

Next stop: our healthy future.

AVIATION/96TH STREET FIRST/LAST MILE PLAN

3/22/19



Metro[®]

Los Angeles Metro

Jacob Lieb, First/Last Mile Planning

My La, First/Last Mile Planning

Joanna Chan, First/Last Mile Planning

Los Angeles World Airports

Glenda Silva, External Affairs Department

Consultants

Shannon Davis, Here LA

Amber Hawkes, Here LA

Chad So, Here LA

Aryeh Cohen, Here LA

Mary Reimer, Steer

Craig Nelson, Steer

Peter Piet, Steer

Christine Robert, The Robert Group

Nicole Ross, The Robert Group

Contents

D	Executive Summary	22	Recommendations
1	Overview	23	Pathways & Projects
		26	Aviation / 96th St. Station
2	Introduction	40	Next Steps
3	Introduction	41	Introduction
4	What is First/Last Mile?	42	Lessons Learned
5	Vision	43	Looking Forward
6	Planning for Changes		
8	Terminology		
10	Introducing the Station Area		Appendix
		A	Walk Audit Summary
		B	Existing Plans & Projects Memo
11	First/Last Mile Planning Around the Station	C	Pathway Origin Matrix
12	Aviation / 96th St. Station	D	Costing Assumptions / Details
		E	Funding Strategies & Funding Sources
14	Process		
15	Formulating the Plan		
16	Phases		

EXECUTIVE SUMMARY

This section introduces the Aviation/96 St. Station first/last mile project, and lists the key findings and recommendations that are within the Plan.

Overview of the Plan

The Aviation/96th St. First/Last Mile Plan is part of an ongoing effort to increase the accessibility, safety, and comfort of the area surrounding the future LAX/Metro station. The plan documents community-guided first/last mile improvements around the station.

In coordination with local jurisdictions and other agencies, including the City of Inglewood, City of Los Angeles, and LAWA, the Aviation/96th St. Station First/Last Mile Plan builds on the ongoing development and transportation changes occurring in the area. The Plan's recommendations recognize and complement existing planning and construction efforts. Funding for implementation has not yet been confirmed for this station, but potential funding sources are summarized in Appendix E.

Key Findings

This station faces unique challenges and opportunities from a first/last mile perspective. The area is characterized by long blocks and wide arterials, which are primarily designed for vehicle circulation; walking and bicycling around the area can be difficult.

Given existing conditions surrounding the station, important recommendations include:

- > Crosswalk improvements, such as high visibility striping, dual curb ramps, and pedestrian signals
- > Sidewalk improvements, such as new sidewalks along streets feeding the transit station, and repaving
- > Bicycle infrastructure that promotes safety, and includes

(where feasible) separation from vehicular traffic

- > More lighting for people walking, biking, or otherwise 'rolling' to the station at night
- > Visual enhancements that reflect the unique history and characteristics of the city and individual communities

Plan Contents

Introduction

This chapter explains why first/last mile is important to Metro. It defines and describes first/last mile planning, along with Metro's various first/last mile policies and commitments. It further summarizes the first/last mile challenges and opportunities in the area.

Existing Plans & Projects

There are many ongoing planning efforts around the station that will impact first/last mile planning. This chapter gives an overview of current and future plans in the area to better understand how first/last mile improvements will complement upcoming changes.

Process

This chapter describes the steps taken to create the plan, including development of a web application (web app) for the walk audit, project dashboard, stakeholder conversations, a community event, and report preparation.

Recommendations

The recommendations introduce first/last mile improvements for the station and include Tier 2 projects that are studied in more detail.

Next Steps

This short chapter describes the next steps after Metro Board adoption, focusing on implementation.

Lessons Learned

This chapter provides insights to others as they undergo first/last mile studies, sharing lessons learned about the process of analysis, community input, and the drafting of the pathway network.

Appendix

The Appendix includes key items produced during Plan formation: the Walk Audit Summary, Existing Plans & Projects Memo, the Pathway Origin Matrix, the Costing Assumptions/Details, and the Funding Plan.

INTRODUCTION

This chapter describes the intent of Metro's First/Last Mile Strategic Plan and the anticipated changes to the urban landscape around LAX. Information about terminology used throughout the Plan is described in detail.

