

# Torrance Citywide Wayfinding and Signage Plan



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# 1. Introduction

The City of Torrance is a tourist and destination hub centrally located in the South Bay of Los Angeles County. The City's status as a destination requires proper signage and wayfinding to aid visitors and residents when traveling to key destinations and attractions within the City. In accordance with the Southern California Association of Governments (SCAG), the Torrance Citywide Wayfinding and Signage Plan (Plan) is a comprehensive plan to guide Torrance travelers, whether by driving, bicycling, or walking, to get to their destinations as easily and efficiently as possible, in addition to introducing them to new ones.

This Plan creates a wayfinding signage masterplan for the City of Torrance that includes goals and objectives, a background in general wayfinding principles, existing signage conditions in Torrance, a summary of public outreach, implementation strategies, and methodologies for measuring project impact.

The study area (Figure 1.1) consists of the City of Torrance boundary. The Plan contains signs oriented to vehicles, bicyclists, pedestrians, and all other users. The goal is to develop a wayfinding framework to direct residents and visitors toward City landmarks, destinations, public buildings, and recreational spaces, while creating an order to traffic flow for all users.

## Purpose of the Plan

There are a variety of sign types that currently exist in the City of Torrance. While there are many regulatory signs, there is an opportunity to improve and expand guide signage in the City. The Plan recommends signage that will shape the City's identity and provide a sense of place, while encouraging use in the City's varied destinations. The Plan will have a role in directing traffic and assisting in self-navigation, as well as helping people understand their bearings and surroundings. In alignment with SCAG's Regional Transportation Plan/Sustainable Communities Strategy, the Plan also intends to encourage sustainable transportation by providing wayfinding signage for alternative modes of transportation and preparing the City for the introduction of the Torrance Regional Transit Center as a result of the extension of the Metro C Line (Green) into Torrance. Ultimately, the Plan will highlight key and complementary destinations, enhance the urban environment, and provide a comprehensive and organized framework of wayfinding signage.

## How to Use this Plan

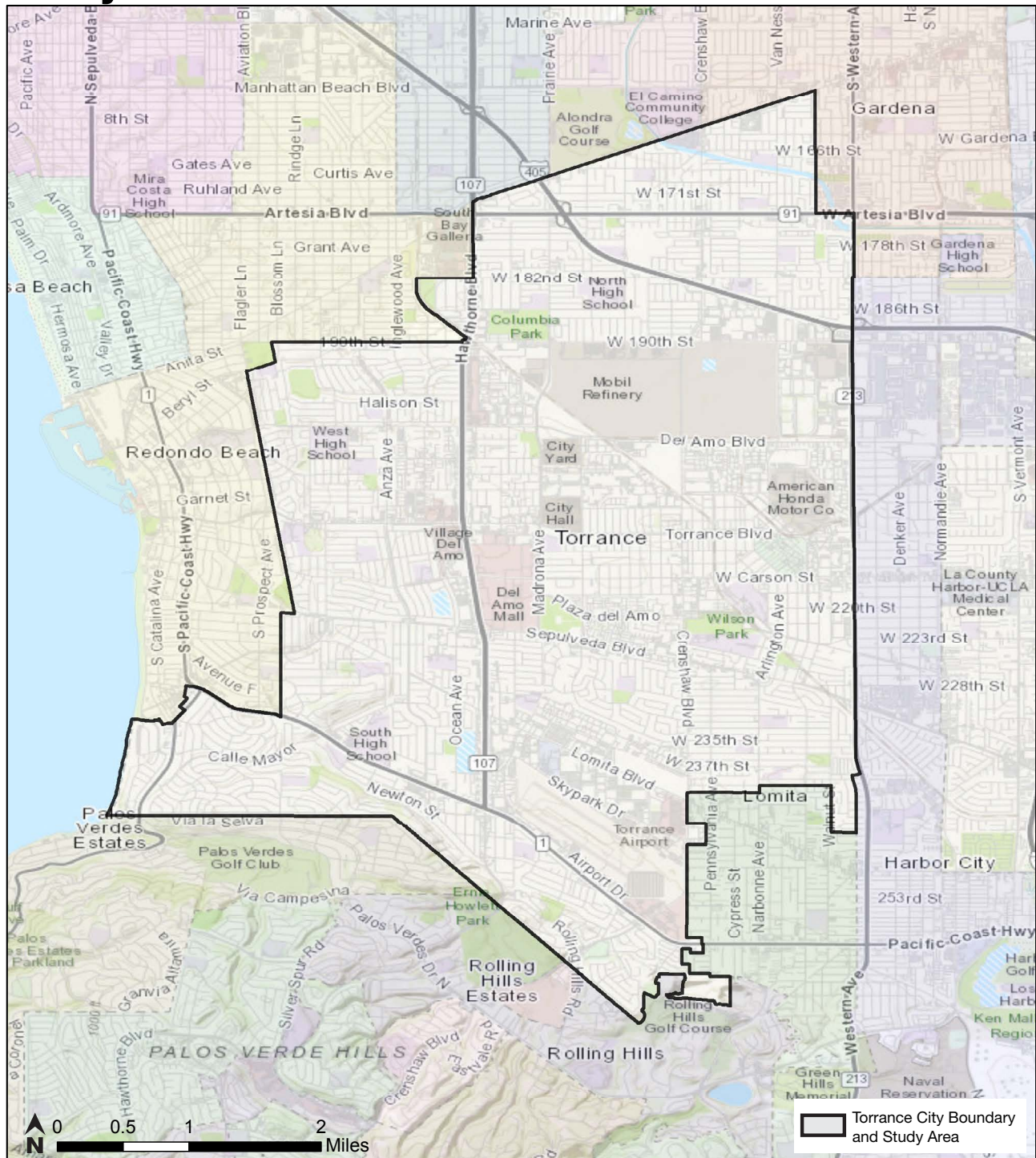
The City of Torrance should use this Plan in the planning, design, and implementation of new public wayfinding signage throughout the City. This Plan can also be used to assist the City in determining whether to remove or replace existing signs located throughout the City. The document should be used in coordination with other plans and assessments that have already been completed or are ongoing. These include the City of Torrance Downtown Revitalization Plan, the Circulation and Infrastructure Element of the General Plan, the South Bay Bicycle Master Plan, the Hawthorne Boulevard Corridor Specific Plan, the Metro C Line (Green) Extension, and City Road Sign Placement Standards.

## Why this Plan

A successful wayfinding system is part of a resident's or visitor's overall experience in the City. It can contribute to the amount of time and money spent in Torrance. The wayfinding system can contribute to a positive experience, which can impact future visits or how they recommend the City to others.

Torrance is well suited for this Plan as the City is as diverse as any in Los Angeles County, with beachfront, a municipal airport, historic neighborhoods, ample parks, industrial sectors, and numerous regional shopping, cultural and art centers. Enhanced wayfinding emphasizes these qualities by giving direction to unique elements within the City.

# Figure 1.1: City of Torrance Signage and Wayfinding Plan Study Area



## 2. Wayfinding Goals and Objectives

The Torrance Citywide Signage and Wayfinding Plan established the following three goals that are intended to achieve a successful wayfinding system. These goals are a combination of best wayfinding practices and elements presented from public engagement. Each goal is accompanied with objectives on how to achieve these goals.

### **A. Implement signage and wayfinding to direct safe and efficient movement through the City of Torrance.**

**Objective A1:** All movement in the City, whether by motorists, bicyclists, or pedestrians should have the ability to utilize wayfinding to direct them to the safest and more direct pathway to their destination.

### **B. Implement signage and wayfinding that promotes sustainable transportation practices.**

**Objective B1:** Signage should direct drivers to find the shortest route minimizing circuitous driving, and encourage alternative modes of transportation by enhancing user confidence with information.

### **C. Reduce signage clutter and implement uniform signage and wayfinding elements throughout the City.**

**Objective C1:** Simplify existing wayfinding by moving forward with only four types of signage elements that relate directly to one another and are impactful at their location.

This Plan will focus on recommendations for new wayfinding signage placement. To complement those recommendations, the following subsections provide general guidance regarding wayfinding principles and signage regulations for the City to consider when designing and implementing the recommended signage.

### 2.1. Wayfinding Principles

Wayfinding principles are the general guidelines that all wayfinding signs should abide by. There are numerous factors to consider when implementing a wayfinding plan such as sign placement, viewing time, sign message, among others. For each of these factors, there are principles and recommendations to follow that enhances the wayfinding network.

#### **Sign Placement**

Sign Placement varies on a number of factors, such as Sign Type, decision-making time, and viewing range depending on viewer mode of transportation. For instance, gateway/monument and vehicle directional signs should be roadway-adjacent and roadway-facing as they are intended to confirm vehicle location and direct vehicle traffic throughout town. Pedestrian fingerboards and kiosks are smaller scale, typically have more text, and guide and inform pedestrians of their specific location. Pedestrian signage should be out of the vehicular field of vision to avoid confusion.

Signs should also be placed a certain distance away from each other, to avoid signage clutter. This means that signs need to be placed where they make the most impact when considered respective to one another. Typically, vehicular-focused signs have the most impact when they are placed before arriving at decision points, such as an intersection. Pedestrian-focused signs can be placed at intersections as there is no crucial decision-making time.

## Viewing Time

The time given to view a sign is related to the speed a viewer is traveling. In general, 10 words would necessitate 3 to 5 seconds to read. Vehicular-focused signs should have no more than a place name and distance. Pedestrian-focused signs can have any amount of text depending on the information attempting to be conveyed as there is no limit to viewing time.

## Message

Universally accepted symbols, such as arrows, should take the place of text as brevity is desired and a clear message can still be conveyed. The vocabulary of the sign should be brief but still communicate the essence of the message. Pedestrian-focused signs can include additional messaging when necessary.

## Layout

The sign layout is critical for clear communication. Every sign layout should be easy to understand quickly and be consistent across all signs. Arrows should be placed on the side of the text in which the viewer is being pointed, and include uniform elements such as the City of Torrance logo in the same consistent location.

## Symbols

Many symbols can take the place of words, such as for parking or a hospital. Due to the diversity of visitors and locals, symbols may be emphasized more than text when referring to well-known destinations. The arrow used for wayfinding should be consistent and easy to understand.

## Typography

The typography chosen should consider both legibility and City identity. The recommended letter height is 1 inch of capital letter height for every 25 feet of viewing distance, meaning a sign with an intended viewing distance of 100 feet should have text four inches in height. For gateway/monument signage, a decorative typeface can be used. Other signs should be uniform in text and be legible from a distance and reflect City character up close.

## Contrast

The recommended scheme for directional wayfinding signage is to have a light-colored lettering paired with a dark-colored background.

## Color and Shape

For regulatory traffic signage, sign colors and shape should conform to existing Manual on Uniform Traffic Control Devices (MUTCD) and California Department of Transportation (Caltrans) standards. Wayfinding signs however should have uniform yet distinct standards of shape and color, which allow visitors and residents to distinguish a sign as wayfinding before even reading it.

The colors chosen for wayfinding should be approved shape and/or colors in the Torrance sign code. If new colors are proposed, they should complement the existing palette of approved colors.

## Illumination

Vehicle-focused signs should have reflective letters so they can be easily readable at night. Monument signs may benefit from decorative and/or accent lighting, and pedestrian-focused signs can be legible from ambient pedestrian-scaled lighting, or down-lighting in particularly dark areas. Spot-lighting from the ground should not be utilized.

## 2.2. Sign System Character

A wayfinding network is most successful when it echoes the identity of its city, and this wayfinding plan reflects the character of Torrance. This can be done with creating a sense of place, using uniquely identifiable design, materials, and form.

### Place-making

The City of Torrance is centrally located in the South Bay of Los Angeles County. Torrance stands out for its diversity, noting its beachfront, distinct residential communities, thriving industrial/airport sector, commercial and retail areas, and historic neighborhood charm.

The uniqueness of Torrance is what makes the City stand out. The overall wayfinding strategy faces a challenge in that all signs should be uniform but still represent all of the diversity in the City. Wayfinding is a place-maker in itself, and is a major element to a City's sense of place. The Plan is designed to complement signage concepts developed by Hunt Design in an ongoing parallel effort to reflect the diversity of Torrance.

### Design, Materials, and Form

Design of signs should encapsulate community input and add to the City's sense of place. The form of signs is influenced by existing archetypes in the City. The materials of signs, specifically gateway and landmark signs, should be consistent with existing materials seen commonly throughout the City.

Parallel to this study, Hunt Design has undertaken an effort to introduce wayfinding signage design concepts, which align with the recommendations of this Plan. Though this Plan does not provide design concepts, the City should utilize the design and signage content drafted by Hunt Design and place them in the recommended locations found in Chapter 5 of this Plan. The sign designs by Hunt Design are found in Appendix A.

## 2.3. Signage Regulations

There are existing national and state signage regulations that must be adhered to for all traffic signage, including signage related to Interstate 405, Pacific Coast Highway, and a section of Western Avenue within the City of Torrance jurisdiction boundary. National regulations are governed by the Federal Highway Administration (FHWA) MUTCD. The MUTCD contains the basic principles that govern the design and use of traffic control devices for all streets, highways, bikeways, and private roads open to public travel regardless of type or class or the public agency, official, or owner having jurisdiction.

Caltrans also regulates signs through the California MUTCD to adopt uniform standards and specifications for all official traffic control devices, such as signs, in California. The CA MUTCD incorporates the MUTCD standards and other signs specific to California. Chapter 5 of this plan discusses signage regulation and placement considerations in more detail.

In addition to these regulating documents, Torrance also has existing wayfinding signage located throughout the City. The designs of these existing signs and any development of new designs by Hunt Design should be taken into consideration when developing additional wayfinding signage.



## 3. Existing Conditions

To provide an overview of current wayfinding conditions in the City of Torrance, the following chapter discusses previous and ongoing efforts related to wayfinding signage in the City of Torrance. Section 3.1 discusses regional and local plans and studies that set the stage for the efforts of this Plan. Section 3.2 provides an overview of the existing signage inventory collected as a part of this study.

### 3.1. Supporting Documents

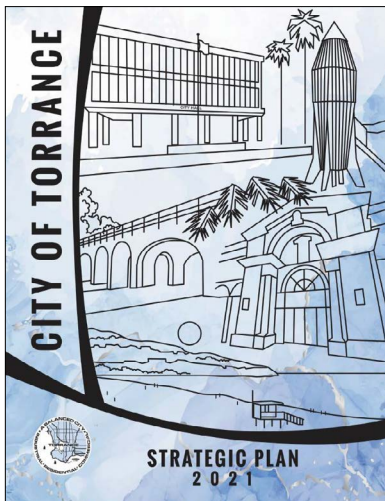
#### 3.1.1. Downtown Torrance Revitalization Plan (July 2021)



The Downtown Torrance Revitalization Plan is an ongoing study to revitalize the vision and strategy for the City’s Historic Downtown and surrounding corridors. The study consists of analyzing existing conditions which set the foundation for goal setting. These goals will then be utilized to create an implementation framework to advance a revitalization vision. The study focuses on three key sections: market and economy, physical conditions, and mobility and parking.

