businesses, landscaped curb extensions and an attractive selection of street furniture. 1st Street and Linden Avenue is also the epicenter of the monthly East Village Arts Walk and other festivals and community events. The goal of the 1st Street Pedestrian Gallery is to extend this vibrant corridor one block west to connect with the 1st Street Metro Blue Line Station. To that end, the Pedestrian Gallery features a 30'-wide pedestrian rambla along the center of the street, providing shade, respite, and opportunities for farmers markets, lunchtime food vendors, or other micro-businesses. As a shared street, the rambla is curbsless, and framed by a line of movable bollards for safety. These bollards can be depressed into the ground to create a completely curbsless environment between the sidewalks. During festivals and events, this curbsless environment can become completely pedestrianized through temporary closures at both ends of the block, serving as an ideal stage for public events and festivals. Key precedents for the Pedestrian Gallery include the Denver Transit Mall and Barcelona's famed Rambla.

During normal traffic, the corridor will continue to serve as a critical corridor for Long Beach Transit and passenger vehicles. Existing bus stops at Long Beach Boulevard and Elm Avenue will remain, providing a critical point of transfer between Long Beach Transit routes and the Metro Blue Line. To further enhance the pedestrian experience at Long Beach Boulevard, a scramble crosswalk is proposed at the intersection, providing an additional cycle during which pedestrians may cross at any direction. This will allow safe and direct passage for transit riders making a transfer, pedestrians crossing from the A-Line to the Pedestrian Gallery, and those traversing between East Village and Ocean or Downtown.

During the preparation of the PMP, the consulting team partnered with the City of Long Beach to prepare a Metro Call for Projects application for the Pedestrian Gallery. On June 29th, 2015, Metro staff released its "Rainbow Report," recommending full funding for the Pedestrian Gallery. If approved by the Metro Board, SCAG, and ultimately the FTA/FHWA through its TIP program, funding for this project could be awarded to the City of Long Beach as early as 2017.

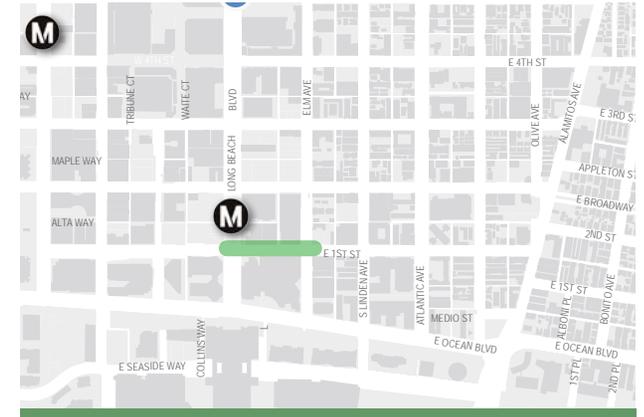


Figure 5.37 Key Map



Figure 5.38 Northeast corner of Long Beach Blvd. and 1st Street.

8 1st Street Pedestrian Gallery

- Scramble Crosswalk
- Movable Bollards
- Gateway Arch
- Movable Planters
- Tree Trenches
- Overhead String lights
- Public Art installations
- Benches
- Parking Bays
- Pedestrian-Level Lighting
- Canopy Trees
- Vendor Tents/ Kiosks

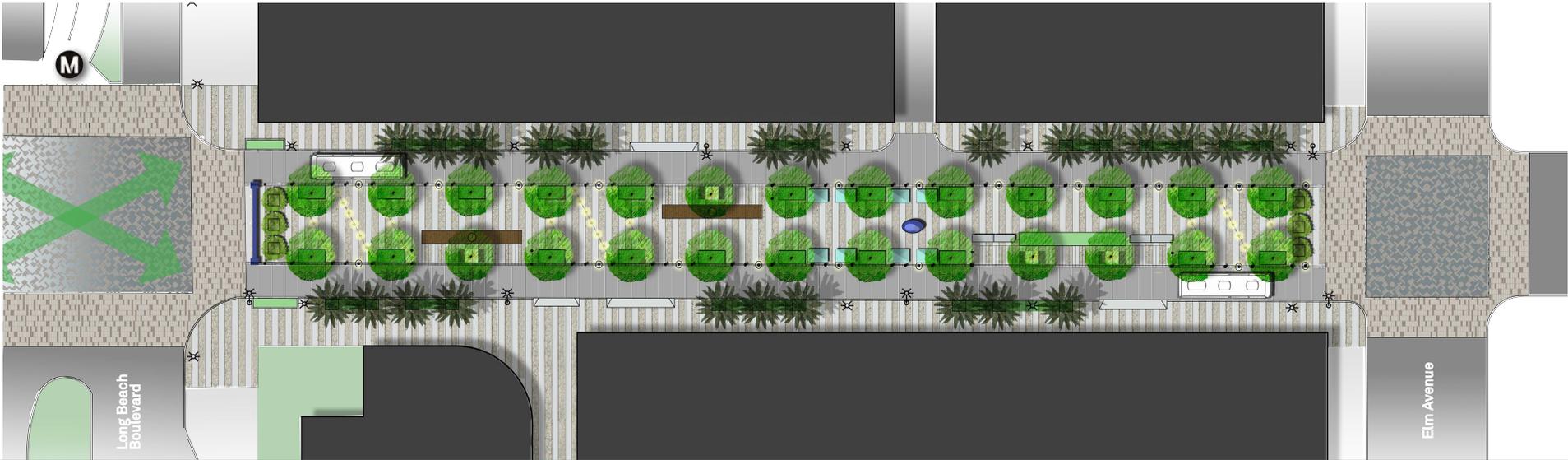


Figure 5.39 1st Street- Long Beach Boulevard to Elm Avenue

8 1st Street Pedestrian Gallery

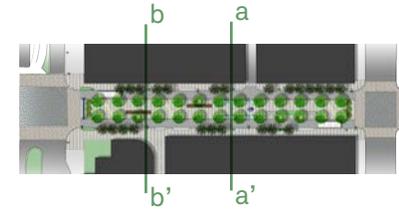
Cost Estimate

\$2.90 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-----------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$226,110 |
| Site Improvements | \$919,022 |
| Striping, Marking, Signals | \$112,000 |
| Drainage Improvements | \$66,994 |
| Wayfinding & Public Art | \$150,000 |
| Landscaping | \$136,302 |
| Irrigation | \$36,084 |
| Electrical & Lighting | \$194,500 |
| Site Furnishings | \$239,700 |
| Other | \$664,752 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency



Typical Cross Sections

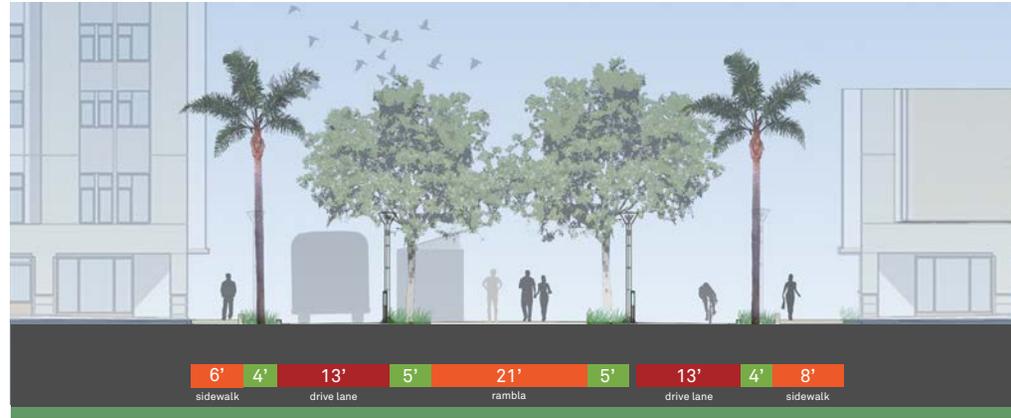


Figure 5.40 Section a-a'



Figure 5.41 Section b-b'

9 Metro Beach Access Gap Closure

This project completes additional gaps along 1st Street. The Pedestrian Gallery (Project #8) is intended to connect the Metro Blue Line 1st Street Station to activity in East Village. However, improvements made by the City of Long Beach along 1st Street largely end at Linden, leaving a gap for pedestrians seeking to access Alamitos and Alamitos Beach. To complete this gap, the project continues existing pedestrian improvements along 1st Avenue, including curb extensions and continental crosswalks. To address narrow sidewalks and a constrained right of way along Alamitos, treelets (see pedestrian toolkit) could be used between parking spaces.