Introduction

“ First/last mile planning will make it safer and more pleasant to walk, bike, and otherwise roll to Metro stations. ”

An individual's transit trip is understood as the entire journey from origin to destination. Individuals may walk, drive, ride a bicycle, take a train, or – in many cases – combine several modes to get to a destination. Bus and rail services often form the core of a trip, but transit riders complete the first and last portion on their own. As riders have different needs and preferences, a First/Last Mile Plan examines the areas around Metro stations at varying distances. Most people may only walk a half-mile to a station, but someone on a bicycle may be comfortable riding up to three miles to get to a transit station. The overall goal of first/last mile planning is to improve conditions surrounding stations to enhance an individual's entire journey – from beginning to end.

First/last mile planning will make it safer and more pleasant to walk, bike, and otherwise roll to Metro stations. Recommendations such as increased lighting can make people feel more safe and secure. Visual enhancements can provide a sense of place and comfort. As a result, successful identification of first/last mile challenges and improvements becomes part of how a community defines itself. Therefore, it is critical that communities are engaged throughout the planning and implementation stages of the first/last mile planning process.

What is First/Last Mile?

First/last mile improvements incorporate a range of urban design elements that respond to the context of each station. Though the streets that comprise Metro's first/last mile planning area typically fall outside the boundaries of Metro's jurisdiction, they remain critical components of an effective public transportation system. The easier it is to access a transit system, the more likely people are to use it.

Some examples of first/last mile improvements include:

- > Infrastructure for walking, biking, and rolling (e.g. bike lanes, bike parking, sidewalks, and crosswalks)
- > Shared use services (e.g. scooters, bike share, and car share)
- > Facilities to transfer or connect to a different mode of transportation (e.g. passenger drop-off areas and bus/rail interface improvements)
- > Information that simplifies travel, including signage, wayfinding, and technology (e.g. information kiosks and mobile apps)

“ Pathways identified in each station area will create an interconnected active transportation grid across Los Angeles County. ”

Vision & Policy

First/last mile improvements are a key element in Metro’s vision of promoting street networks that make traveling by transit safe, comfortable, and convenient. The vision stems from Metro Board Motions 14.1 and 14.2, passed in 2016.

- > Motion 14.1 is a broad, foundational resolution that instructed Metro to conduct first/last mile planning across its rail and busway stations.
- > Motion 14.2 allows local jurisdictions to count first/last mile improvements toward their 3% local contribution for rail projects.

The First/Last Mile Strategic Plan and Planning Guidelines (2014), describes a vision for improved station access throughout the LA region. The Strategic Plan lays out a process for identifying and analyzing existing conditions to develop a network of first/last mile improvements. Pathways identified in each station area will create an interconnected active transportation grid across Los Angeles County.

In Spring 2018, Metro completed the next step in the program, the Blue Line First/Last Mile Plan, which laid groundwork for the first/last mile community-based planning processes and represented the first application of the Strategic Plan. Ongoing first/last mile plans are also being conducted concurrently for the Foothill Gold Line Extension, the Purple Line Extension Phases 2 and 3, and the East San Fernando Valley Transit Corridor.

Planning for Changes

This First/Last Mile Plan has the opportunity to influence the changing landscape of the area. The Crenshaw/LAX Transit Project will connect to the Los Angeles International Airport (LAX) and to numerous new developments that are being planned and constructed.

Relevant Existing Plans

- > Century Streetscape Plan: Provides guidelines and standards for streetscape improvements along Century Boulevard within the City of Los Angeles (City of Los Angeles)
- > Hollywood Park Specific Plan/ LA Stadium and Entertainment District: Proposes a vibrant city center with an array of mixed-uses to enhance economic development (City of Inglewood)
- > Metro Crenshaw/LAX Transit Corridor Joint Development Strategic Plan: Identifies potential joint development sites and opportunities for integration with transit facilities (Metro)

Relevant Plans in Progress

- > Los Angeles International Airports Landside Access Modernization Program: Creates a ground transportation network to improve current traffic conditions and support multimodal access around LAX (LAWA)
- > Metro NextGen Bus Study: Restructures the existing Metro bus network to better respond to changing travel patterns across the region (Metro)