This Wayfinding and Signage Plan ensures a seamless connection to the Final Downtown Torrance Revitalization Plan, especially related to any goals or strategies related to Mobility and Parking. The mobility and parking section specifically addresses vehicular and bicycle circulation, pedestrian connectivity, and transit access, as well as parking requirements, inventory, and utilization. All of these elements are at least in part reliant on successful wayfinding. Therefore, this Plan will maximize Downtown Torrance revitalization by unifying the wayfinding and signage objectives of this Plan to the mobility and parking objectives in the Revitalization Plan.

#### 3.1.2. City of Torrance Strategic Plan (2021)



The latest revision of the City of Torrance Strategic Plan addresses Mobility as a priority, emphasizing a greater focus on people-centric modes of transportation, co-existence of vehicle and alternate transportation modes, and a balance of land use practices to encourage a range of mobility options. Under the priority of Appearance, Character, and Quality of the Community, the Strategic Plan also includes a goal to create attractive signage with an identifiable, distinct, unifying theme as part of an overall branding strategy for the City.

With the goal to promote sustainable transportation practices, this Wayfinding and Signage Plan aims to develop a wayfinding system that provides all users with strategically-placed and effective wayfinding information for residents and visitors using various forms of transportation. The system is intended to improve connectivity and help users navigate to key focus areas and destinations confidently, encouraging the use of transit, biking, and walking.

Additionally, the wayfinding sign types and locations recommended in this Plan set the stage for the development of an attractive and unified signage system.

### 3.1.3. City of Torrance General Plan (2010)



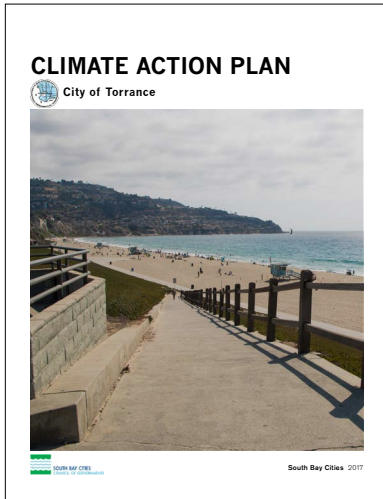
The City of Torrance General Plan contains two elements that address wayfinding and signage: Chapter 1 Land Use Element and Chapter 2 Circulation and Infrastructure Element. These elements focus on strengthening the character and appearance that defines Torrance as a model community, and plans for the efficient and effective movement of people and goods between destinations within Torrance and throughout the region. The two Elements provide objectives and related policies to achieve their goals. Many of these objectives and policies relate directly to wayfinding and signage. This Plan supports these objectives and policies by planning for the development of enhanced wayfinding in the City of Torrance. Table 3.1 below presents Element objectives and policies addressed by this Plan:

Table 3.1: Torrance General Plan Objectives & Policies Related to Signage and Wayfinding

| Element                        | Objective or Policy  |
|--------------------------------|--|
| Land Use                       | <b>Objective LU.11:</b> Attractive, high-quality neighborhoods and commercial and industrial districts through the use of innovative design and architectural themes   |
| Land Use                       | <b>Policy LU.11.4:</b> Establish corridor plans along major roads that integrate public and private improvements and create identifiable and cohesive visual themes through the use of landscaping, hardscape, signage, and lighting.  |
| Land Use                       | <b>Policy LU.11.7:</b> Encourage the use of cohesive design elements that encourage movement of pedestrians, bicycles, and other non-automotive modes of transportation between distinct commercial establishments, between commercial and residential areas, and between residential areas, schools, recreational and cultural facilities, libraries, and transit corridors and hubs. |
| Land Use                       | <b>Policy LU.11.8:</b> Accentuate major gateways and entryways through the use of design elements such as landscape, hardscape, gateway monuments, and signage treatments.   |
| Land Use                       | <b>Policy LU.11.9:</b> Require that development along the City’s boundaries emphasize the qualities and uniqueness of Torrance by using attractive and cohesive design elements and architectural themes.  |
| Circulation and Infrastructure | <b>Objective CI.4:</b> To provide a safe, efficient, and comprehensive circulation system that serves local needs, meets forecasted demands, and reduces traffic impacts on neighborhoods  |
| Circulation and Infrastructure | <b>Policy CI.4.1:</b> Protect residential neighborhoods from cut-through traffic by enhancing the capacity of Arterials and Collectors, improving signage, guiding traffic away from residential areas, and employing appropriate traffic-calming methods based on identified needs.   |
| Circulation and Infrastructure | <b>Objective CI.6:</b> To enhance the visual quality of the City’s roadway system and thereby contribute to a high-quality visual image of Torrance  |

Additionally, the City is currently in the process of updating the General Plan’s Housing Element to zone for more housing and meet the City’s share of the State’s overall housing need. An increase in residential land use throughout the City can contribute to a need for more pedestrian-focused infrastructure improvements, including wayfinding.

### 3.1.4. City of Torrance Climate Action Plan (2017)



The City of Torrance, in coordination with the South Bay Cities Council of Governments, developed a Climate Action Plan to reduce greenhouse gas emissions within the City. Torrance is committed to providing a more livable, equitable, and economically vibrant community and sub-region. The Climate Action Plan serves as a guide by setting emission reduction goals, strategies, and policies for the next 20 years.

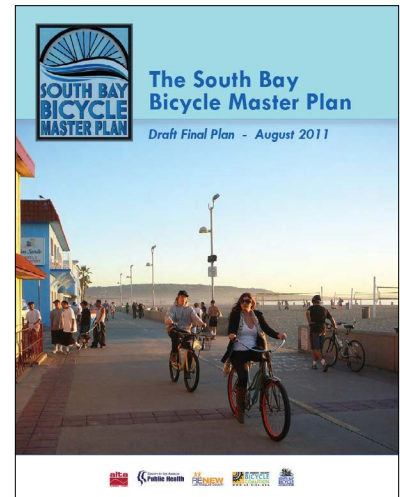
Though signage and wayfinding are not specifically called for within the action plan, successful signage and wayfinding within the City can play a role in reducing circling especially for parking, limiting non-direct trips, and encouraging active modes of transportation. All of these elements are factors in achieving the City’s greenhouse gas emission reduction targets.

### 3.1.5. South Bay Bicycle Master Plan (2011)

The South Bay Bicycle Master Plan is intended to guide the development and maintenance of a comprehensive bicycle network throughout seven South Bay cities including Torrance, with a unique focus on cross-city consistency and connectivity. The Master Plan also presents a regional wayfinding plan to support bicycling to key destinations and to allow for easier navigation throughout the network. The Plan recommends three sign types: standards signs to confirm a bicyclist is riding on a bikeway, turn signs to prepare bicyclists for a turn, and hybrid confirmation and decision signs to provide direction and distance to key destinations.

The Bicycle Master Plan identified key destinations in Torrance in which to provide wayfinding signage towards and bicycle kiosks at:

- Torrance Beach
- Torrance Airport/ Zamperini Field
- Madrona Marsh Nature Center
- Wilson Park
- Downtown Torrance
- El Prado Park and Torrance Historical Society and Museum
- Torrance City Hall and Library



With these locations in mind, this Plan addresses bicycle wayfinding through the use of pedestrian fingerboards, which can function as wayfinding signage for both pedestrians and bicyclists. When the City of Torrance develops a comprehensive City bicycle network that allows for safe bicycling to all Torrance destinations without breaks in the network, further bicycle wayfinding signage can be implemented that ensures conformity to the efforts presented in the Bicycle Master Plan and better connect to the regional bikeway network.

### 3.1.6. Connect SoCal (2020)

SCAG adopted the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Connect SoCal, to align and better connect transportation investments across the six-county region. Connect SoCal builds upon and expands land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern to close the gap and reach greenhouse gas reduction goals.

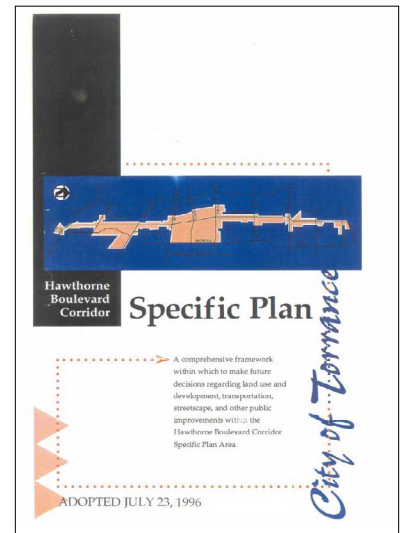
Connect SoCal lays out a path to greater access, mobility, and sustainability. The Plan calls for complete streets, center focused placemaking, active transportation improvements, transportation safety, and connected transportation networks; all of these action categories can utilize improved wayfinding and signage in part to achieve the desired outcome. In this way, this Plan acts upon the values presented in Connect SoCal.



### 3.1.7. Hawthorne Boulevard Corridor Specific Plan (1996)

The Hawthorne Boulevard Corridor Specific Plan was developed to create a framework to guide land use, transportation, streetscape, and other public improvements along the Hawthorne Boulevard corridor. The Streetscape Design Concept includes a section on the Public Signage Program to enhance the identity of the corridor as well as provide useful information to residents and business patrons, whether they are traveling by automobile, by transit, or on foot.

The Specific Plan identifies four sign types for the corridor: entry signs to provide a sense of arrival, advance street signs to allow for advance lane changes, transit signage to encourage the use of transit, and direction signage to direct users to destinations. This Wayfinding Plan ensures that the implemented signage stemming from Hawthorne Boulevard Public Signage Program is integrated with recommended wayfinding and signage goals and objectives.



### 3.1.8. Future or New Destinations in Torrance

Torrance recently opened a California Welcome Center located at the Del Amo Fashion Center. The Welcome Center gives visitors the opportunity to learn about the unique experiences Torrance has to offer. This Plan incorporates the Torrance California Welcome Center in the Plan.

Torrance will soon finish construction of the Torrance Transit Park and Ride Regional Terminal, a seven-acre multi-modal transportation hub for the South Bay region, located just west of Crenshaw Boulevard and just south of Del Amo Boulevard. The Terminal is proposed to serve as the terminus for the Metro C Line (Green) Extension, which will improve transit accessibility and provide direct connections and alternatives modes from Torrance to regional destinations. This Plan ensures that the future Regional Terminal is incorporated in this Plan as a key destination.



## 3.2. Inventory

An inventory of all existing signs within City of Torrance public right-of-way was conducted. This was administered to get a better understanding of the extent of signage in the City of Torrance, and to provide the City with signage conditions, as well as identify gaps in the existing signage network. This section provides detail on the data collection process and summarizes key findings of City of Torrance public right-of-way signs.

### 3.2.1. Data Collection Process

IBI Group led an extensive data collection process to document all signs in the City of Torrance by their coordinates. From early January 2021 to late June 2021, IBI Group used a proprietary software called CurblQ that scans photos for sign shapes and determines sign content and location. In order to collect all public right-of-way signs, a picture-by-picture time-lapse was taken for every public street in the City of Torrance. This was done by affixing a GoPro to a car and driving on every public street in both directions. The process documented upwards of 2 million time-lapse photos, in which most of the photos contained a street sign.

The photos were uploaded to a public website called Mapillary, which captures street sign images from the photos and maps their location. From there, CurblQ is used to document and organize the street signs, along with a few descriptive elements related to each one.

Using a combination of CurblQ and a manual quality control process, IBI Group gathered the following data:

- Sign Classification, including if the sign type is Regulatory (i.e. No Parking, Speed Limits, Stop Signs), Information (i.e. Route Designations, Directions, Parking), or Warning (i.e. Construction, School Zone, Railroad Crossing).
- Sign Text
- Lateral Position, including if the sign is on the roadside, in the median, or otherwise
- Sign Condition
- Pole Type
- Pole Condition
- Sign Height
- Latitude and Longitude

### 3.2.2. Summary of Findings

The data collection process identified a total of 17,741 traffic signs within the City of Torrance. Of these, a total of 6,402 signs were located on a major highway arterial, as defined by the Los Angeles County Master Plan of Highways (Table 3.2). 72% of all signs were classified as regulatory signs, followed by information signs (20%), and warning signs (7%). Additionally, 1% of signs were classified as complementary signs, such as signs providing additional directional arrows or time restrictions.

The sign locations and uploaded images are viewable on Mapillary’s public-facing website, and were also provided to the City of Torrance in a shapefile containing the location and associated attributes of each sign collected. The findings further support the need for sufficient wayfinding signage to complement existing information signs and aid travelers to key destinations in the city.

Table 3.2 Existing Traffic Signage Summary

| Sign Type            | Located on a Major Highway | TOTAL  |
|----------------------|----------------------------|--------|
| <b>Regulatory</b>    | 4,019                      | 12,667 |
| <b>Information</b>   | 1,825                      | 3,561  |
| <b>Warning</b>       | 438                        | 1,245  |
| <b>Complementary</b> | 120                        | 268    |
| <b>TOTAL</b>         | 6,402                      | 17,741 |

## 4. Public Outreach Summary

Feedback about the needs of residents, commuters, and community stakeholders is crucial to developing a wayfinding program that serves the needs of people traveling through Torrance and has support for implementation. The following goals guided the public outreach process for this wayfinding plan.

- Create opportunities for meaningful participation from City staff in Collaborative Wayfinding Committee Meetings.
- Build support and cohesion around Citywide Wayfinding and Signage Plan and its implementation.
- Drive the public to the website and interactive map for input.

The onset of the global COVID-19 pandemic in 2020 limited in-person engagement opportunities, so the project team instead conducted remote and virtual engagement and outreach. The project team used the tactics and promotional strategies detailed below to gather input from the Torrance public about routes and locations in Torrance that would benefit from improved wayfinding signage.

### 4.1. Marketing and Promotions

A project webpage hosted on the City of Torrance website (<http://torranceca.gov/wayfinding>) provided information about the project and a link to the survey and map. This site used a visual brand, including a logo, that were developed to provide distinctive look and feel for the Wayfinding and Signage Plan.

During the planning period for this Plan, the City distributed electronic newsletters and posted promotional social media posts to periodically notify community members about opportunities to participate in the survey, map and draft plan review.



Promotional post on Facebook



**City of Torrance CA Government** ✓  
April 6 at 10:15 AM · 🌐

Last chance! Help make it easier for people walking, biking, taking transit, or driving, in Torrance to find their way! Visit the project website and check out the interactive map to tell us where you go in Torrance and help us make it easier to navigate the city.  
<http://www.TorranceCA.Gov/Wayfinding> #TorranceCA



**Last chance to add your input on wayfinding and signage!**

Add your feedback by April 12th to help make it easier for people walking, biking, driving, or taking transit to find their way and get where they need to go.