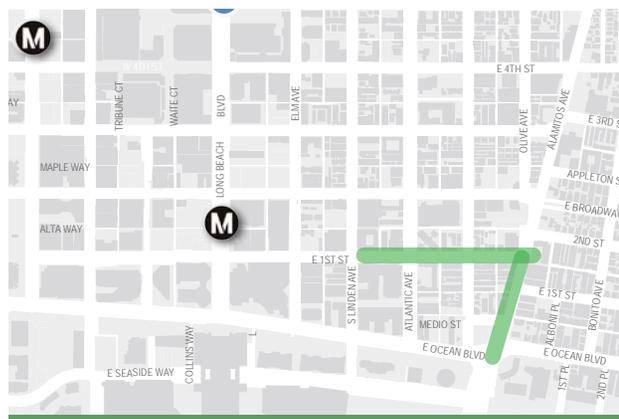
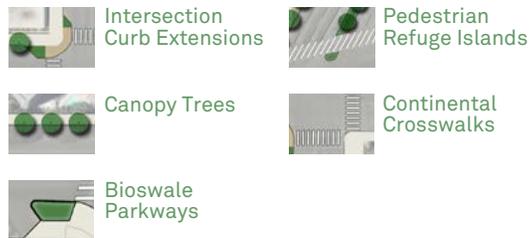


Image 5.42 Key Map



Image 5.43 1st Street and Alamitos



9 Metro Beach Access Gap Closure

Cost Estimate

\$4.98 million

total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$805,875 |
| Site Improvements | \$1,971,450 |
| Striping, Marking, Signals | \$134,900 |
| Drainage Improvements | \$432,500 |
| Wayfinding & Public Art | \$25,000 |
| Landscaping | \$155,800 |
| Irrigation | \$49,000 |
| Electrical & Lighting | \$75,000 |
| Site Furnishings | \$59,400 |
| Other | \$1,149,960 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Cross Section



Figure 5.44 1st Street between Linden and Alamitos

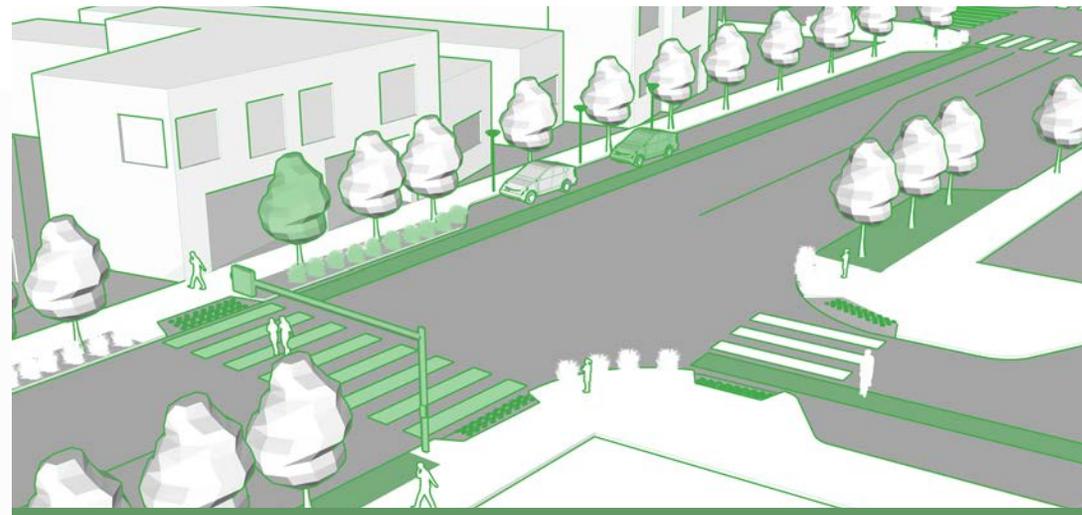


Figure 5.45 Alamitos and Malta Way/East 1st Street, showing pedestrian crossing with overhead beacon and continuation of existing bike path.

15 1st Street Station Green Alley Network

There is an extensive network of alleyways throughout downtown Long Beach. While most of these alleyways continue to function as auto-oriented corridors for making deliveries, collecting trash, and accessing parking lots and structures, a few have been repurposed as areas for pedestrians. Examples include the Pine Square Redevelopment project, which pedestrianized segments of Alta Way and Solano Court along Pine Avenue. In East Village, a segment of Alta Way between Linden Avenue and Frontenac Court has been converted to a fully pedestrianized alley with benches, a table, mural, and landscaping.

While these are great examples, each alley conversion project is relatively isolated and does not function as part of a larger network that facilitates pedestrian movement. To address this need, two high-priority Green Alley networks are proposed for downtown. The 1st Street Station Green Alley network leverages the 1st Street station by proposing improvements to the following corridors (see map at right):

Standard Alleys

Autos and pedestrians share these alleys. Improvements include wayfinding treatments, permeable pavers, bioswale planters, trash consolidation, seating, murals, and lighting

Corridors: Waite Court, Alamo Court, Maple Way, Frontenac Court

Pedestrianized Commercial Alleys

Completely pedestrianized through closing curb cuts and installing bollards. Cafe seating can activate the alleyways. Includes additional seating and permeable pavers throughout the alley, possible through the elimination of heavy vehicles

Corridors: Alta Way

Green Alley Strategic Improvement Project

An ongoing medium-priority project. As redevelopment projects are proposed for key sites downtown, the City should work with developers to complete the Green Alley network. An important precedent will be the Edison Lofts project, profiled at right.