Relevant Development in the Works

- > Crenshaw/LAX Light-Rail Transit Project (Metro)
- > Los Angeles Stadium and Entertainment District (City of Inglewood)
- > Los Angeles Airport Automated People Mover (LAWA)
- > A potential new basketball arena (City of Inglewood)

From an Auto- to Transit-Oriented Culture

Existing infrastructure and development patterns in this area support an auto-oriented lifestyle. Automobile volumes and speeds are high along most of the city's arterials and major collectors. Given that the location of the new light rail alignment was formerly used as a freight corridor, the existing street design presents difficulties for those walking, biking, and rolling. Through our community engagement process, community members expressed enthusiasm about public transit and the new light rail line. This Plan identifies many opportunities to create safer access for those walking and rolling to the future station.

Community engagement was an important component of the Aviation/96th St. Station First/Last Mile Plan, and the process drew participation from local residents. Community members provided feedback through walk audits, stakeholder interviews, and community events. Feedback broadly supported first/last mile improvements. More details are outlined in the Process chapter.

Broader Concerns and Guidance

The planned developments surrounding the Aviation/96th St. station indicate a changing landscape and present potential challenges that need to be addressed. Metro is sensitive to both the benefits and drawbacks of new transportation investment and the related challenges of community change. Unintentional consequences of transportation investment, such as gentrification, can lead to rising property values and rents and can also cause displacement of existing low income residents and/or businesses. This can affect neighborhoods and individuals in various ways, including displacing the very residents who are most likely to use transit. Community engagement creates a space to capture hopes, visions, and concerns regarding unintended impacts, while also promoting a dialog around solutions.

“ Feedback broadly supported first/last mile improvements... ”

Additional policies and precedents inform this plan and acknowledge, in particular, the urgency for Metro and stakeholders to ensure that the benefits of transit investments are realized broadly and especially for existing residents. The Blue Line First/Last Mile: A Community-Based Process and Plan (<https://www.metro.net/projects/transit-oriented-communities/blue-line-flm/>) sets the bar for future first/last mile plans – engaging the community in every aspect of design and development and addressing broader historic inequities and consequences of disinvestment within the communities studied. Metro’s Transit Oriented Communities (TOC) Policy, adopted in June 2018, sets broad goals for realizing holistic land use and community development along transit corridors. Enhancing access to transit, deep community engagement, and preservation and stabilization of communities are key goals of the Policy. This plan proposes safe and comfortable routes to public transit, built upon support and feedback from the multiple lenses of the community. In addition, in February 2018, the Metro Board adopted the Metro Equity Platform Framework – a policy aimed at addressing equity disparities by employing the following strategies agency-wide:

- > Define and Measure
- > Listen and Learn
- > Focus and Deliver
- > Train and Grow

Equity concerns, as described above, were raised during community events and stakeholder conversations. As such, involved local jurisdictions and agencies are encouraged to continue a dialogue with the community about these issues and to address policies and programs that protect, preserve, and enhance existing communities and those most vulnerable to displacement or other unintended impacts Metro anticipates assisting in this effort as equity policies continue to evolve. Metro can provide guidance and assistance in these efforts as equity policies continue to evolve.

Terminology

First/Last Mile Walk Audit

During a walk audit, community members and other stakeholders investigate and analyze the urban realm, taking note of elements that make it easier or harder to access the Metro station. Typically, a walk audit is performed within a 1/2 mile – or 15-minute walk – from the Metro station being studied. The goal of a walk audit is to see and feel firsthand what it is like to walk and bike around the station area. During the first/last mile process, walk audits are performed early on, helping to build a foundational understanding of what currently works well and what can be improved along the streets around the existing or future transit station. The auditors in this study piloted Metro’s first/last mile web app, an online interface with comment categories and geo-location capabilities that followed participants as they walked. Information, notes, and pictures were captured in real time.

Walkshed

Maintaining consistency with Federal Transit Administration (FTA) policy, a walkshed is defined as the area around a transit station which a person would reasonably walk, approximately a half mile radius (or 10-15 minute walk).

Tier 2 Projects

This plan specifies a selection of “Tier 2 Projects” – four per station area – which were selected for further study. Using community input as a guide, the projects were identified by the City of Inglewood, Metro, and the consultant team. Criteria for project selection are described further in Chapter 4. There is much work already underway in and around the future station areas; these projects augment, rather than duplicate the efforts being designed or constructed currently. Selections intentionally exclude projects already in progress, which are represented as Tier 1 projects.