Learn more at:  
[www.TorranceCA.Gov/Wayfinding](http://www.TorranceCA.Gov/Wayfinding)

CITY OF TORRANCE  
WAYFINDING AND  
SIGNAGE  
PLAN

The graphic features a signpost with three blue directional signs: 'Historic Downtown' pointing right, 'Torrance Beach' pointing left, and 'Regional Transit Center' pointing right. Two stylized figures, a man in a light blue shirt and red pants, and a woman in a pink shirt and blue pants, are walking towards the right. The background is light blue with a white box containing the call to action text.

Promotional post on Instagram

**We need your input on wayfinding and signage!**  
[www.TorranceCA.Gov/Wayfinding](http://www.TorranceCA.Gov/Wayfinding)

Historic Downtown  
Torrance Beach  
Regional Transit Center

CITY OF TORRANCE  
WAYFINDING AND  
SIGNAGE PLAN

cityoftorranceca • Follow  
Torrance, California

cityoftorranceca We need your input on the Citywide Wayfinding and Signage Plan! Tell us about the places that matter to you and help us make it easier to navigate the city:  
<http://www.TorranceCA.Gov/Wayfinding>  
#TorranceCA

5w

the\_hammerhasspoken I think it's important to use the same language for Historic Torrance - it's called all sorts of things. Old Torrance , Downtown Torrance , Historic Torrance , etc. it would be great for the businesses so everyone knows where they are

Liked by molfib7 and others  
MARCH 9

Add a comment... Post



## 4.2. Survey and Interactive Map

An online survey was made available to the public between February and April 2021. The survey asked where people travel in Torrance and to describe their comfort level with various modes of transportation. The site also offered an interactive map on which participants dropped pins to indicate destinations that are important to them, including for shopping, errands, work, school, recreation, transportation, social, or other purposes.

### Survey results and analysis

More than 200 people responded to the survey; nearly three-quarters had home ZIP codes in Torrance, and others came from 20 ZIP codes across the region. Most respondents live or work in Torrance (80% and 39%, respectively). Respondents were asked to select from a list of racial and ethnic categories that most closely match their self-identification. Fifty-six percent selected “White or Caucasian,” 20% selected “Asian or Pacific Islander,” 16% selected “Latinx or Hispanic,” 2.5% selected “African American or Black,” and 1% selected “Native American or Alaskan Native.”<sup>1</sup> Thirteen percent of respondents selected “Other,” preferred not to say, or did not leave a response to this question. About half of survey respondents were 50 years or older, and nearly two-thirds identified as female. About one in four respondents have household incomes below \$75,000.

Survey respondents most often drive or walk to travel through Torrance. When asked to select all the ways they typically get around, nearly all participants selected driving and nearly half selected walking. In addition, one in five selected biking, 5% selected car service or taxi, and 4% selected bus transit. While these results reflect the dependency that many people have on private automobiles, they also highlight that walking and biking are also a part of how many people get around when those choices are available.

Participants were also asked to rank various modes of active transportation (walking, biking, or taking the bus) by how comfortable they were using those modes. Participants were most likely to be comfortable walking, and slightly more likely to be comfortable riding a bike compared to taking the bus. Despite expressing high levels of comfort as pedestrians walking in Torrance, participants are still most likely to travel in private vehicles. This may indicate that many key destinations for Torrance residents and visitors are at distances too far for a comfortable walk, or that bicycle facilities aren’t sufficiently comprehensive to form a complete low-stress network. Improvements to the bicycle and transit networks can increase comfort for those modes and increase active transportation choices throughout Torrance. A detailed breakdown of survey responses can be found in Appendix B.

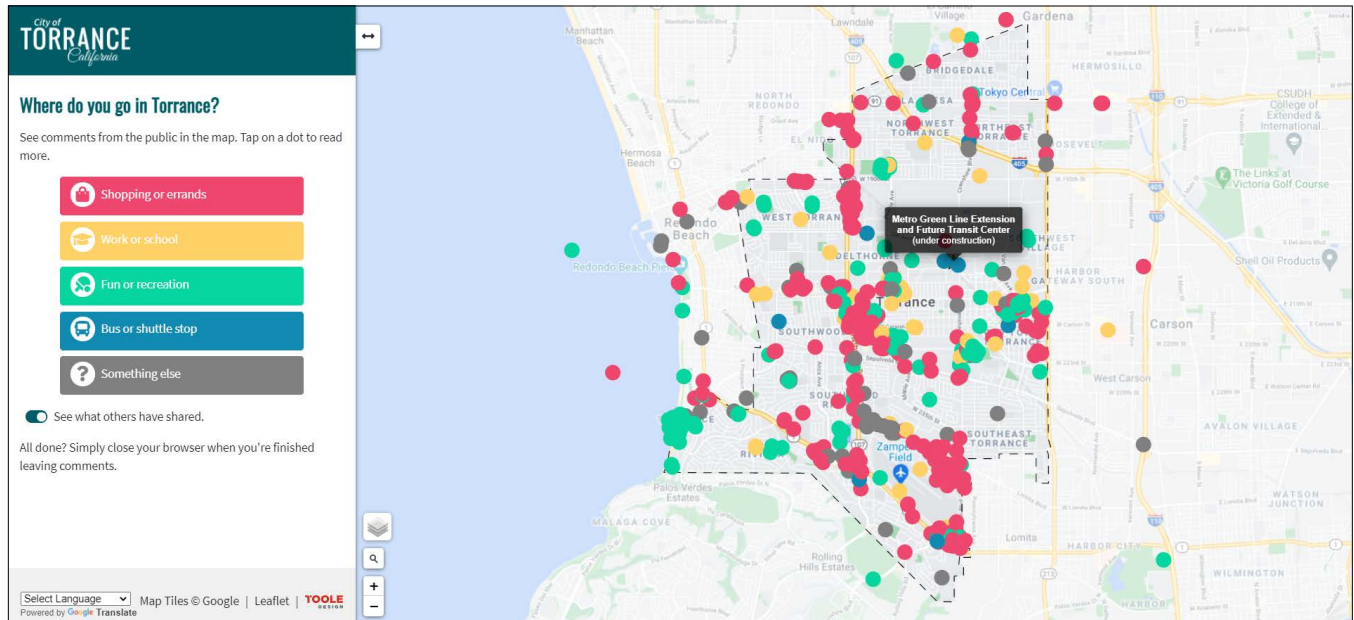
### Interactive map results and analysis

Participants dropped nearly 600 pins in the interactive map to indicate locations they visit often in Torrance and were asked to indicate their purpose for visiting each location. About half of those points dropped were for shopping or errands, about a quarter were for fun or recreation, 8% were for work or school, 1% for transportation purposes, and 9% for other reasons. Participants were also asked how they travel to each location. Driving was the most common mode for trip purpose type except for transportation-related destinations, which were accessed primarily by walking, riding a bike, or using transit.

Most pins are concentrated in a few areas in Torrance: near Torrance Beach, in the Historic Downtown, around Zamperini Airport, and in central Torrance (the area including the Civic Center and Del Amo Fashion Center). Smaller clusters of points are seen in shopping areas on Hawthorne Boulevard; a few locations in North Torrance; and around Madrona Marsh, Columbia Park, and Charles H. Wilson Park. These concentrations of destinations guided the recommendations in this plan for corridors and intersections where wayfinding signs should be placed.

<sup>1</sup> This demographic breakdown excludes participants who responded to the race and ethnicity question by indicating “other” or “prefer not to say” and those who chose not to respond.

Screenshot of Interactive Map



### 4.3. Collaborative Wayfinding Committee

An interdepartmental team of City staff served as the project’s Collaborative Wayfinding Committee (CWC). The committee’s purpose was to help ensure that this plan is aligned with City goals and policies, provide guidance on wayfinding focus areas, sign types, and review the draft plan. The committee met three times.

- December 2020: The committee reviewed the project goals and process, provided feedback on planned outreach and engagement strategies, and discussed where wayfinding efforts could serve vulnerable users.
- February 2021: The committee received interim updates on engagement results, confirmed wayfinding signage focus areas, and provided feedback on key routes for walking and biking.
- May 2021: The committee reviewed and provided feedback on the draft Wayfinding and Signage Plan.

## 5. Recommendations for New Wayfinding Signage

This Plan recommends locations for four different sign types matched to the needs of different travel modes. Gateway signs serve all travelers, vehicle directional signs serve people driving, and pedestrian directional signs and map kiosks serve those walking (and, where relevant, biking). The following sections provide a description of each sign type and summarize the approach for location selection. Specific locations for each sign are presented in Figure 5.1. Additional recommendations regarding placement considerations are included in the sign locations attribute table included in Appendix C of this Plan.

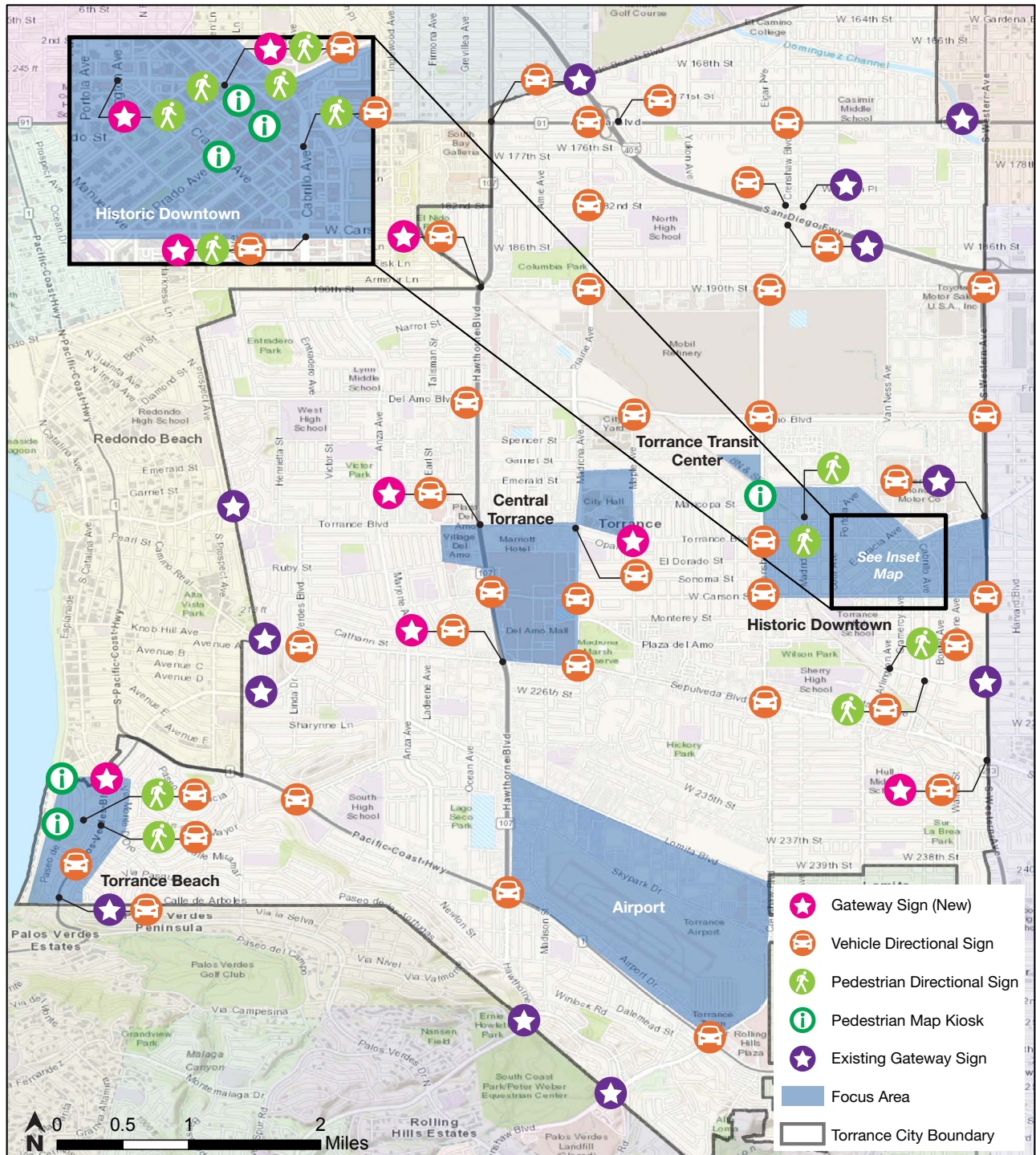
### 5.1. Approach for Identifying Sign Locations

Based on community feedback and input from City staff about key destinations, routes and landmarks within Torrance, the project team identified four focus areas that contain clusters of likely destinations for those using wayfinding signage.

- 1. Torrance Beach:** The beach, its surrounding residential streets (in Torrance), and nearby arterials.
- 2. Airport:** Zamperini Field and its surrounding retail nodes, including cultural destinations like the Western Museum of Flight.
- 3. Central Torrance:** The Civic Center and nearby medical facilities and large retail destinations.
- 4. Historic Downtown:** The area including the city's Historic Downtown district and the nearby future Transit Center.

The project team then identified recommended intersections for new signage to serve travelers on selected key arterial routes to and within the focus areas, especially for routes originating outside the City's administrative boundaries. These are identified on the map below, along with the sign types recommended at each location. The recommended intersections are intended to provide a general location for signage placement, which would be further refined by the City.

# Figure 5.1: City of Torrance New Wayfinding Signage Locations



This Plan includes, in Appendix C, the attribute table for sign locations corresponding to the Geographic Information Systems (GIS) shapefiles of recommended locations generated for the City as part of this Plan. The attribute table includes the following details for each location to assist the City in determining exact placement of each sign:

- An intersection-level location recommendation
- The type of sign recommended at each location
- The number of signs recommended at the location
- The focus area where the recommended location is situated, if applicable
- A suggestion for which legs of the approach to the intersection should be signed, based on the street type and direction of travel to key locations identified in the focus area analysis
- The implementation strategy the sign location corresponds to (see Chapter 6 for full descriptions of the Essential, Enhanced, and Digital and Dynamic implementation strategies)

## 5.2. Location by Sign Type

The following section provides further detail regarding the four sign types identified by location on the map above and provides guidelines for the City of Torrance to consider in determining exact locations based on the sign type.

### 5.2.1. Type 1: Gateway Sign

Gateway signs (sometimes called monument signs) announce to the driver, pedestrian, or bicyclist that they have arrived at a destination or district. These signs can also be used as a meeting or gathering point for people. Currently, there are 12 existing gateway signs in the City of Torrance. The project team recommends adding at least six more gateway signs using the main or secondary gateway sign designs created by Hunt Design. To improve traveler recognition of City boundaries and important destinations within Torrance (see the Essential and Enhanced strategies in Chapter 6 for further details). The existing gateway signs can eventually be replaced to match the updated sign designs created by Hunt Design.