Corridors: Alta Way, Maple Way

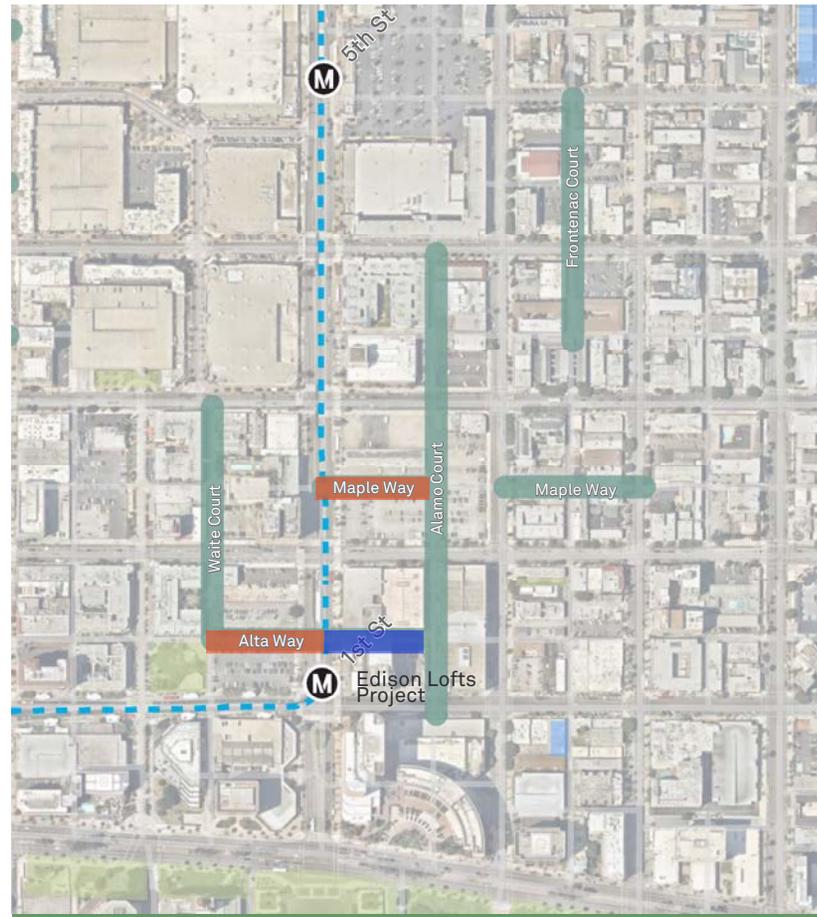


Figure 5.46 1st Street Station Green Alley Network

- Part of Project #17: Green Alley Strategic Improvement Project (medium priority)
- Pedestrianized Commercial Alleys
- Standard Alleys

Alta Way Pedestrianized Commercial Alley

A redevelopment project, known as **Edison Lofts**, is proposed for the City Hall East building at 1st Street and Long Beach Boulevard. This conversion project will bring up to 156 apartments to East Village, leveraging proposed improvements such as the Pedestrian Gallery and Alta Way Green Alley. In light of this project, the Alta Way Green Alley should receive immediate priority to ensure that key green alley elements are incorporated into the PMP, and any ground-level retail is oriented to and takes advantage of planned alley improvements.



Edison Lofts
Image courtesy of Ratkovitch Properties.

15 1st Street Station Green Alley Network

Cost Estimate

\$3.16 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-----------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$203,500 |
| Site Improvements | \$509,600 |
| Striping, Marking, Signals | \$0 |
| Drainage Improvements | \$425,000 |
| Wayfinding & Public Art | \$187,500 |
| Landscaping | \$189,500 |
| Irrigation | \$142,000 |
| Electrical & Lighting | \$600,000 |
| Site Furnishings | \$105,000 |
| Other | \$748,606 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Green Alley Plans



Figure 5.47 Pedestrianized Commercial Alley

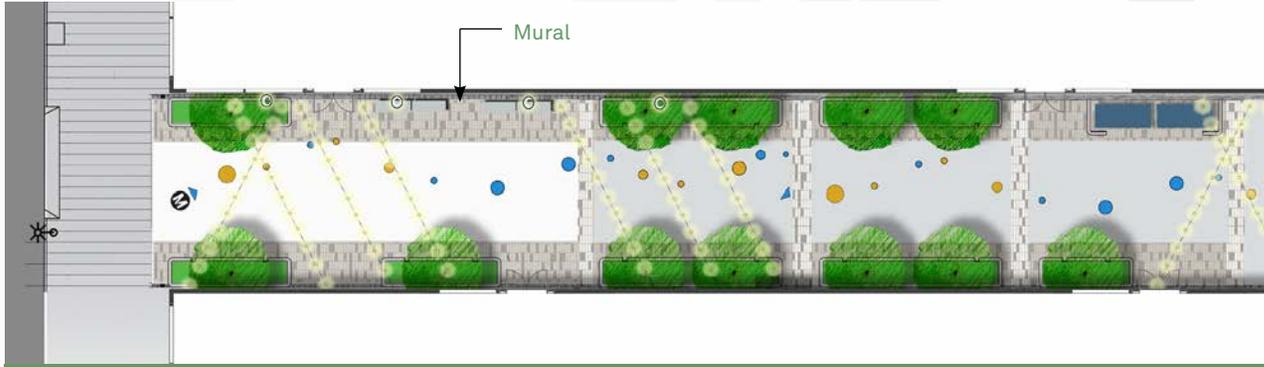


Figure 5.48 Standard Alley

16 Pacific Station Green Alley Network

Similar to the 1st Street Station Green Alley Network, a mix of pedestrianized commercial alleys and standard alleys are proposed for courts and ways near Pacific Station. Pedestrianized commercial alleys are proposed for segments along Cereza, Melrose, and Roble between Solano Court and Pine Avenue. These green alleys will serve as important pedestrian connections between Pacific Station and Pine Avenue. Cafes along Pine Avenue can wrap around the corner to activate the alleyways and wayfinding signage can direct passengers between the Metro Blue Line and activity centers east of Pacific.

As part of a demonstration project for green alleys in residential areas, improvement projects are proposed for Roble Way and Park Court (see map at right). These corridors will receive standard alley treatments. If successful, standard alley treatments could be implemented on other residential courts and ways throughout Long Beach, as funding and political will permits.

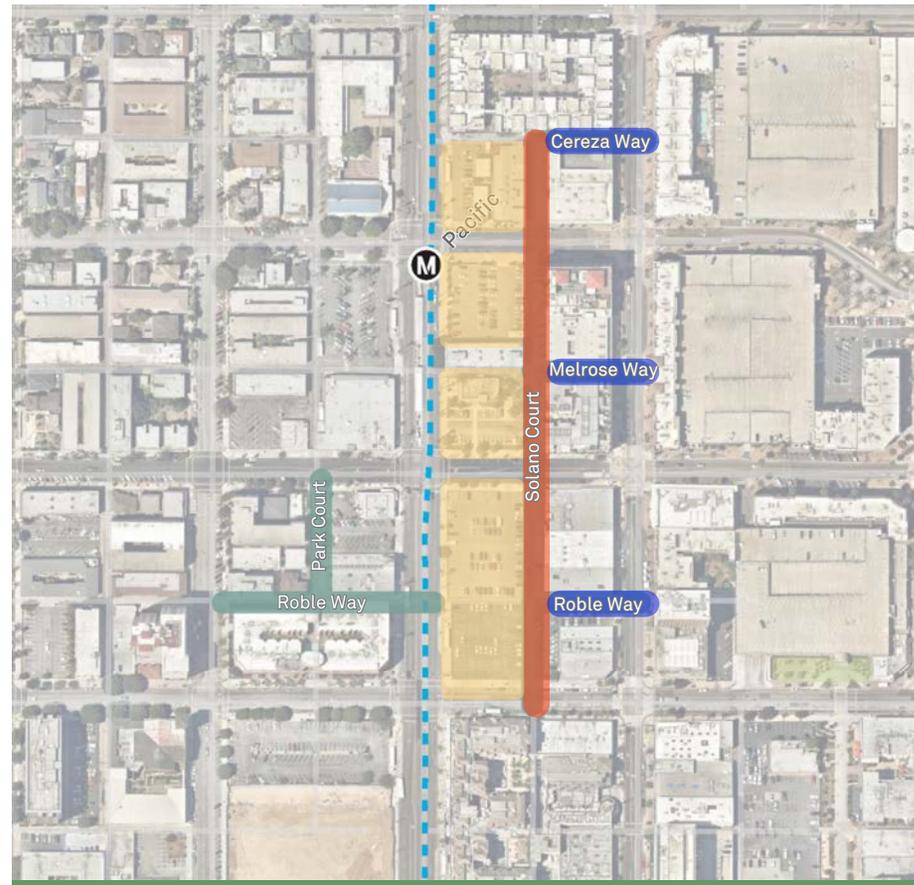


Figure 5.49 1st Street Station Green Alley Network



- Part of Project #17: Green Alley Strategic Improvement Project (medium priority)
- Pedestrianized Commercial Alleys
- Standard Alleys
- Redevelopment Opportunities