Pathway

The first/last mile process identifies a system of “Pathways” where pedestrian, bicycle, or other recommendations for improvements are concentrated. The goal of the pathway network is to clearly identify a series of routes that people can use, which make it easier and more pleasant to find and access the transit stations. Pathways are stratified hierarchically into arterials, collectors, and cut throughs. Pathway types are defined below.

Pathway Arterials

Pathway Arterials are the main connectors used to get to and from the Metro station. Arterials typically feed directly into and connect to the station. Pathway Arterials are different from the roadway “Arterials” that may be specified by a city’s mobility framework.

Pathway Collectors

Pathway Collectors are the secondary feeder routes that connect to the Arterials and ultimately the Metro station. Pathway Collectors tend to be smaller in scale and character than Arterials. Pathway Collectors are different from the roadway “Collectors” that may be specified by a city’s mobility framework.

Pathway Cut Throughs

In some cases, off-street passageways – either those that exist or those that can be added – make it easier for people to walk and/or bike to and from a transit station. These passageways are collectively referred to as Cut Throughs. Typically, Cut Throughs shorten walking or biking distance for transit riders. Not all stations have Cut Throughs identified.

This page is intentionally left blank.

INTRODUCING THE STATION AREA

This chapter describes the existing conditions that currently surround the Aviation/96th St. Station. As there are several planning documents and projects in progress that affect the future station, this chapter sets the foundation for the project recommendations in subsequent chapters.

First/Last Mile Planning Around the Station

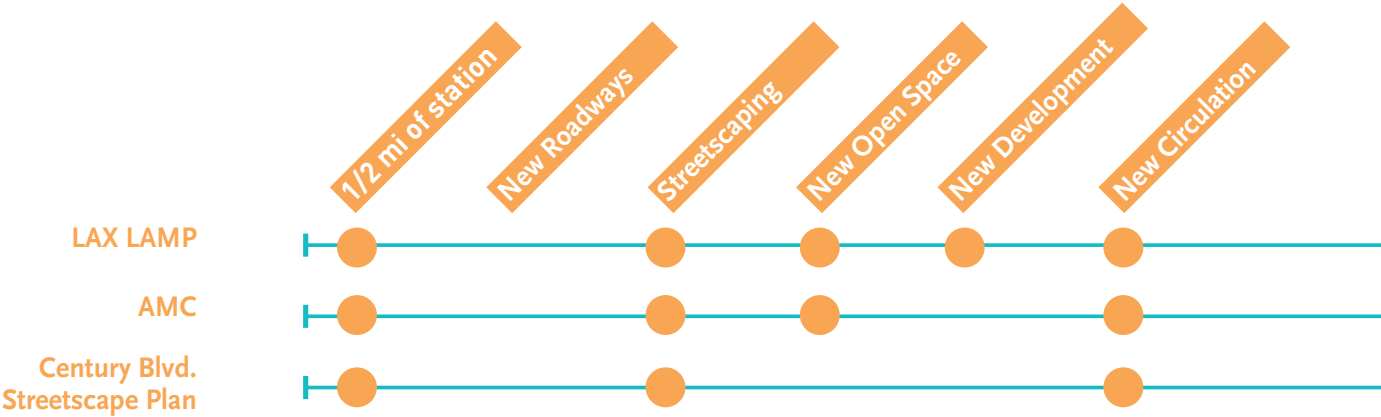
The Aviation/96th St. Station First/Last Mile Plan is being developed during a unique time. With the anticipated opening of the Los Angeles Airport Automated People Mover, the Airport Metro Connector, and other changes proposed as part of the Century Boulevard Streetscape Plan, the area is facing major changes. Several agencies have proactively adopted plans and projects that will guide development and roadway modifications surrounding the future Metro station.

In discussion with local jurisdictions and other agencies, including the City of Inglewood, City of Los Angeles and LAWA, this section introduces the

Aviation/96th St. Station area and describes the surrounding urban context. Changes proposed to the area impact first/last mile planning through the introduction of:

- > New roadway configurations
- > Streetscape enhancements
- > Multi-modal enhancements
- > New public and open spaces
- > New development, attractions, and destinations
- > Changes to circulation patterns

This chapter is an abbreviated summary of the Existing Plans and Projects Memo, which can be found in Appendix B.