#### Location guidelines

- Site signs on primary routes into a district or neighborhood, placing them at the edges.
- Consider sight lines. Gateway signs may not be necessary where the destination is already clearly visible (such as at Torrance Beach) or where there are signs or landmarks already present, such as around Del Amo Fashion Center.

*Examples of gateway signs*



*Existing Torrance Gateway Signage (City of Torrance)*



*Little Italy in San Diego, CA (Rupert Essinger / ESRI)*

### 5.2.2. Type 2: Vehicle Directional Sign

Vehicle directional signs guide drivers from arterial or freeway entry points into Torrance to the City’s major destinations, neighborhoods, and districts. The signs are installed at locations that help drivers make decisions about where to turn to continue toward their destination. These signs should feature large letters and minimal words (six or fewer is ideal) and point to only a maximum of three destinations to ensure that people driving can quickly read and process the information. Vehicle directional signs can also help orient or direct people walking, biking, or using transit. The project team recommends adding at least 54 vehicle directional signs in Torrance to improve drivers’ navigation through the city (see the Essential and Enhanced strategies in Chapter 6 for further details).

#### Location guidelines

- Place signs within a half mile of freeway exits and other major vehicle entry points into Torrance.
- Site signs on the approaches to intersections where a driver must make a decision (such as to turn) to continue toward their destination.

*Examples from other cities*



*District Sign in Madison, WI (Google Streetview)*



*Community Identifier, location unknown (Toole Design)*

### 5.2.3. Type 3: Pedestrian Directional Sign

Pedestrian directional signs, sometimes called fingerboards, guide people walking to nearby destinations or services that they can conveniently walk to. Pedestrian directional signs can have smaller print and more listed destinations than vehicle directional signs, as people on foot can stop to take in much more information at once. These signs are helpful when placed along pedestrian routes (for example, to guide people to Torrance Beach or the future Transit Center). The project team recommends adding at least 26 pedestrian directional signs to assist pedestrians in navigating the Historic Downtown and Torrance Beach focus areas (see the Enhanced strategy in Chapter 6 for more details).

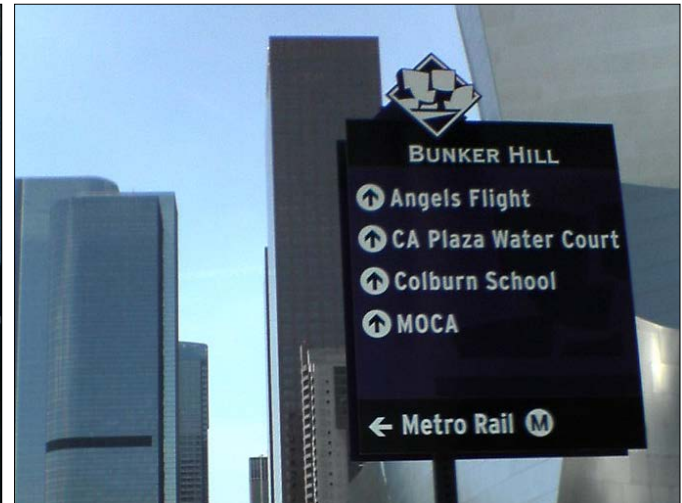
#### Location Guidelines

- Prioritize pedestrian directional signs in and adjacent to focus areas.
- Place at intersections along pedestrian routes where people will be making simple right/left/straight decisions about their onward direction.
- Use along sections of routes where confirmation of direction is helpful but where a pedestrian map kiosk may not be necessary.

#### Examples from other cities



Directional sign in Omaha, NE (Toole Design)



Directional sign in Los Angeles, CA  
(Eric Richardson, Creative Commons)

### 5.2.4. Type 4: Pedestrian Map Kiosk

Pedestrian map kiosks help people walking or rolling to orient themselves within their immediate environment, especially in areas with many nearby destinations. On off-street paths and trails these kiosks can also display information about permitted uses, other rules, or public safety contact information. Kiosks should be placed far enough away from the main part of the sidewalk that people stopping to use them will not block sidewalk travel. The project team recommends adding at least 6 pedestrian map kiosks to improve wayfinding for people in the Historic Downtown and Torrance Beach focus areas (see the Essential strategy in Chapter 6 for further details). Since Torrance Beach is adjacent to the City of Redondo Beach, the City of Torrance should work in collaboration to further develop beach-oriented signage strategies (for example, map content should reflect the surrounding multi-jurisdictional area).

#### Location Guidelines

Because most people are accustomed to reading maps that have north facing the top of the map, all attempts should be made to place the map panel so that it will be read by a person facing north, or within 90 degrees of north. If the map panel must be placed so that it will be read by a person facing south, the map can be oriented with south at the top. Place at major pedestrian access points and nodes where many pedestrians often cross paths.

#### Examples from other cities



Map kiosk in West Palm Beach, FL (Toole Design)



Map kiosk in Portland region, OR (Toole Design)



## 5.3. General Sign Placement Considerations

Beyond specific location guidelines for each sign, City staff should also consider the following general considerations for placement when choosing exactly where to install a wayfinding sign at a recommended intersection.

### 5.3.1. MUTCD Community Wayfinding Regulations (Section 2D.50)

MUTCD regulations state that signs cannot be mounted overhead or obstruct road users' view of other traffic control devices. Adequate spacing is required between wayfinding signage and other higher priority signs.

### 5.3.2. Traffic Circulation Patterns

Consider traffic volumes and speed limits, especially when placing Vehicle Directional signage. A roadway with drivers traveling at higher speeds and with multiple lanes of traffic may require signage placed farther back from the decision point, or multiple sign assemblies facing the same decision point. For example, on a 3- or 4-lane highway, there should be two vehicle directional signs in advance of the decision or turn: one would be on the median, and the other, on the right side of the roadway. Also consider the number of travel lanes and typical traffic patterns a driver will have to negotiate to reach a turn lane after viewing and processing wayfinding sign information and deciding to turn.

### 5.3.3. Site-Specific Constraints

Roadway elements like turn lanes and medians may limit where signage can be placed in the roadway, and narrow or missing sidewalks create challenges for placing signage on the sidewalk.

## 6. Action and Implementation

The following funding and implementation strategies can guide the City of Torrance as it installs new wayfinding signage citywide.

### 6.1. Funding

This section provides a high-level overview of costs for the sign types recommended in Chapter 5 as well as an overview of available funding sources.

#### 6.1.1. Sign Costs

Hunt Design, a wayfinding signage designer contracted with the City of Torrance, estimated the unit costs below in May of 2021 based on sign design concepts it proposed. The Hunt Design concept images are shown in Appendix A and align with those recommended in this Plan. The cost ranges provided by Hunt Design are based on manufacturing and installation costs, and do not include costs for getting power to internally illuminated signs. Toole Design estimated non-infrastructure costs based on its previous experience on projects of a similar scope and scale.

##### **Type 1: Gateway sign**

- Typical unit cost: \$25,000 to \$38,000 for a City Gateway sign or \$8,000 to \$10,000 for a Secondary Gateway sign
- Typical non-infrastructure planning and engineering costs: \$400 per sign

##### **Type 2: Vehicle directional sign**

- Typical unit cost: \$3,000 to \$4,000
- Typical non-infrastructure planning and engineering costs: \$400 per sign

##### **Type 3: Pedestrian directional sign**

- Typical unit cost: \$1,800 to \$2,400
- Typical non-infrastructure planning and engineering costs: \$400 per sign

##### **Type 4: Pedestrian map kiosk**

- Typical unit cost: \$10,000 to \$16,000
- Typical non-infrastructure planning and engineering costs: \$2,000 to \$5,000 per sign

## 6.1.2. Funding Sources

Cities usually secure funding for wayfinding signage through competitive application-based grants. In addition to pursuing such federal, state or regional funds, the City of Torrance could dedicate local funds to implementation of the wayfinding signage recommendations. The South Bay Bicycle Master Plan also recommended partnering with non-profit organizations, schools, and bicycle advocacy groups, such as the South Bay and Los Angeles County Bicycle Coalitions, to pursue funding opportunities and grants for wayfinding signage.

The following table summarizes the most likely funding programs and source agencies.

Table 6.1 Funding Sources

| <b>Congestion Mitigation and Air Quality (CMAQ)</b>                               |  |
|---|--|
| <b>Lead agency</b>  | Federal Highway Administration (project selection by Los Angeles County Metropolitan Transportation Authority through “Call for Projects”)   |
| <b>Description and eligible projects</b>  | Program funds can be used for transportation projects that contribute air quality improvements and provide congestion relief in areas that do not meet minimum air quality standards. This program can fund transit, bicycle, and pedestrian projects because of their link to air quality improvements. Federal funds come with many restrictions and reporting requirements. |
| <b>Link</b>   | <a href="http://fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm">fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm</a>   |
| <b>Recreational Trails Program</b>  |  |
| <b>Lead agency</b>  | Federal Highway Administration (project selection by California Department of Parks and Recreation and Caltrans)   |
| <b>Description and eligible projects</b>  | Program funds may be used to fund projects on recreational trails, such as the Marvin Braude Bike Trail. Eligible projects include the development of trailside and trailhead facilities.  |
| <b>Link</b>   | <a href="https://www.fhwa.dot.gov/environment/recreational_trails/">https://www.fhwa.dot.gov/environment/recreational_trails/</a>  |
| <b>Active Transportation Program</b>  |  |
| <b>Lead agency</b>  | Caltrans and California Transportation Commission  |
| <b>Description and eligible projects</b>  | The program consolidates federal and state transportation programs into a single program. It funds projects that increase modes of active transportation like walking and biking, including infrastructure and non-infrastructure projects.  |
| <b>Link</b>   | <a href="https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/active-transportation-program">https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/active-transportation-program</a><br><a href="http://catc.ca.gov/programs/active-transportation-program">catc.ca.gov/programs/active-transportation-program</a>                                |
| <b>Los Angeles County sales taxes (Propositions A and C and Measures R and M)</b> |  |
| <b>Lead agency</b>  | Los Angeles County Metropolitan Transportation Authority (Metro)   |
| <b>Description and eligible projects</b>  | Local sales taxes from these measures flow to Metro to be used or programmed by Metro or are transferred to local jurisdictions through Formula Allocation Procedure.  |
| <b>Link</b>   | <a href="http://media.metro.net/2020/Metro-Funding-Sources-Guide-2020.pdf">http://media.metro.net/2020/Metro-Funding-Sources-Guide-2020.pdf</a>  |

**Transit Oriented Communities**

|  |   |
|--|---|
| <b>Lead agency</b>                       | Los Angeles County Metropolitan Transportation Authority (Metro)  |
| <b>Description and eligible projects</b> | The program includes funding for first/last mile projects that plan and implement improvements for the first/last mile portions of transit journeys, including signage, wayfinding, and dynamic information and technology. |
| <b>Link</b>                              | <a href="https://www.metro.net/projects/transit-oriented-communities/">https://www.metro.net/projects/transit-oriented-communities/</a>   |

**Convention and Visitor’s Bureaus, or Local Chambers of Commerce**

|  |   |
|--|---|
| <b>Lead agency</b>                       | Discover Torrance, Torrance Area Chamber of Commerce  |
| <b>Description and eligible projects</b> | Local tourism boards and chambers of commerce can provide local matches for Federal, State, or Metro grant funding, or can help fundraise for local matches.  |
| <b>Link</b>                              | <a href="https://discovertorrance.com/">https://discovertorrance.com/</a><br><a href="https://www.torrancechamber.com/">https://www.torrancechamber.com/</a><br><a href="http://www.southbaycities.org/">http://www.southbaycities.org/</a> |

## 6.2. Strategies for Implementation

This wayfinding Plan offers three strategies to implement the wayfinding signage recommendations:

- The Essential Strategy implements the minimum quantity of signs required to establish a functional wayfinding program.
- The Enhanced Strategy implements additional signs beyond those in the Essential Strategy to provide wider coverage across Torrance.
- The Digital and Dynamic Strategy recommends a variety of digital wayfinding tools that people can access before and during trips to improve wayfinding and as a complement to physical signage, especially as wayfinding technology continues to improve and become more widely available.

The sign location recommendations in Chapter 5 identify the particular signs to be implemented under the Essential Strategy and Enhanced Strategy. Each strategy can be deployed in combination with the others, and the Essential Strategy and Digital and Dynamic Strategy could be deployed independent of the others. The following sections detail the concept and estimated cost for each strategy.

### 6.2.1. Essential Strategy

The Essential Strategy provides the minimum viable product for the City of Torrance to deploy a functional wayfinding and signage program. This strategy focuses signage investments on high-priority areas and corridors, providing the minimum of signs needed to direct users to their destinations. Sign types deployed in this strategy include gateway signs, vehicle directional signs, and pedestrian map kiosks.

To develop this strategy the project team focused on identifying wayfinding routes that provide access from the City’s boundaries to key destinations within the four focus areas (Airport, Central Torrance, Torrance Beach, and the Historic Downtown). In addition to these primary vehicle routes, signs were identified for places with relatively high pedestrian activity (Torrance Beach and the Historic Downtown) and on key nodes in the transit network. Refer to Chapter 5 for more information about sign location selection. In total, there are 66 signs recommended for the Essential Strategy. Table 6.2 provides a breakdown of sign types for the Essential strategy, with estimated costs based on the unit cost and non-infrastructure planning and engineering costs. Note that the cost ranges for gateway signs reflect costs for both the City Gateway and Secondary Gateway sign options.

Table 6.2 Essential Strategy Summary

| Sign Type                           | Quantity of Signs | Estimated Cost        |
|-------------------------------------|-------------------|-----------------------|
| <b>Gateway Signs</b>                | 6                 | \$50,400 - \$230,400  |
| <b>Vehicle Directional Signs</b>    | 54                | \$183,600 - \$237,600 |
| <b>Pedestrian Directional Signs</b> | 0                 | \$0                   |
| <b>Pedestrian Map Kiosks</b>        | 6                 | \$72,000 - \$126,000  |
| <b>Essential Strategy Total</b>     | 66                | \$306,000 - \$594,000 |

### 6.2.2. Enhanced Strategy

The Enhanced Strategy builds on the basic, functional approach recommended in the Essential strategy by adding sign density to help users who veer off-course from primary wayfinding signage corridors or are visiting destinations that are not within one of the four primary focus areas. This strategy uses all four sign types (gateway, vehicle directional, pedestrian directional, and pedestrian map kiosk) to deploy additional signage in the following places:

- Additional gateway sign and pedestrian directional signs in the Historic Downtown, which will complement the efforts in the Downtown Revitalization Plan;
- Additional gateway signs in Central Torrance for additional wayfinding near the Civic Center;
- Additional vehicle directional signs on parallel minor arterials and major intersections, for supplementary wayfinding beyond primary routes identified in the Essential Strategy;
- Additional vehicle directional signs to help people reach popular locations outside of focus areas including multiple destinations in North Torrance, the Herma Tilim Center, Columbia Park, as well as Charles H. Wilson Park near the Historic Downtown;
- Additional pedestrian directional signs that are compatible with bicycle wayfinding needs to direct people on foot or bicycle to existing and planned entrances to major bikeways identified in the South Bay Bicycle Master Plan.