16 Pacific Station Green Alley Network

Green Alley Strategic Improvement Project (Project #17, medium priority)

There are several redevelopment opportunities between Pacific and Solano Court (indicated in yellow on the map - see previous page). Several of these sites are currently owned by the City's Successor Redevelopment Agency and will be listed for sale within months of the adoption of the PMP. This presents an opportunity to work with developers, as projects are proposed for these sites, to implement a green alley plan for Solano Court between Cereza Way and 3rd Street.

Similar strategies could also be employed for the following projects near 1st Street Station:

- Maple Way between Long Beach Boulevard and Alamo Court
- Alta Way between Waite Court and Long Beach Boulevard

The plan at right is a concept for how these sites could be redeveloped over time, including potential improvements to Solano Court for which developers and the City could be jointly responsible.

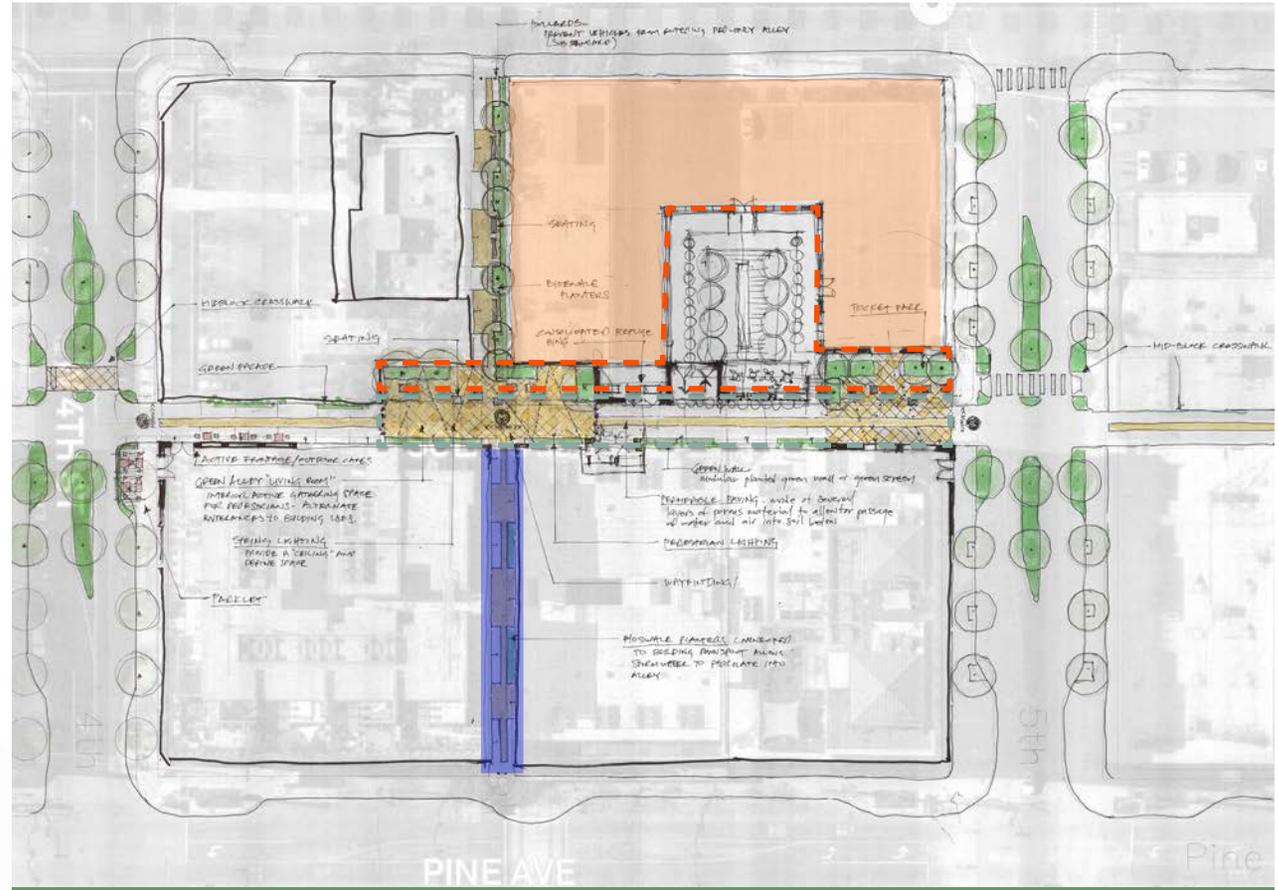


Figure 5.50 Green Alley Strategic Improvement Project - Building Green Alleys through Redevelopment

| | | | |
|--|---|--|---|
|  Redevelopment Project |  Pedestrianized Commercial Alley to Pine |  Potential Improvements on Private Land: adjacent courtyard consolidated trash storage parking garage entrance pocket park expansion of central plaza |  Potential Standard Alley Improvements within Public ROW: permeable pavers lighting central pedestrianized plaza wayfinding |
|--|---|--|---|

16 Pacific Station Green Alley Network

Cost Estimate

\$1.45 million
total estimate

see appendix for detailed cost estimate

estimate does not include Project #17: Green Alley Strategic Improvement Project

| | |
|----------------------------|-----------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$85,000 |
| Site Improvements | \$215,200 |
| Striping, Marking, Signals | \$0 |
| Drainage Improvements | \$180,000 |
| Wayfinding & Public Art | \$135,000 |
| Landscaping | \$87,200 |
| Irrigation | \$107,200 |
| Electrical & Lighting | \$150,000 |
| Site Furnishings | \$30,000 |
| Other | \$339,601 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Green Alley Plans



Figure 5.51 Pedestrianized Commercial Alley



Figure 5.52 Standard Alley

18 Anaheim Stitch Street

The Anaheim corridor has some of the highest rates of auto-pedestrian collisions in the plan area. The intersection of Anaheim and Long Beach Boulevard (next to the Metro station) is particularly dangerous, with several additional hotspots at intersections east of the station. The collisions are a direct result of a poorly-designed pedestrian environment. Factors include inadequate turning radii, a very long crossing distance at intersections, and narrow sidewalks (5'-7') that do not include street furniture or trees to act as a barrier between pedestrians and

fast-moving traffic. The Anaheim stitch street will feature landscaped medians and treelets to calm traffic and beautify the streetscape. With a limited right of way, treelets make use of the space between parking stalls to add trees and visually narrow the roadway. Treelets (see the pedestrian toolkit) can be added after street reconstruction as curb cuts are closed for redevelopment. Curb extensions and pedestrian refuges will protect pedestrians as they cross the street. Finally, to widen the sidewalk over time, new developments should include a 7' setback from the property line, following the lead of the Long Beach Senior Arts Colony project at Anaheim and Long Beach Boulevard.