Aviation/96th St. Station

Location

This station is located adjacent to Aviation Blvd., just south of Arbor Vitae St. Access to the station will be set back from Aviation Blvd., because of the location of the tracks. A second station sits nearby, to the south at Century Blvd. Both stations will provide access to LAX. The Aviation/96th St. station will provide direct connection to the Airport Metro Connector and a nearby connection to the Consolidated Rental Car Facility (CONRAC), and the Intermodal Transfer Facility (ITF).

Existing Access Concerns

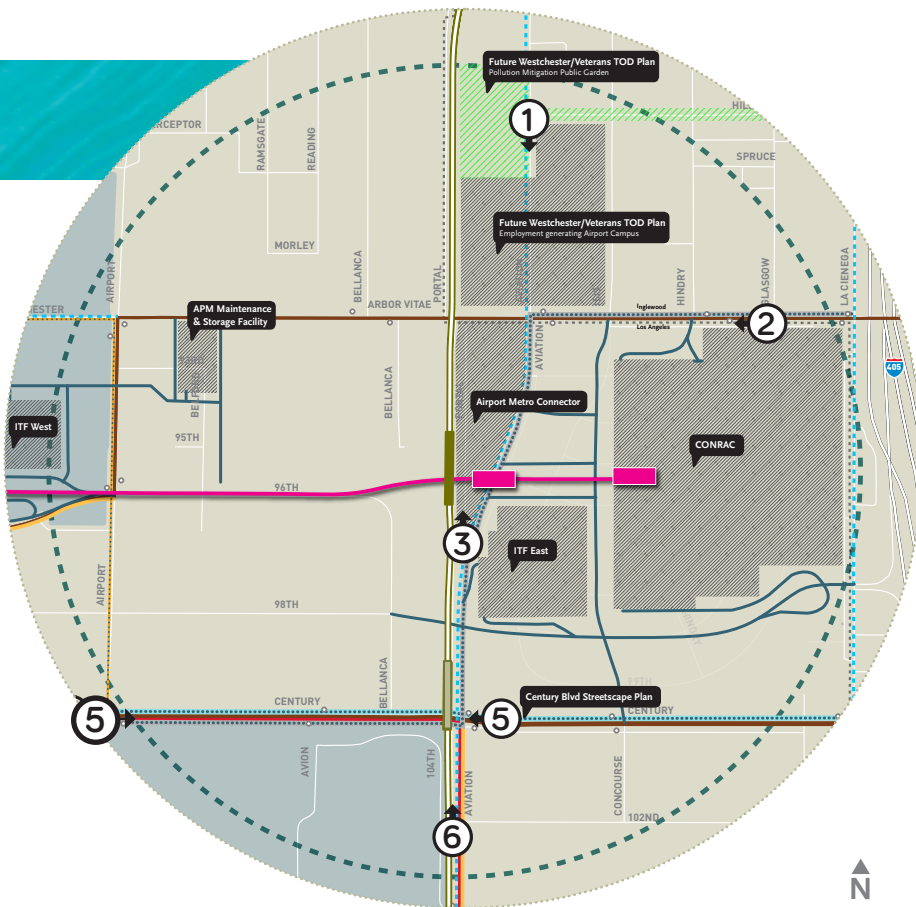
In this area, long blocks and vehicular-oriented streets make first/last mile improvements especially important. In addition, intuitive wayfinding will be critical to help users navigate future destinations and transportation options.