There are 61 signs solely for the Enhanced Strategy, meaning there would be 127 signs in total when implemented with the Essential Strategy. Table 6.3 provides a breakdown of sign types and cost estimates for the Enhanced strategy, along with total numbers if both the Essential and Enhanced Strategies were implemented together.

Table 6.3 Enhanced Strategy Summary

| Sign Type                                    | Quantity of Signs | Estimated Cost        |
|--|-------------------|-----------------------|
| <b>Gateway Signs</b>                         | 3                 | \$25,200 - \$115,200  |
| <b>Vehicle Directional Signs</b>             | 32                | \$108,800 - \$140,800 |
| <b>Pedestrian Directional Signs</b>          | 26                | \$57,200 - \$72,800   |
| <b>Pedestrian Map Kiosks</b>                 | 0                 | \$0                   |
| <b>Enhanced Strategy Total</b>               | 61                | \$191,200 - \$328,800 |
| <b>Essential + Enhanced Strategies Total</b> | 127               | \$497,200 - \$922,800 |

### 6.2.3. Digital and Dynamic Strategy

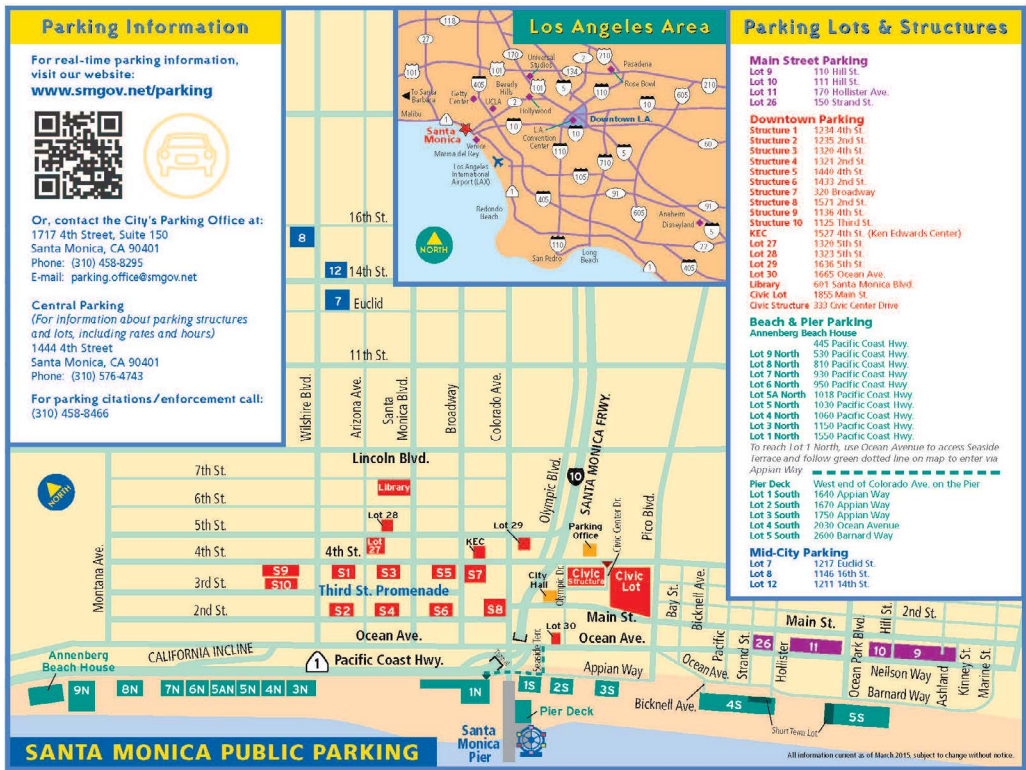
Most people start planning their trip before they leave their house or workplace. A successful and comprehensive wayfinding system therefore provides people with information they can access on their computers or smartphones while they are still deciding where to go – information that helps them decide how to get there and (if applicable) where to park their vehicles or bicycles. The Digital and Dynamic Strategy provides people with the tools they need at every step in their journey, from pre-trip planning through the return trip home.

#### Pre-trip planning

This strategy recommends producing printable and digital interactive maps, and supporting third-party mapping products, to help people envision their trip from end to end. These might include the following maps and resources, which should be made available on the City of Torrance website and could be provided on other visitor-facing tourism and accommodation websites:

- Parking maps
- Destination maps (such as the “plan your visit” app on DiscoverTorrance.Com)
- Maps of the Strand/Marvin Braude Bike Trail, and Torrance Beach, including information about allowed activities (such as biking, dog walking, and rollerblading); and the availability, location, and cost of amenities such as parking, bathrooms, showers, and public safety stations.
- Information from the future Keep It Moving app (currently under development as part of the Bloomberg Philanthropies Mayors Challenge)

Parking facility map (City of Santa Monica)



Plan Your Visit application on DiscoverTorrance.Com

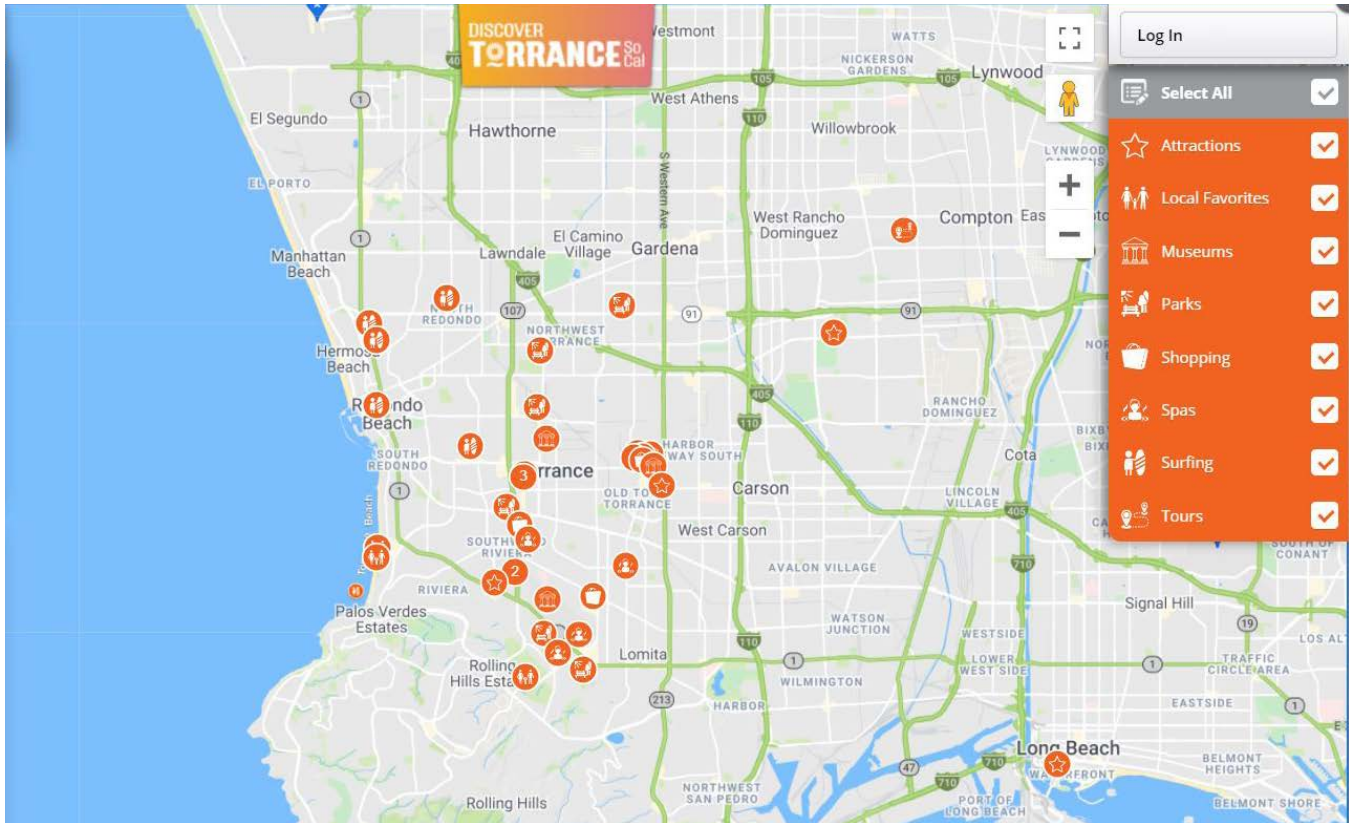






Table 6.4 Digital and Dynamic Strategy Summary

| Quantity of Signs | Estimated Cost |
|-------------------|----------------|
| Variable          | Variable       |

## 6.3. Implementation Steps

No matter what strategy the City chooses to implement, the following steps lay out a path to implementing the sign types and locations in this Plan. The City should pursue implementation in accordance with the availability of funding and in alignment with other public investments the City is making, such as improvements related to the Downtown Revitalization Plan or the South Bay Bicycle Master Plan. The following steps provide a general roadmap for implementation regardless of the sequence in which various elements of this plan are implemented.

### 6.3.1. Step 1: Select one or more strategies to implement

Re-engage with key stakeholders, including the Collaborative Wayfinding Committee and other local businesses and community groups, and extend outreach to agencies and stakeholders in surrounding communities such as Redondo Beach to explore potential wayfinding collaboration. Research funding sources and grant timelines and obtain approvals from City of Torrance elected officials (and support from Community Development, Public Works, and other relevant departments) to pursue grant opportunities or include additional line items in the annual budget.

### 6.3.2. Step 2: Implement corridor or zone sign plans

Once the city has determined what strategy to implement, City staff will likely need to contract a consultant to determine the specific sign placements and legends that would implement the wayfinding system described in this Plan. The City’s request for proposals should illustrate the sign types and the approximate number of sign assemblies to be included in the sign plans (as listed in this Plan). The request for proposals should include the following scope elements:

- Identify sign locations for each sign type to the nearest 5-foot placement, including whether the sign will be installed on new or existing posts.
- Develop a draft of sign locations and sign legends (text showing destinations) for each location, for review by City staff and other stakeholders.
- Develop a final draft wayfinding sign plan that includes sign layouts and dimensions that can be used for fabrication and installation and submit this for review by City staff and other stakeholders.
- Deliver a final wayfinding sign plan including sign layouts, dimensions, and other specifications for fabrication and installation.
- Conduct any surveying, permitting, or fabrication specifications needed to make and install Gateway signs (Type 1) and Pedestrian Map Kiosks (Type 4).

### 6.3.3. Step 3: Fabricate and install signs

Once the City has the final wayfinding sign plans and the specifications in Step 2, City staff can request bids from local sign makers to make and install the signs according to the sign plans. For cost efficiency, Torrance could use existing City crews to install pole-mounted signs like Vehicle Wayfinding (Type 2) and Pedestrian Directional (Type 3) Signs and hire outside contractors for Gateway Signs (Type 1) and Pedestrian Map Kiosks (Type 4).

## 7. Measuring Project Impact

The Wayfinding and Signage Plan developed through this project aims to implement a comprehensive signage and wayfinding program that improves circulation within and around the City of Torrance by guiding all travelers, regardless of mode, to get to their destinations as easily and efficiently as possible. In addition, by improving wayfinding and circulation in and around the City, the project also aims to encourage travel by alternative modes of transportation, thus improving sustainability, safety conditions, and efficiency for all community members and visitors.

Moreover, the improvements proposed through this document are in alignment with other ongoing plans and assessments occurring throughout the City. Signage will reflect the character of Torrance in form and materials and remain uniform with other signage and wayfinding elements. These objectives aim to simplify the wayfinding experience and direct travelers to the safest and most direct pathway to their destination.

To measure the project's impact, the proposed performance metrics listed in Table 7.1 consider the City's population, vehicular travel, non-vehicular travel, mode share, safety conditions, street network, land use development, sustainability, and socio-economics. The proposed methodology integrates quantitative and qualitative metrics for the near and long term. The objective of the matrix is to provide clear, user-friendly guidance to ensure that pre- and post-project measurements are conducted in a consistent manner and project evaluation is effective in meeting the goals of the wayfinding program.