Figure 5.53 Key Map

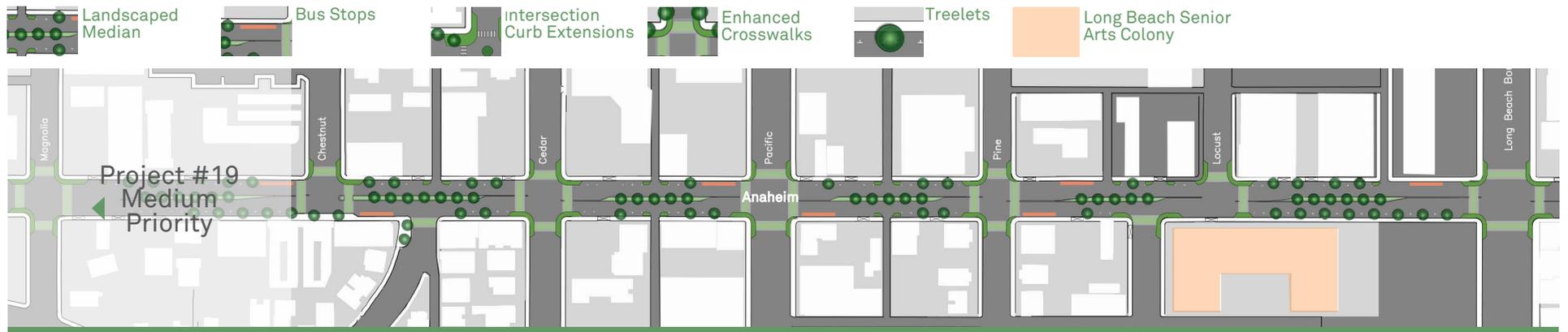


Figure 5.54 Anaheim Street - Typical Block Plan between Chestnut Avenue and Long Beach Boulevard



Figure 5.55 Anaheim Street - Typical Block Plan between Long Beach Boulevard and Lime Avenue

18 Anaheim Stitch Street

Cost Estimate

\$9.87 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$1,678,775 |
| Site Improvements | \$4,840,750 |
| Striping, Marking, Signals | \$164,640 |
| Drainage Improvements | \$80,000 |
| Wayfinding & Public Art | \$55,000 |
| Landscaping | \$232,000 |
| Irrigation | \$59,000 |
| Electrical & Lighting | \$250,000 |
| Site Furnishings | \$151,800 |
| Other | \$2,283,266 |

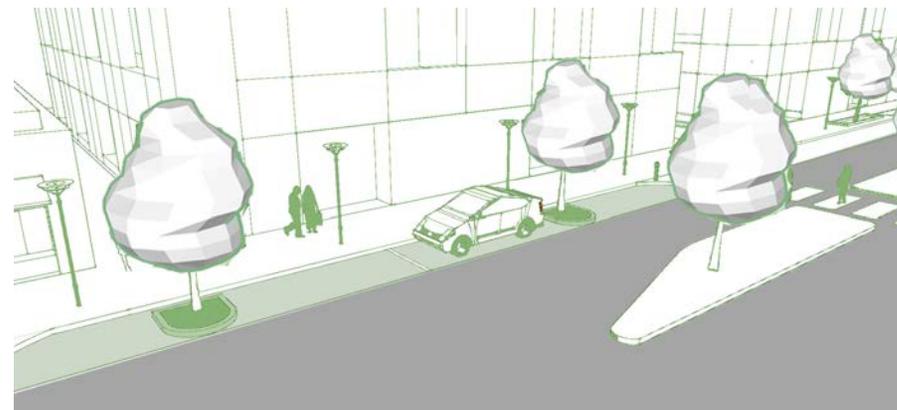
includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Typical Cross Section



Figure 5.56 Anaheim between Chestnut and Lime Avenues

Proposed Treelet Treatment along Anaheim



Long Beach Senior Arts Colony development project with setback to allow for a wider sidewalk along Anaheim.

20 11th Street West Streetlet and Stitch Street

The streetlet concept emerged from the Midtown Specific Plan. Streetlets, located at cross streets along Long Beach Boulevard, are pedestrianized half-blocks that allow safe passage for pedestrians as they travel between the Metro Blue Line. With a limited supply of park space along the corridor, streetlets will also provide informal gathering spaces and serve to create a sense of place for the surrounding neighborhood. Farmers markets, neighborhood events, or casual conversations with friends can all occur within the streetlet. Given the potential to serve as important pedestrian connections between the

Blue Line and the surrounding neighborhood, several streetlets have been paired with stitch street improvements. In the case of 11th Street, the goal is to provide an improved pedestrian connection between Anaheim Station and nearby St. Mary Medical Center, home to over 1,400 employees. A large expanse of lawn is located along the south side of 11th Street at Long Beach Boulevard, presenting an opportunity to create a much larger public space with at least a portion of the land. However, the plan and cost estimate included in the PMP only pertains to the public right-of-way.



Figure 5.57 Key Map



Figure 5.58 11th Street Streetlet (Long Beach Boulevard to Alley) and Stitch Street (Alley to Atlantic)

20 11th Street West Streetlet and Stitch Street

Cost Estimate

\$3.24 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$393,550 |
| Site Improvements | \$1,066,700 |
| Striping, Marking, Signals | \$75,200 |
| Drainage Improvements | \$292,500 |
| Wayfinding & Public Art | \$45,000 |
| Landscaping | \$123,300 |
| Irrigation | \$70,600 |
| Electrical & Lighting | \$207,500 |
| Site Furnishings | \$94,200 |
| Other | \$750,528 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Birdseye Perspective



Figure 5.59 11th Avenue and Long Beach Boulevard

24 Esther Streetlet and Stitch Street

Conceptually, the Esther Streetlet and Stitch Street is similar to the 11th Street Streetlet and Stitch Street. In the case of Esther, the goal is to improve pedestrian connections between the Pacific Coast Highway Station and higher-density residential housing east of Long Beach Boulevard. The Midtown Specific Plan included a conceptual design for the streetlet, showing trees in planter boxes, colorful pavement, opportunity sites for micro-businesses, kiosks, and vendors, and the potential for a community garden. This plan is presented on the following page.



Figure 5.60 Key Map

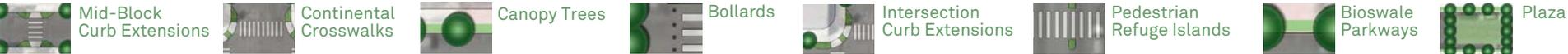
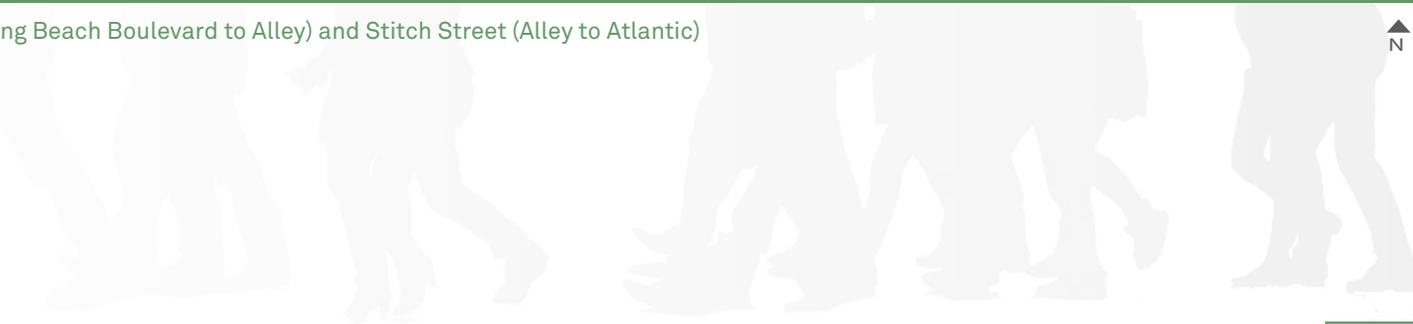