Table 7.1: Performance Metrics

| Measurement Method   | Metric Types  | Tools   | Data Indicators   |
|--|---|---|---|
| <p><b>Audits:</b><br/>                     Can help to assess street conditions and compare between pre- and post- project street conditions and behavior patterns</p>   | <ul style="list-style-type: none"> <li>• Pedestrian and Bicyclist Activity</li> <li>• Road Safety Audit</li> <li>• Distance between key locations and wayfinding signage</li> </ul> | <ul style="list-style-type: none"> <li>• SCAG Go Human So Cal Audit Toolbox</li> <li>• Community Walk &amp; Bike Audits</li> <li>• FHWA Road Safety Audit Toolkit</li> <li>• Origin-Destination Analysis</li> <li>• GIS Analysis</li> </ul>                                 | <ul style="list-style-type: none"> <li>• Pedestrian and Bicyclist Activity</li> <li>• Road Safety Audit</li> <li>• Distance between key locations and wayfinding signage</li> </ul>   |
| <p><b>Surveys:</b><br/>                     Can be used to measure public sentiment toward and acceptance of the project's elements.</p>   | <ul style="list-style-type: none"> <li>• Qualitative Metrics</li> </ul>   | <ul style="list-style-type: none"> <li>• Survey Monkey</li> <li>• Public Life Survey</li> <li>• Mail Surveys</li> <li>• Phone Interviews</li> </ul>   | <ul style="list-style-type: none"> <li>• Survey responses</li> <li>• Observed physical behavior (i.e. looking around)</li> <li>• Observed errors in navigation</li> </ul>   |
| <p><b>Travel Data Analysis:</b><br/>                     Since the project's impact may not always be visible in the near term it is important to conduct an assessment of long-term trends relevant to the project within the study area.</p> | <ul style="list-style-type: none"> <li>• % Change in Mode Share</li> <li>• Walkability</li> </ul>   | <ul style="list-style-type: none"> <li>• California Household Travel Survey</li> <li>• American Community Survey (ACS)</li> <li>• EPA Walkability Index</li> </ul>  | <ul style="list-style-type: none"> <li>• Pre- and post-project travel data related to walking and biking for work and non-work trips</li> <li>• Bicycle and Pedestrian miles traveled</li> <li>• Daily transit boardings and alightings</li> <li>• Walkability Index Score</li> </ul> |
| <p><b>Model Analysis:</b><br/>                     Can be used to forecast future travel patterns and traffic flows.</p>   | <ul style="list-style-type: none"> <li>• Traffic volumes and flow</li> <li>• Congestion</li> </ul>  | <ul style="list-style-type: none"> <li>• Highway performance monitoring system</li> <li>• Caltrans PEMS Data</li> <li>• Caltrans Traffic Census Program</li> </ul>  | <ul style="list-style-type: none"> <li>• AADT Data</li> <li>• VMT Data</li> <li>• VHD Data</li> <li>• VHT Data</li> <li>• Minutes of Congested Travel Time</li> </ul>   |
| <p><b>Safety Review:</b><br/>                     Can be used to assess the change, if any, in safety incidents.</p>   | <ul style="list-style-type: none"> <li>• % Change in pedestrian and bicyclist related incidents</li> </ul>  | <ul style="list-style-type: none"> <li>• California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS)</li> <li>• UC Berkeley Transportation Injury Mapping System (TIMS)</li> <li>• FHWA USLIMITS52 Online Tool for Future Speed Studies</li> </ul> | <ul style="list-style-type: none"> <li>• # of fatalities and serious injuries reported in annual SWITRS data</li> <li>• Traffic speed (85th Percentile Speeds)</li> </ul>   |
| <p><b>Sustainability Review:</b><br/>                     Can be used to assess any changes in greenhouse gas (GHG) emissions &amp; Vehicle Miles Traveled (VMT) resulting from any of the project's elements.</p>                             | <ul style="list-style-type: none"> <li>• % Change in GHG emissions</li> <li>• % Change in daily VMT</li> <li>• % Change in Ozone and PM2.5 Concentrations</li> </ul>                | <ul style="list-style-type: none"> <li>• SCAG Local Sustainability Planning Tool (LSPT)</li> <li>• CalEnviroScreen 3.0</li> </ul>   | <ul style="list-style-type: none"> <li>• GHG emission data</li> <li>• Daily VMT per capita</li> <li>• Average PM 2.5 exposure</li> <li>• Ozone Percentile</li> <li>• Asthma and Cardiovascular Disease Prevalence</li> </ul>  |

| Measurement Method  | Metric Types  | Tools  | Data Indicators   |
|---|---|--|---|
| <p><b>Equity Analysis</b><br/>                     Can be used to identify the level of investment in low-income and disadvantaged communities.</p> | <ul style="list-style-type: none"> <li>Investment amount or percent of investment located in disadvantaged communities</li> </ul> | <ul style="list-style-type: none"> <li>CalEnviroScreen 3.0</li> <li>SB 535 Disadvantaged Communities Map</li> <li>Healthy Places Index AB 1550 Low-Income Communities</li> </ul> | <ul style="list-style-type: none"> <li>Median Household Income</li> <li># of Households with a Housing Burden</li> <li># of Households with Linguistic Isolation</li> <li>Level of Educational Attainment</li> <li>Unemployment Percentile</li> </ul> |

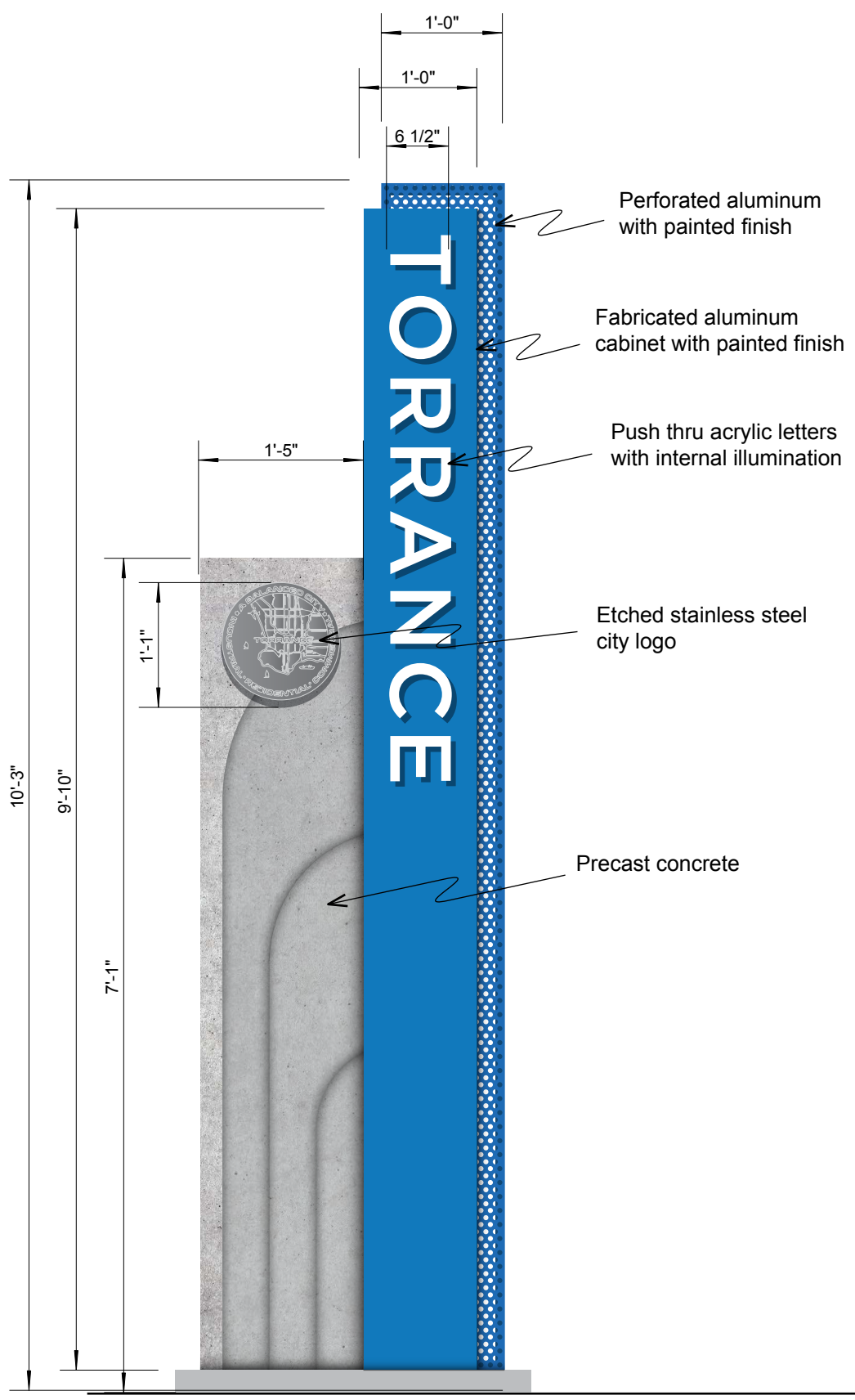
It is recommended that the City of Torrance utilize the measurement methods, metric types, tools, and data indicators listed in Table 7.1 before and after the project’s completion to determine how to measure the project’s impact within local communities. Introducing these performance metrics will help the City to quantitatively and qualitatively measure the level of impact resulting from the recommendations posed by the Citywide Wayfinding and Signage Plan. This assessment can also help the City to identify any potential gaps and challenges that could be addressed by future studies and projects.

**Next Steps**

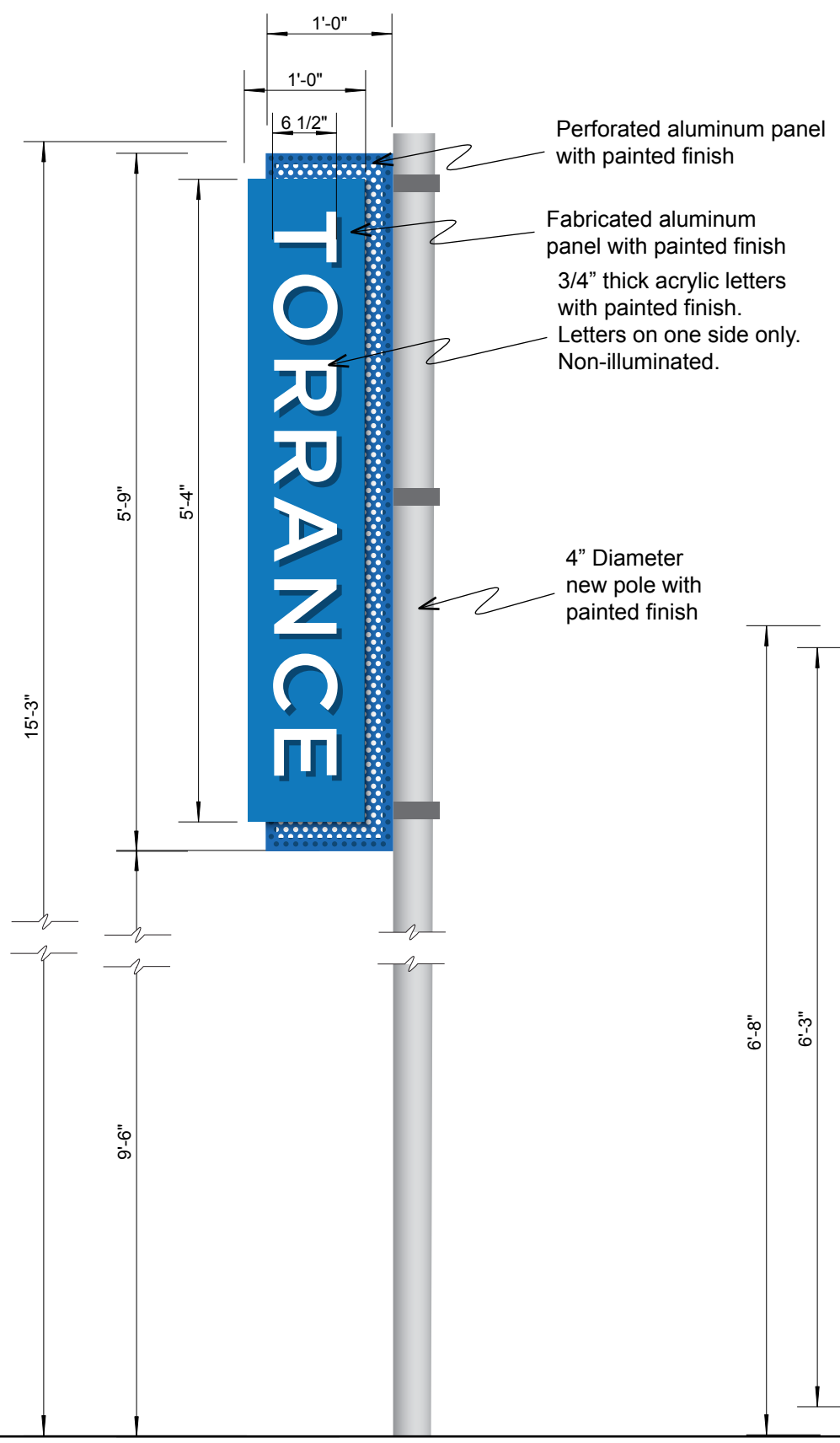
In moving forward with the Plan’s recommendations, the City should continue to coordinate and build upon other ongoing projects that may impact wayfinding to determine exact placement of signage and finalize details for implementation strategies. These efforts include the City’s contracted Signage/Wayfinding Branding and Design Services, the ongoing Downtown Revitalization Plan, the construction of the Torrance Regional Transit Center, and the City’s Keep It Moving application. Together these efforts will lead to a cohesive, well-branded wayfinding program that will improve travel for residents and visitors, encourage sustainable transportation options, and help to revitalize Torrance as a key destination in Los Angeles County.

Appendix A –  
Draft Signage Concepts and  
Cost Estimates

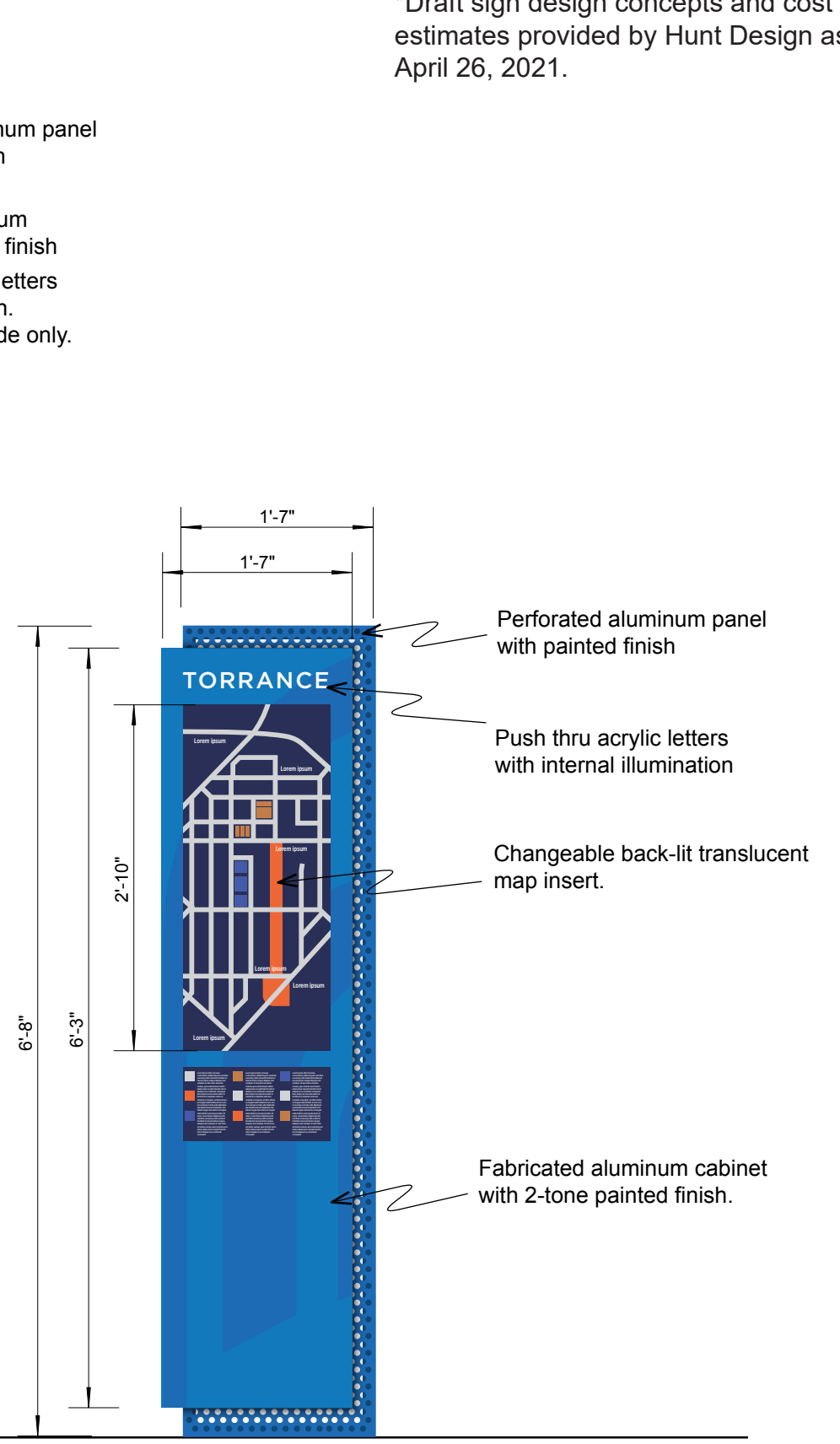
\*Draft sign design concepts and cost estimates provided by Hunt Design as of April 26, 2021.



City Gateway  
Internally Illuminated  
\$25,000-\$38,000



Secondary Gateway  
Non Illuminated  
\$8,000-\$10,000



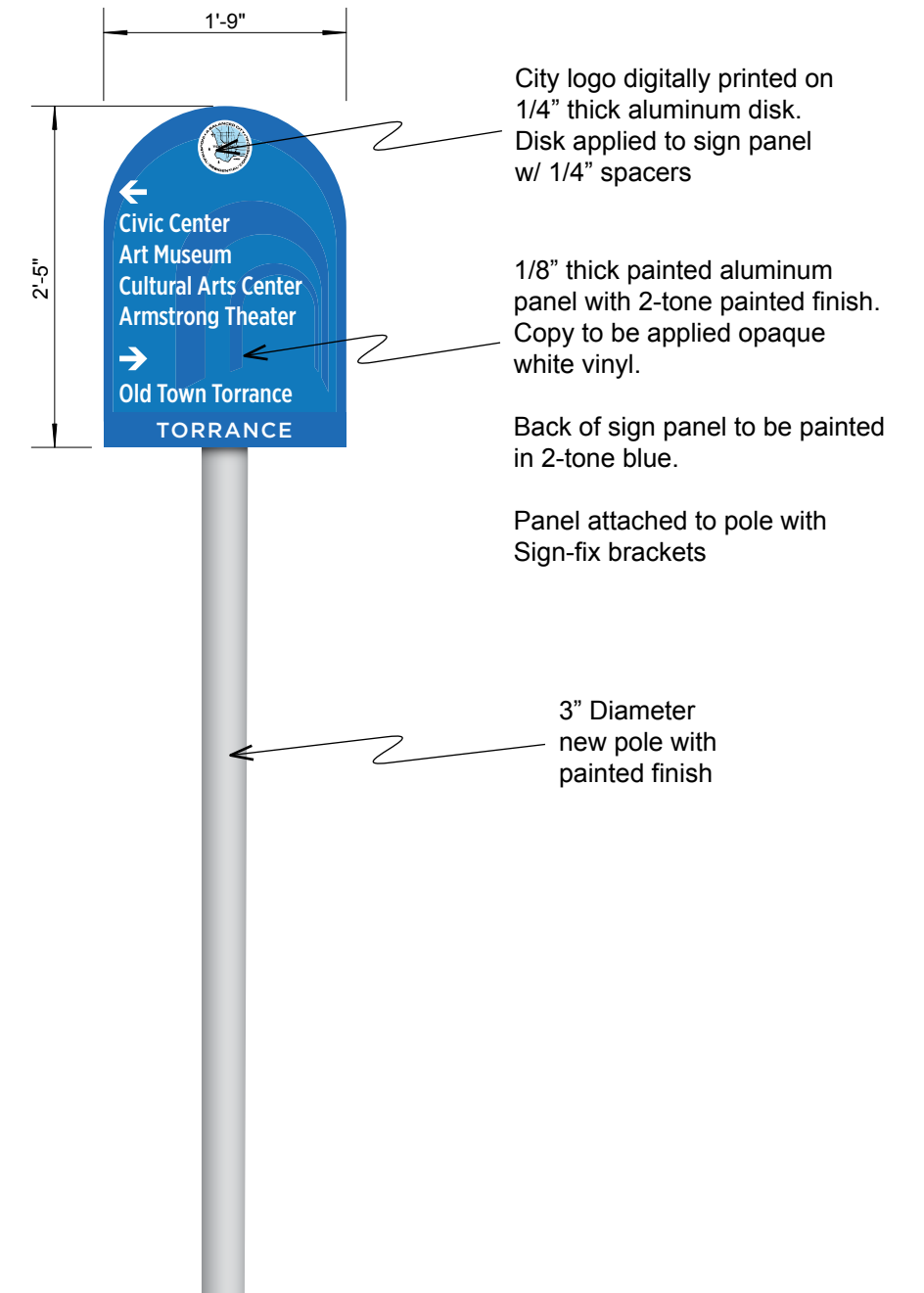
Map Kiosk  
Internally Illuminated  
\$10,000-\$16,000

**1** ELEVATION  
SCALE: 3/4"=1'-0"

\*Draft sign design concepts and cost estimates provided by Hunt Design as of April 26, 2021.



Vehicular Directional  
Non Illuminated  
\$3,000-\$4,000



Pedestrian Directional  
Non Illuminated  
\$1,800-\$2,400

Appendix B –  
Public Outreach and  
Map Comment Summary



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**Destinations drawn**                    **597**

|                         |     |
|-------------------------|-----|
| Responses to other comm | 42  |
| Map visits              | 521 |
| Survey responses        | 239 |

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**Drawing Comments**                    **597**

|                     | Total      | Drive      | Walk       | Ride a bike | Take the bus | Call a car |               |
|---------------------|------------|------------|------------|-------------|--------------|------------|---------------|
| Shopping or errands | 334        | 311        | 46         | 21          | 6            | 4          | draw-shopping |
| Fun or recreation   | 153        | 115        | 45         | 33          | 4            | 4          | draw-leisure  |
| Something else      | 53         | 43         | 7          | 1           | 1            | 1          | draw-other    |
| Work or school      | 48         | 42         | 6          | 7           | 1            | 1          | draw-work     |
| Bus or shuttle stop | 9          | 2          | 5          | 2           | 3            | 1          | draw-bus      |
| <b>Total</b>        | <b>597</b> | <b>513</b> | <b>109</b> | <b>64</b>   | <b>15</b>    | <b>11</b>  |               |

|                     | Total         | Drive        | Walk         | Ride a bike  | Take the bus | Call a car  |  |
|---------------------|---------------|--------------|--------------|--------------|--------------|-------------|--|
| Shopping or errands | 55.9%         | 52.1%        | 7.7%         | 3.5%         | 1.0%         | 0.7%        |  |
| Fun or recreation   | 25.6%         | 19.3%        | 7.5%         | 5.5%         | 0.7%         | 0.7%        |  |
| Something else      | 8.9%          | 7.2%         | 1.2%         | 0.2%         | 0.2%         | 0.2%        |  |
| Work or school      | 8.0%          | 7.0%         | 1.0%         | 1.2%         | 0.2%         | 0.2%        |  |
| Bus or shuttle stop | 1.5%          | 0.3%         | 0.8%         | 0.3%         | 0.5%         | 0.2%        |  |
| <b>Total</b>        | <b>100.0%</b> | <b>85.9%</b> | <b>18.3%</b> | <b>10.7%</b> | <b>2.5%</b>  | <b>1.8%</b> |  |

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**Demographic Surveys**                    **239**

Do you live in, work in, or visit Torrance? Select all that apply.

|                        |     |       |
|------------------------|-----|-------|
| I live in Torrance     | 190 | 79.5% |
| I work in Torrance     | 94  | 39.3% |
| I often visit Torrance | 41  | 17.2% |
| (blanks)               | 9   | 3.8%  |

What is your home ZIP Code?

|       |    |       |
|-------|----|-------|
| 90503 | 67 | 28.0% |
| 90501 | 40 | 16.7% |
| 90504 | 33 | 13.8% |
| 90505 | 15 | 6.3%  |
| 90277 | 14 | 5.9%  |
| 90278 | 4  | 1.7%  |
| 90275 | 3  | 1.3%  |
| 90717 | 2  | 0.8%  |
| 90731 | 2  | 0.8%  |

|          |    |       |
|----------|----|-------|
| 90808    | 2  | 0.8%  |
| 90814    | 2  | 0.8%  |
| 90247    | 1  | 0.4%  |
| 90249    | 1  | 0.4%  |
| 90250    | 1  | 0.4%  |
| 90262    | 1  | 0.4%  |
| 90266    | 1  | 0.4%  |
| 90274    | 1  | 0.4%  |
| 90291    | 1  | 0.4%  |
| 90713    | 1  | 0.4%  |
| 90805    | 1  | 0.4%  |
| 90807    | 1  | 0.4%  |
| 90810    | 1  | 0.4%  |
| 90815    | 1  | 0.4%  |
| 91325    | 1  | 0.4%  |
| 9087     | 1  | 0.4%  |
| (blanks) | 41 | 17.2% |

How do you normally get around in Torrance? Select all that apply.

|                    |     |                          |
|--------------------|-----|--------------------------|
| Drive              | 232 | 97.1%                    |
| Walk               | 117 | 49.0%                    |
| Ride a bike        | 51  | 21.3%                    |
| Take the bus       | 10  | 4.2%                     |
| Call a car or taxi | 13  | 5.4%                     |
| Other              | 1   | 0.4% Write-in Skateboard |
| (blanks)           | 5   | 2.1%                     |

How comfortable would you be walking in Torrance?

|                               |     |       |
|-------------------------------|-----|-------|
| Very Comfortable              | 114 | 47.7% |
| Somewhat Comfortable          | 76  | 31.7% |
| Neither Comfortable nor Uncon | 22  | 9.2%  |
| Somewhat Uncomfortable        | 14  | 5.9%  |
| Very Uncomfortable            | 9   | 3.9%  |
| (blanks)                      | 4   | 1.7%  |

How comfortable would you be taking the bus in Torrance?

|                               |    |       |
|-------------------------------|----|-------|
| Very Comfortable              | 33 | 13.8% |
| Somewhat Comfortable          | 26 | 11.0% |
| Neither Comfortable nor Uncon | 73 | 30.5% |
| Somewhat Uncomfortable        | 56 | 23.4% |
| Very Uncomfortable            | 45 | 18.7% |
| (blanks)                      | 6  | 2.5%  |

How comfortable would you be riding a bike in Torrance?

|                  |    |       |
|------------------|----|-------|
| Very Comfortable | 51 | 21.3% |
|------------------|----|-------|

|                                      |    |       |
|--------------------------------------|----|-------|
| <b>Somewhat Comfortable</b>          | 47 | 19.5% |
| <b>Neither Comfortable nor Uncon</b> | 60 | 25.1% |
| <b>Somewhat Uncomfortable</b>        | 40 | 16.7% |
| <b>Very Uncomfortable</b>            | 36 | 15.3% |
| <b>(blanks)</b>                      | 5  | 2.1%  |

What races or ethnicities do you identify with? Select all that apply.

|                                      |     |                                 |
|--------------------------------------|-----|---------------------------------|
| <b>White or Caucasian</b>            | 134 | 56.1%                           |
| <b>Asian or Pacific Islander</b>     | 48  | 20.1%                           |
| <b>Latinx or Hispanic</b>            | 39  | 16.3%                           |
| <b>African American or Black</b>     | 6   | 2.5%                            |
| <b>Native American or Alaskan Na</b> | 3   | 1.3%                            |
| <b>Other</b>                         | 1   | 0.4% <b>Write-in</b> Portuguese |
| <b>Prefer not to say</b>             | 18  | 7.5%                            |
| <b>(blanks)</b>                      | 13  | 5.4%                            |

What is your age?

|                          |    |       |
|--------------------------|----|-------|
| <b>Under 18</b>          | 1  | 0.4%  |
| <b>18 to 34</b>          | 33 | 13.8% |
| <b>35 to 49</b>          | 65 | 27.2% |
| <b>50 to 64</b>          | 82 | 34.3% |
| <b>65 or older</b>       | 37 | 15.5% |
| <b>Prefer not to say</b> | 4  | 1.7%  |
| <b>(blanks)</b>          | 17 | 7.1%  |

What is your gender identity?

|                                     |     |       |
|-------------------------------------|-----|-------|
| <b>Female</b>                       | 147 | 61.5% |
| <b>Male</b>                         | 74  | 31.0% |
| <b>Gender nonconforming or nonl</b> | 2   | 0.8%  |
| <b>Prefer not to say</b>            | 7   | 2.9%  |
| <b>Other</b>                        | 0   | 0.0%  |
| <b>(blanks)</b>                     | 9   | 3.8%  |

What is your income level?

|                               |    |       |
|-------------------------------|----|-------|
| <b>Less than \$20,000</b>     | 6  | 2.5%  |
| <b>\$20,000 to \$34,999</b>   | 5  | 2.1%  |
| <b>\$35,000 to \$49,999</b>   | 21 | 8.8%  |
| <b>\$50,000 to \$74,999</b>   | 22 | 9.2%  |
| <b>\$75,000 to \$99,999</b>   | 31 | 13.0% |
| <b>\$100,000 to \$149,999</b> | 50 | 20.9% |
| <b>\$150,000 to \$249,999</b> | 39 | 16.3% |
| <b>\$250,000 or more</b>      | 12 | 5.0%  |
| <b>Prefer not to say</b>      | 35 | 14.6% |
| <b>(blanks)</b>               | 18 | 7.5%  |