Figure 5.61 Esther Avenue Streetlet (Long Beach Boulevard to Alley) and Stitch Street (Alley to Atlantic)



24 Esther Streetlet and Stitch Street

Cost Estimate

\$3.41 million
total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$439,325 |
| Site Improvements | \$1,017,500 |
| Striping, Marking, Signals | \$38,360 |
| Drainage Improvements | \$440,000 |
| Wayfinding & Public Art | \$45,000 |
| Landscaping | \$143,700 |
| Irrigation | \$73,400 |
| Electrical & Lighting | \$207,500 |
| Site Furnishings | \$94,200 |
| Other | \$789,398 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

Esther Streetlet Concept from Midtown Specific Plan

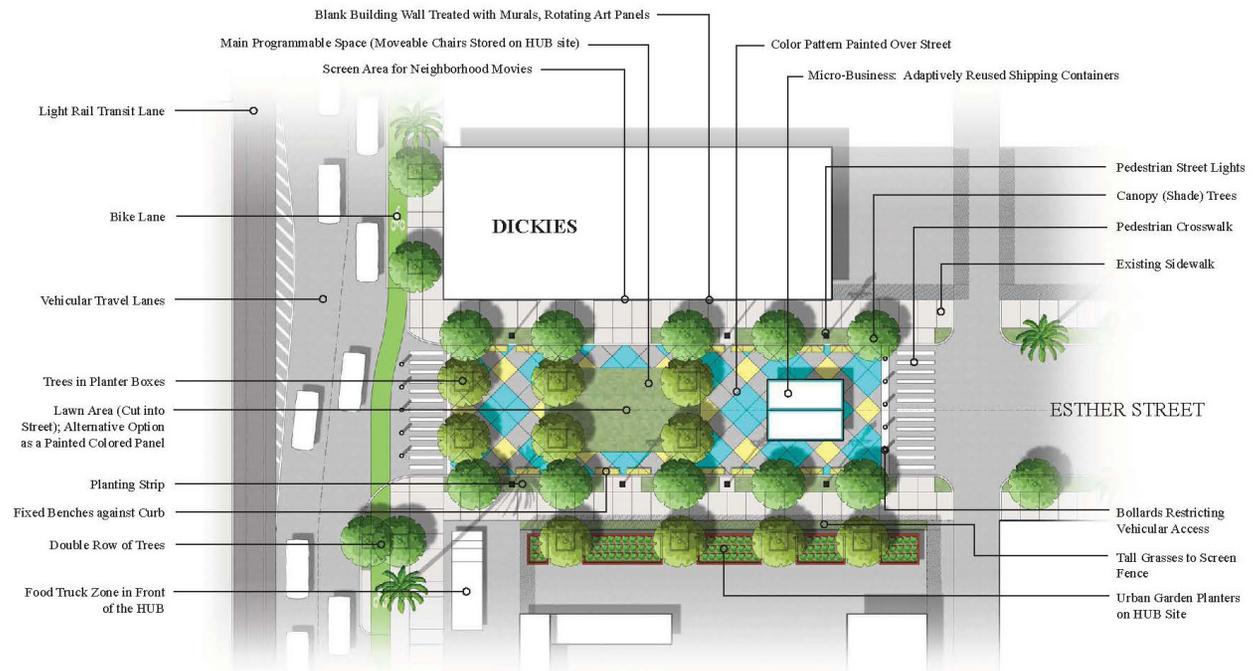


Figure 5.62 Esther Streetlet Concept

30 Willow Station Transit Access Project

The Willow station presents several opportunities for pedestrian improvements, which could lead to reinvestment and new transit-oriented development. There are several underutilized parcels within walking distance of the station, many of which are currently paved for surface parking. Miller Children’s Hospital and Long Beach Memorial Medical Center are located directly east of the station, but pedestrian connections across Long Beach Boulevard are currently poor. Moreover, Fellowship Park is located on the south side of Willow, but it is difficult to access the station from the park. To link these important neighborhood and regional destinations to Willow Station, the Willow Station Transit Access Project makes use of mid-block crosswalks, landscaped medians, continental crosswalks, and curb extensions, all found within the PMP pedestrian toolkit. A green alley east of Long Beach Boulevard will repurpose an underutilized corridor and provide a more direct connection between Willow and 27th Street.

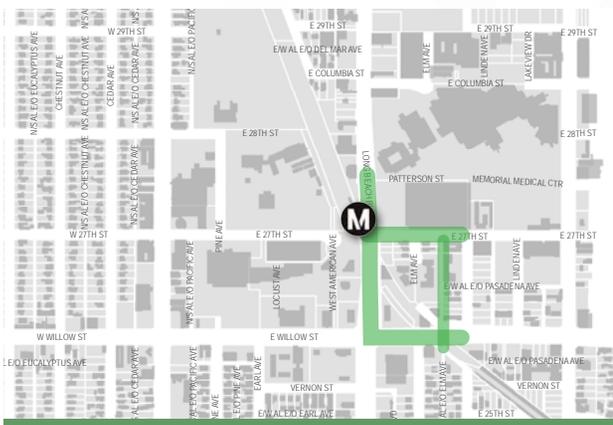


Figure 5.63 Key Map

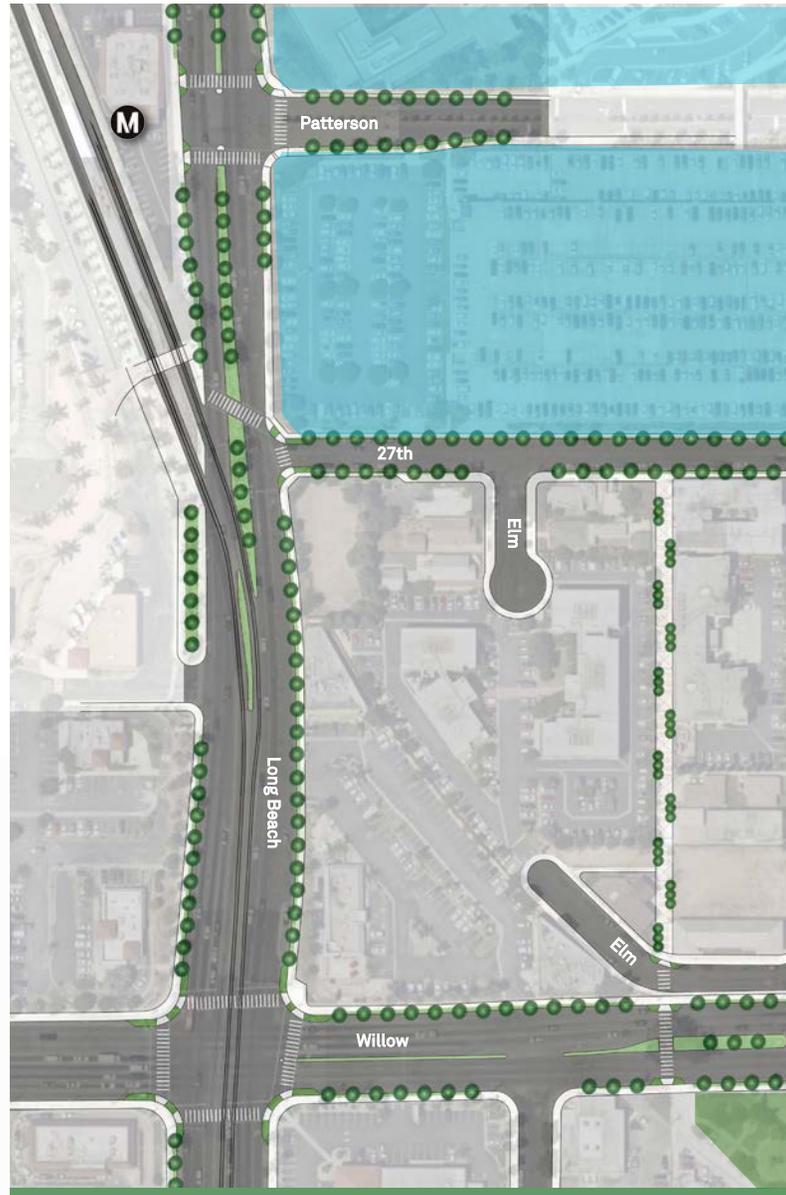
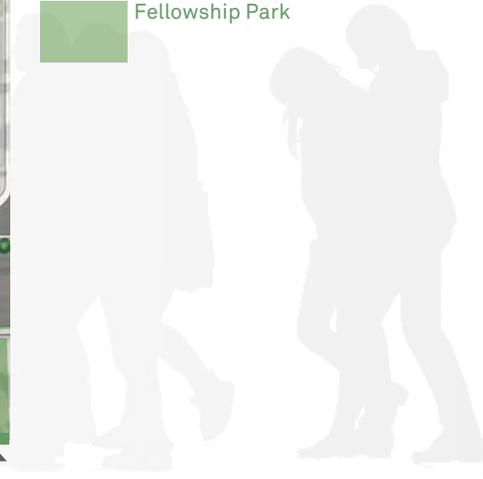


Figure 5.64 Willow Station Transit Access Project

-  Pedestrian Refuge Islands
-  Bioswale Parkways
-  Mid-Block Curb Extensions
-  Green Alley (standard)
-  Continental Crosswalks
-  Landscaped Median
-  Canopy Trees
-  Intersection Curb Extensions
-  Miller Children’s Hospital
-  Fellowship Park



30

Willow Station Transit Access Project

Cost Estimate

\$6.73 million

total estimate

see appendix for detailed cost estimate

| | |
|---|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$1,154,600 |
| Site Improvements | \$2,648,380 |
| Striping, Marking, Signals | \$100,720 |
| Drainage Improvements | \$425,000 |
| Wayfinding & Public Art | \$37,500 |
| Landscaping | \$261,200 |
| Irrigation | \$112,200 |
| Electrical & Lighting | \$220,000 |
| Site Furnishings | \$98,600 |
| Other | \$1,552,044 |
| includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency | |



Figure 5.65 Strengthening connections to Willow Blue Line Station.

31 Wardlow Avenue and Pacific Place Transit Access Project

Similar to the Transit Access Project at Willow, the Wardlow Avenue and Pacific Place Transit Access Project utilizes strategic interventions profiled in the PMP pedestrian toolkit to improve pedestrian safety. As noted in the Existing Conditions Analysis, the Wardlow Station area is home to a significant number of senior citizens. There are clusters of assisted living facilities, senior housing development projects, and other facilities at the NE and SW quadrants of the intersection of Pacific Place and Long Beach Boulevard.

The station area, however, is not particularly walkable or safe for pedestrians. Between the park and ride lot at Wardlow and just south

of 32nd Street, the sidewalk ends, forcing pedestrians to cross at an unstriped and unsignalized intersection with fast-moving traffic. Project #31 proposes continental crosswalks at 32nd and 33rd Streets along Pacific Place, protected with pedestrian refuges and a landscaped median. New trees along the median and boulevard will help to calm traffic. An extension of the missing sidewalk link along the Metro right-of-way will provide better north-south connections for Metro passengers seeking to access the station. At Wardlow, curb extensions and pedestrian refuges will narrow the crossing distance across a wide corridor and provide safer passage for vulnerable populations.



Figure 5.66 Key Map



Figure 5.67 Wardlow Transit Access Project

31

Wardlow Avenue and Pacific Place Transit Access Project

Cost Estimate

\$5.61 million

total estimate

see appendix for detailed cost estimate

| | |
|---|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$935,000 |
| Site Improvements | \$2,166,300 |
| Striping, Marking, Signals | \$66,800 |
| Drainage Improvements | \$317,500 |
| Wayfinding & Public Art | \$10,000 |
| Landscaping | \$419,000 |
| Irrigation | \$94,500 |
| Electrical & Lighting | \$150,000 |
| Site Furnishings | \$30,200 |
| Other | \$1,293,141 |
| includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency | |

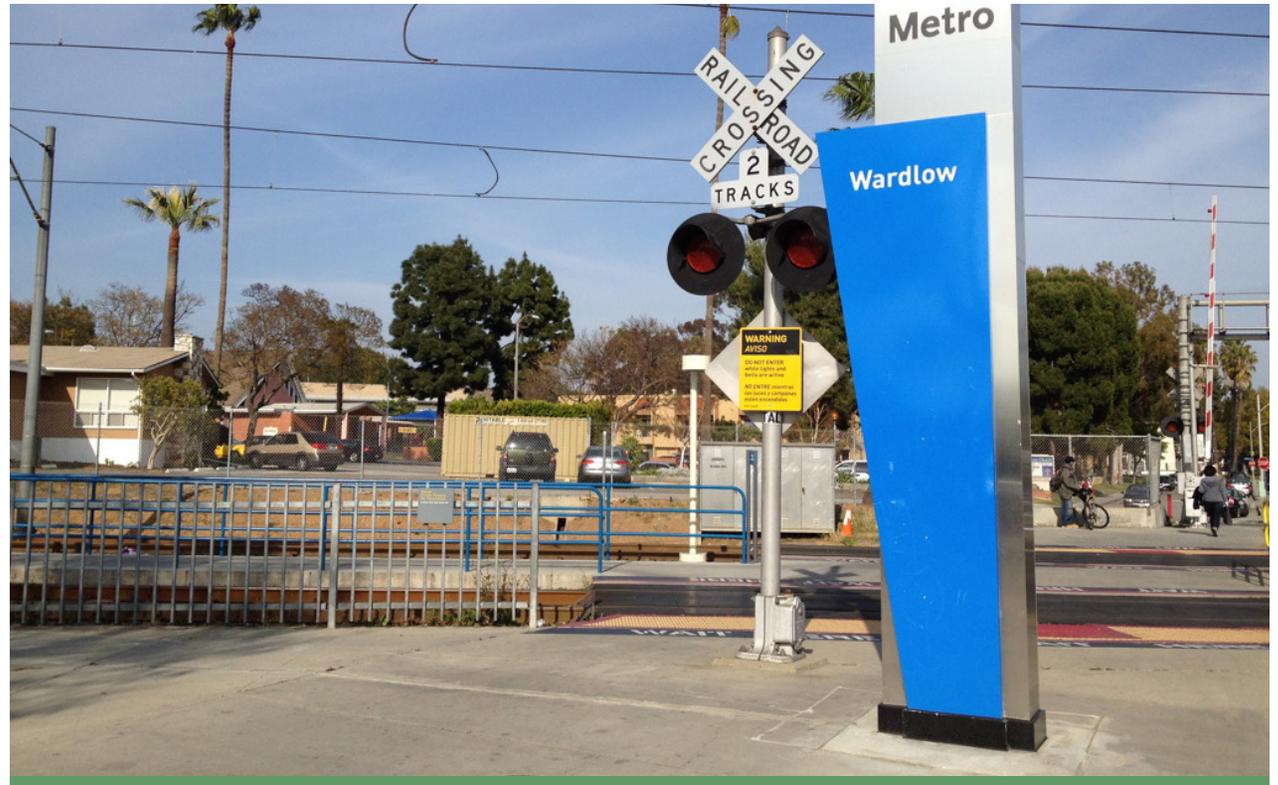


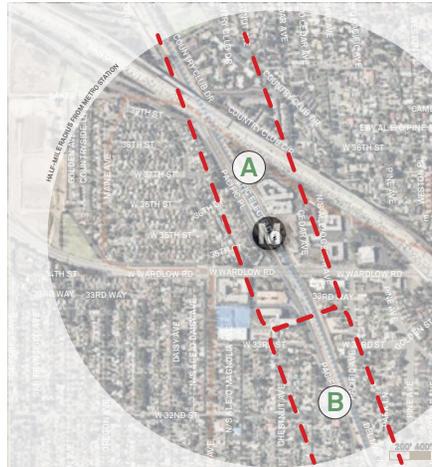
Figure 5.68 Existing Blue Line Wardlow Station.

33 Del Mar Greenbelt

The Del Mar Greenbelt is an ambitious project that aims to bring the first greenway to the City of Long Beach. Largely utilizing a portion of the Metro right-of-way, the project will connect Willow Station to Wardlow Station and Los Cerritos Park. Within segments of the Metro right-of-way, a multi-use path parkway is proposed (see map at right and cross section on the following page). A portion of the project also leverages the proposed Daisy Bike Boulevard, part of which will be located along Del Mar Avenue. Along this segment (shown in orange on the maps at right), a bike boulevard/parkway is proposed. While the configuration of the Greenbelt will vary significantly along the length of the corridor due to right-of-way constraints, a 10' minimum multi-use path is possible throughout the length of the corridor. The Greenbelt will serve as an important connection for commuting and recreation, and can become a model for other greenbelt projects within the Los Angeles region.



Wardlow Station Area



Willow Station Area



SECTION A-A' - BIKE BOULEVARD/ PARKWAY (NEXT PAGE)



SECTION B-B' - MULTI-USE PATH PARKWAY (NEXT PAGE)



Figure 5.69 Segment A - Wardlow Station to Los Cerritos Park



Figure 5.70 Segment B - between Wardlow and Willow Stations



Figure 5.71 Segment C - Willow Station

33

Del Mar Greenbelt

Cost Estimate

\$5.28 million

total estimate

see appendix for detailed cost estimate

| | |
|----------------------------|-------------|
| General Requirements | \$150,000 |
| Demolition/Excavation | \$197,800 |
| Site Improvements | \$1,755,500 |
| Striping, Marking, Signals | \$0 |
| Drainage Improvements | \$0 |
| Wayfinding & Public Art | \$20,000 |
| Landscaping | \$958,000 |
| Irrigation | \$210,000 |
| Electrical & Lighting | \$720,000 |
| Site Furnishings | \$154,200 |
| Other | \$1,241,319 |

includes general conditions & overhead, bonds and insurance, profit, escalation to midpoint, and design contingency

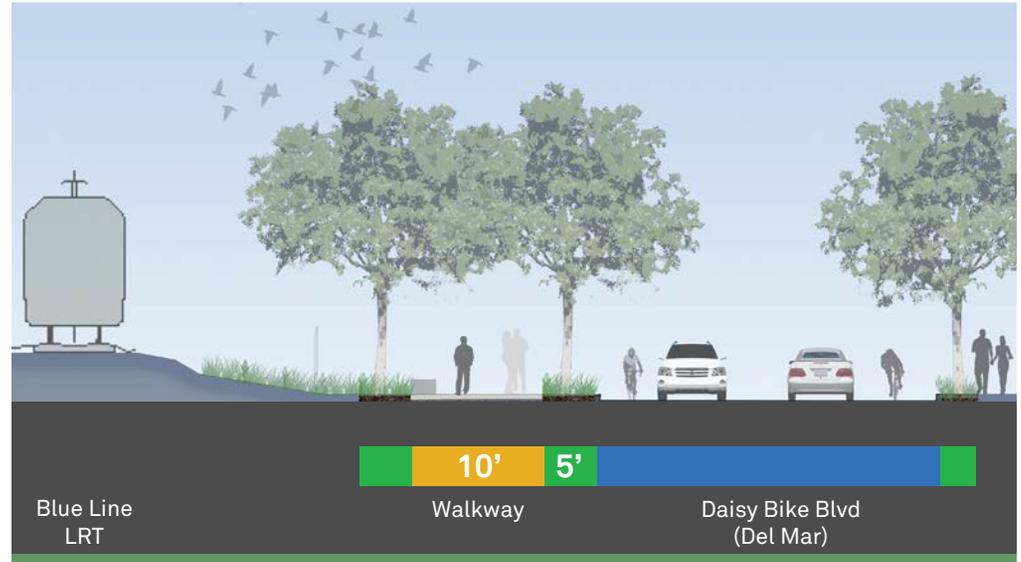


Figure 5.72 Section A-A': Bike Boulevard/Parkway (see maps on previous page)

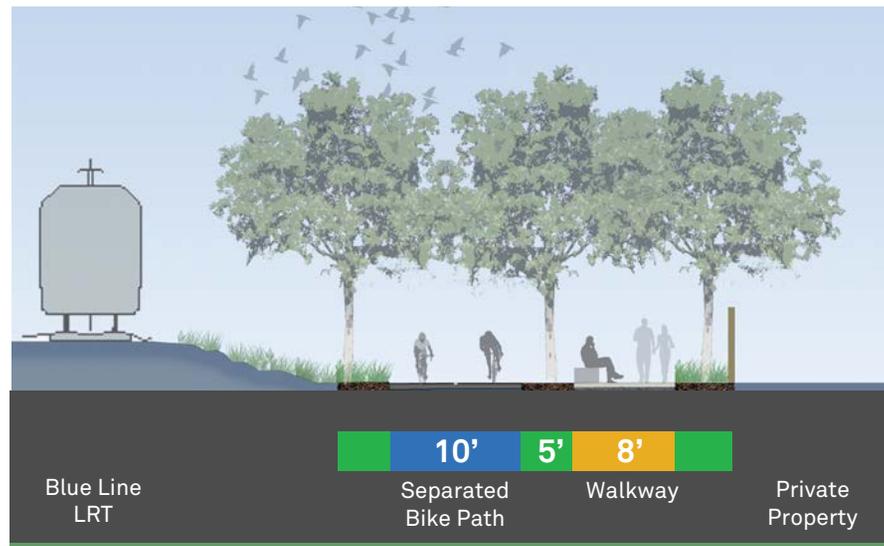


Figure 5.73 Section B-B': Multi Use Parkway (see maps on previous page)