Appendix C –  
Recommended Sign Locations  
Attribute Table

| ID | NAME                              | INTERSECTION_X                    | INTERSECTION_Y              | RECOMMENDED_LOCATION  | QUANTITY | TYPE | STRATEGY  | FOCUS_AREA        | NOTES  | Sign                   |
|----|-----------------------------------|-----------------------------------|-----------------------------|---|----------|------|-----------|-------------------|--|------------------------|
| 0  | 1TorranceBlvdHawthorneBlvd        | Torrance Blvd                     | Hawthorne Blvd              | S leg of Hawthorne Blvd   | 1        | 1    | Enhanced  | Central           | Del Amo area is lower priority for Gateway signs and may need to be part of larger placemaking or district branding effort.                            | Gateway                |
| 1  | 1CarsonStCabrilloAve              | Carson St                         | Cabrillo Ave                | In island on NW corner of intersection.   | 1        | 1    | Essential | Historic Downtown |  | Gateway                |
| 2  | 1TorranceBlvdCravensAve           | Torrance Blvd                     | Cravens Ave                 | W leg of Torrance Blvd  | 1        | 1    | Enhanced  | Historic Downtown |  | Gateway                |
| 3  | 1ViaMonteDoroPalosVerdesBlvd      | Via Monte Doro                    | Palos Verdes Blvd           | S leg of Palos Verdes Blvd  | 1        | 1    | Essential | Beach             |  | Gateway                |
| 4  | 1TorranceBlvdMapleAve             | Torrance Blvd                     | Maple Ave                   | NW corner of intersection   | 1        | 1    | Essential | Central           | Should say Torrance Civic Center.  | Gateway                |
| 5  | 1190thStHawthorneBlvd             | 190th St                          | Hawthorne Blvd              | E leg of W 190th St   | 1        | 1    | Essential |                   | Consider screening the railroad overcrossing over the east leg of 190th St with an overpass gateway sign to make use of the railroad bridge structure. | Gateway                |
| 6  | 1SepulvedaBlvdWesternAve          | Sepulveda Blvd                    | Western Ave                 | W leg of Sepulveda Blvd   | 1        | 1    | Essential |                   |  | Gateway                |
| 7  | 1SepulvedaBlvdHawthorneBlvd       | Sepulveda Blvd                    | Hawthorne Blvd              | W leg of Sepulveda Blvd   | 1        | 1    | Enhanced  | Central           | Del Amo area is lower priority for Gateway signs and may need to be part of larger ""place making"" effort   | Gateway                |
| 8  | 1TorranceBlvdSartoriAve           | Torrance Blvd                     | Sartori Avenue              | E leg Torrance Blvd., median  | 1        | 1    | Essential | Historic Downtown |  | Gateway                |
| 9  | 2ArtesiaBlvdPrairieAve            | Artesia Blvd                      | Prairie Ave                 | E leg Western Avenue; N/S legs of Prairie Ave   | 3        | 2    | Essential |                   | Place sign on W leg of Western to be visible from Freeway exit   | Vehicle Directional    |
| 10 | 2190thStPrairieAve                | 190th St                          | Prairie Ave                 | E/W legs of 190th St; N/S legs of Prairie Ave   | 4        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 11 | 2TorranceBlvdMadronaAve           | Torrance Blvd                     | Madrona Ave                 | E/W legs of Torrance Blvd; S leg of Madrona Ave   | 3        | 2    | Essential | Central           |  | Vehicle Directional    |
| 12 | 2SepulvedaBlvdMadronaAve          | Sepulveda Blvd                    | Madrona Ave                 | E leg of Sepulveda Blvd   | 1        | 2    | Essential | Central           |  | Vehicle Directional    |
| 13 | 2SepulvedaBlvdHawthorneBlvd       | Sepulveda Blvd                    | Hawthorne Blvd              | W leg of Sepulveda Blvd   | 1        | 2    | Essential | Central           |  | Vehicle Directional    |
| 14 | 2HawthorneBlvdPacificCoastHighway | Hawthorne Blvd                    | Pacific Coast Highway       | W leg of Pacific Coast Highway; N/S legs of Hawthorne Blvd  | 3        | 2    | Essential | Airport           |  | Vehicle Directional    |
| 15 | 2TorranceBlvdSartoriAve           | Torrance Blvd                     | Sartori Ave                 | E/W legs of Torrance Blvd   | 2        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 16 | 2CarsonStCabrilloAve              | Carson St                         | Cabrillo Ave                | E/W leg of Carson St; S leg of Cabrillo Ave   | 3        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 17 | 2SartoriAveCabrilloAve            | Sartori Ave                       | Cabrillo Ave                | N/S legs of Cabrillo Ave  | 2        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 18 | 2TorranceBlvdWesternAve           | Torrance Blvd                     | Western Ave                 | N/S legs of Western Ave   | 2        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 19 | 2CarsonStWesternAve               | Carson St                         | Western Ave                 | N/S legs of Western Ave   | 2        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 20 | 1DelAmoBlvdCrenshawBlvd           | Del Amo Blvd                      | Crenshaw Blvd               | W leg of Del Amo Blvd; N/S legs of Crenshaw Blvd  | 3        | 2    | Essential |                   |  | Vehicle Directional    |
| 21 | 2SepulvedaBlvdWesternAve          | Sepulveda Blvd                    | Western Ave                 | N/S legs of Western Ave   | 2        | 2    | Essential |                   |  | Vehicle Directional    |
| 22 | 2PacificCoastHighwayCrenshawBlvd  | Pacific Coast Highway             | Crenshaw Blvd               | E/W legs of Pacific Coast Highway; N/S leg of Crenshaw Blvd   | 4        | 2    | Essential | Airport           |  | Vehicle Directional    |
| 23 | 2PaseoDeLaPlayaPalosVerdesBlvd    | Paseo De La Playa                 | Palos Verdes Blvd           | S leg of Palos Verdes Blvd  | 1        | 2    | Essential | Beach             |  | Vehicle Directional    |
| 24 | 2CalleMiramarPalosVerdesBlvd      | Calle Miramar                     | Palos Verdes Blvd           | N leg of Palos Verdes Blvd  | 1        | 2    | Essential | Beach             |  | Vehicle Directional    |
| 25 | 2SepulvedaBlvdCrenshawBlvd        | Sepulveda Blvd                    | Crenshaw Blvd               | E/W legs of Sepulveda Blvd; S leg of Crenshaw Blvd  | 3        | 2    | Essential |                   |  | Vehicle Directional    |
| 26 | 2190thStWesternAve                | 190th St                          | Western Ave                 | E/W legs of 190th St; N leg of Western Ave  | 3        | 2    | Enhanced  |                   | Place signs to be visible from freeway exits.  | Vehicle Directional    |
| 27 | 2ArtesiaBlvd405Ramp               | Artesia Blvd                      | 405 Ramp                    | E leg of Artesia Blvd   | 1        | 2    | Essential |                   |  | Vehicle Directional    |
| 28 | 2190thStCrenshawBlvd              | 190th St                          | Crenshaw Blvd               | N leg of Crenshaw Blvd  | 1        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 29 | 2ArtesiaBlvdHawthorneBlvd         | Artesia Blvd                      | Hawthorne Blvd              | E leg of Artesia Blvd   | 1        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 30 | 2190thStHawthorneBlvd             | 190th St                          | Hawthorne Blvd              | W leg of 190th  | 1        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 31 | 2TorranceBlvdHawthorneBlvd        | Torrance Blvd                     | Hawthorne Blvd              | E/W legs of Torrance Blvd; N/S legs of Hawthorne Blvd   | 4        | 2    | Essential | Central           |  | Vehicle Directional    |
| 32 | 2CarsonStHawthorneBlvd            | Carson St                         | Hawthorne Blvd              | E leg of Carson St  | 1        | 2    | Essential | Central           |  | Vehicle Directional    |
| 33 | 2CarsonStMadronaAve               | Carson St                         | Madrona Ave                 | N/S leg of Madrona Ave  | 2        | 2    | Enhanced  | Central           |  | Vehicle Directional    |
| 34 | 2SepulvedaBlvdPalosVerdesBlvd     | Sepulveda Blvd                    | Palos Verdes Blvd           | W leg of Sepulveda Blvd; S leg of Palos Verdes Blvd   | 2        | 2    | Essential |                   |  | Vehicle Directional    |
| 35 | 2ViaRivieraCalleMiramar           | Via Riviera                       | Calle Miramar               | N/S legs of Calle Miramar   | 2        | 2    | Essential | Beach             |  | Vehicle Directional    |
| 36 | 2CalleMayorPalosVerdesBlvd        | Calle Mayor                       | Palos Verdes Blvd           | E leg of Calle Mayor  | 1        | 2    | Essential | Beach             |  | Vehicle Directional    |
| 37 | 2PacificCoastHighwayCalleMayor    | Pacific Coast Highway             | Calle Mayor                 | E/W legs of Pacific Coast Highway   | 2        | 2    | Essential |                   |  | Vehicle Directional    |
| 38 | 2TorranceBlvdCrenshawBlvd         | Torrance Blvd                     | Crenshaw Blvd               | W leg of Torrance Blvd; N/S legs of Crenshaw Blvd   | 3        | 2    | Essential | Historic Downtown |  | Vehicle Directional    |
| 39 | 2182ndStPrairieAve                | 182nd St                          | Prairie Ave                 | E/W leg of 182nd St; N/S legs of Prairie Ave  | 4        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 40 | 2405RampCrenshawBlvd              | 405 Ramp                          | Crenshaw Blvd               | At freeway exit   | 1        | 2    | Essential |                   |  | Vehicle Directional    |
| 41 | 2182ndStCrenshawBlvd              | 182nd St                          | Crenshaw Blvd               | W leg of 182nd St   | 1        | 2    | Essential |                   | Place sign to be visible from freeway exit.  | Vehicle Directional    |
| 42 | 2PlazadelAmoCabrilloAve           | Plaza del Amo                     | Cabrillo Ave                | E/W leg Plaza del Amo; N leg Cabrillo Ave   | 3        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 43 | 2PlazadelAmoWashingtonAve         | Plaza del Amo / Washington Ave    | Arlington Ave               | E leg Plaza del Amo   | 1        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 44 | 2CarsonStCrenshawBlvd             | Carson St                         | Crenshaw Blvd               | E/W legs Carson St; N/S legs Crenshaw Blvd  | 4        | 2    | Enhanced  | Historic Downtown |  | Vehicle Directional    |
| 45 | 2ArtesiaBlvdCrenshawBlvd          | Artesia Blvd                      | Crenshaw Blvd               | E/W legs Artesia Blvd; N/S legs Crenshaw Blvd   | 4        | 2    | Enhanced  |                   |  | Vehicle Directional    |
| 46 | 3ViaRivieraCalleMiramar           | Via Riviera                       | Calle Miramar               | S leg of Calle Miramar, both sides  | 2        | 3    | Enhanced  | Beach             |  | Pedestrian Directional |
| 47 | 3CalleMiramarPalosVerdesBlvd      | Calle Miramar                     | Palos Verdes Blvd           | S leg of Palos Verdes Blvd, both sides  | 2        | 3    | Enhanced  | Beach             |  | Pedestrian Directional |
| 48 | 3TorranceBlvdEngraciaAve          | Torrance Blvd                     | Engracia Ave                | W leg of Torrance Blvd., S side.  | 1        | 3    | Enhanced  | Historic Downtown |  | Pedestrian Directional |
| 49 | 3SartoriAveCabrilloAve            | Sartori Ave                       | Cabrillo Ave                | Thomas Keller Memorial Park (NW corner of intersection)   | 1        | 3    | Enhanced  | Historic Downtown |  | Pedestrian Directional |
| 50 | 3SierraStMadridAve                | Sierra St                         | Madrid Ave                  | Existing rail ROW between Madrid Ave. and Sierra St., either side   | 1        | 3    | Enhanced  | Historic Downtown | To connect future Transit Center to Historic Downtown  | Pedestrian Directional |
| 51 | 3TorranceBlvdMadridAve            | Torrance Blvd                     | Madrid Ave                  | W leg of Torrance Blvd., both sides. E. leg of Torrance Blvd., north side.                                  | 3        | 3    | Enhanced  | Historic Downtown | To connect future Transit Center to Historic Downtown  | Pedestrian Directional |
| 52 | 3TorranceBlvdCravensAve           | Torrance Blvd                     | Cravens Ave                 | W. leg of Torrance Blvd., both sides. S leg of Cravens Ave., either side.                                   | 3        | 3    | Enhanced  | Historic Downtown |  | Pedestrian Directional |
| 53 | 3TorranceBlvdSartoriAve           | Torrance Blvd                     | Sartori Ave                 | E leg of Torrance Blvd., both sides; W leg of Torrance Blvd., N. side; S. leg of Sartori Ave., either side. | 4        | 3    | Enhanced  | Historic Downtown |  | Pedestrian Directional |
| 54 | 3CarsonStCabrilloAve              | Carson St                         | Cabrillo Ave                | W leg Carson St., north side  | 1        | 3    | Enhanced  | Historic Downtown | Place for visibility by bus riders   | Pedestrian Directional |
| 55 | 3PlazadelAmoCabrilloAve           | Plaza del Amo                     | Cabrillo Ave                | NE corner; SW corner  | 2        | 3    | Enhanced  |                   | Include bicycle signage for people biking on planned West 223 St and Cabrillo Avenue lanes.  | Pedestrian Directional |
| 56 | 3PlazadelAmoArlingtonAve          | Plaza del Amo / Washington Avenue | Arlington Ave               | NW corner Arlington Avenue / Washington Avenue; SW corner Plaza Del Amo / Arlington Avenue                  | 2        | 3    | Enhanced  |                   | Include bicycle signage directing people to planned bike lanes on Arlington Avenue and Plaza del Amo.  | Pedestrian Directional |
| 57 | 3TorranceBlvdVanNessAve           | Torrance Boulevard                | Van Ness Ave / Cabrillo Ave | All corners   | 4        | 3    | Enhanced  | Historic Downtown |  | Pedestrian Directional |
| 58 | 4ElPradoAveSartoriAve             | El Prado Ave                      | Sartori Ave                 | S leg El Prado Avenue, either side.   | 1        | 4    | Essential | Historic Downtown |  | Pedestrian Kiosk       |
| 59 | 4PostAveSartoriAve                | Post Ave                          | Sartori Ave                 | E leg of Post Ave, either side  | 1        | 4    | Essential | Historic Downtown |  | Pedestrian Kiosk       |
| 60 | 4RailROWCrenshawBlvd              | Rail ROW                          | Crenshaw Blvd               | TBD based on future access to Transit Center  | 1        | 4    | Essential | Historic Downtown |  | Pedestrian Kiosk       |
| 61 | 4ElPradoAveCravensAve             | El Prado Ave                      | Cravens Ave                 | In park on W. side of Cravens Avenue  | 1        | 4    | Essential | Historic Downtown |  | Pedestrian Kiosk       |
| 62 | 4ViaRivieraPaseoDeLaPlaya         | Via Riviera                       | Paseo De La Playa           | Near entrance to parking lot  | 1        | 4    | Essential | Beach             |  | Pedestrian Kiosk       |
| 63 | 4PaseoDeLaConchaPaseoDeLaPlaya    | Paseo De La Concha                | Paseo De La Playa           | In Miramar Park   | 1        | 4    | Essential | Beach             |  | Pedestrian Kiosk       |
| 64 | 2DelAmoBlvdWesternAve             | Del Amo Blvd                      | Western Ave                 | N/S legs of Western Ave   | 2        | 2    | Enhanced  |                   | Wayfinding at this location may be supplemented with future placemaking signage efforts for the brewery district area.                                 | Vehicle Directional    |
| 65 | 2DelAmoBlvdMapleAve               | Del Amo Blvd                      | Maple Ave                   | E/W legs of Del Amo Blvd  | 2        | 2    | Enhanced  | Central           | Wayfinding at this location may be supplemented with future placemaking signage efforts for the brewery district area.                                 | Vehicle Directional    |