Relevant Plans and Projects

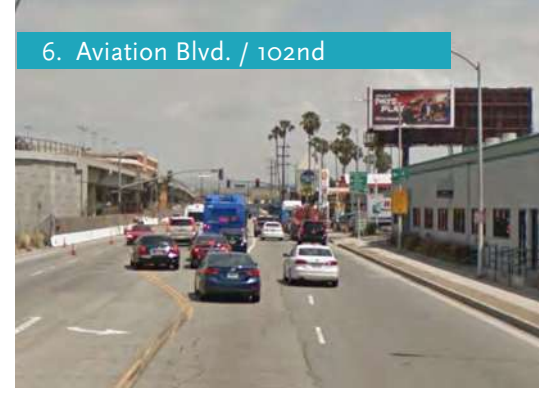
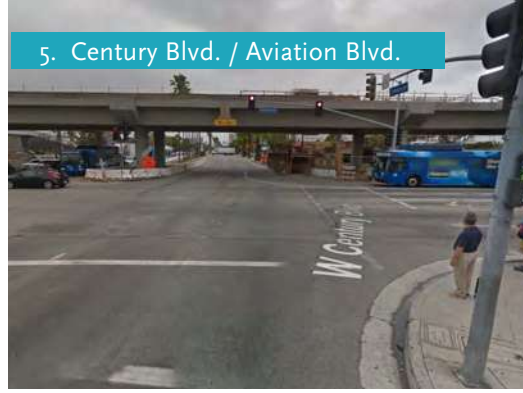
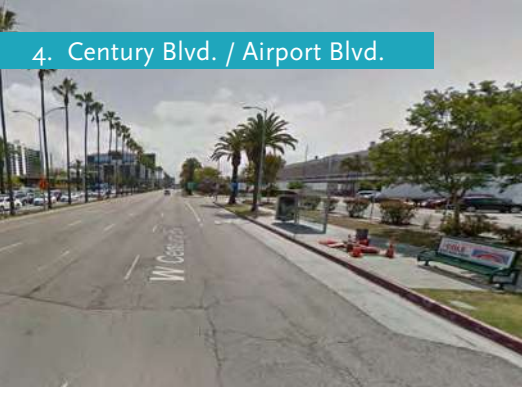
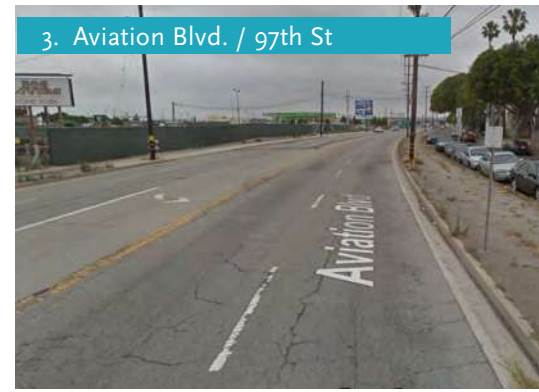
- > Century Boulevard Streetscape Plan
- > Airport Metro Connector (AMC) – in progress
- > LAX Landside Access and Modernization Plan (LAMP) – in progress
 - » LAX Automated People Mover (APM)
 - » Consolidated Rental Car Facility (CONRAC)
 - » Intermodal Transportation Facility East/West (ITF)
 - » Roadway Improvements

First/Last Mile Implications

- > The Aviation/96th St. Station will act as the main transit connection to LAX. The station itself will be a component of the larger Airport Metro Connector, a hub that will allow transit connections to the CONRAC, the ITF, the APM, and to other public transit. First/last mile improvements should take into consideration those transferring or accessing these destinations and facilities.
- > The Aviation/96th St. Station will undergo a series of improvements that include a bike hub at the station, multi-use paths, protected bike lanes, and enhanced pedestrian streetscapes over the next few years as part of the larger AMC project.
- > Given the hub of activity slated to occur near and around the station, district identity and signage may be needed.
- > Additional multi-modal transportation amenities should be incorporated to ensure a seamless transfer for visitors, transit riders, employees, and residents alike.
- > There may also be a need to fill gaps in the multi-modal network that may arise from multiple efforts managed by different agencies.



- Metro Crenshaw / LAX Line
- Aviation / 96th St. Station
- Ingleswood City Boundary
- Automated People Mover Route
- Automated People Mover Stop
- Half Mile Radius From Station
- Los Angeles International Airport
- Roadway Speed Limit > 35mph
- Metro Local Bus Route 40
- Metro Non-Local Bus Routes 111, 117
- Bus Stop
- ATSP High Ridership (> 800 daily on & off boardings)
- Class II Bike Lane
- Planned Roadway
- Planned TOD Area
- Planned TOD Green Boulevards



PROCESS

This chapter describes the steps taken to develop this Plan. This chapter details steps that were new to the first/last mile planning process, such as the development of an online web audit app, the hosting of stakeholder conversations, and direct coordination with LAWA to refine the project recommendations.

Formulating the Plan

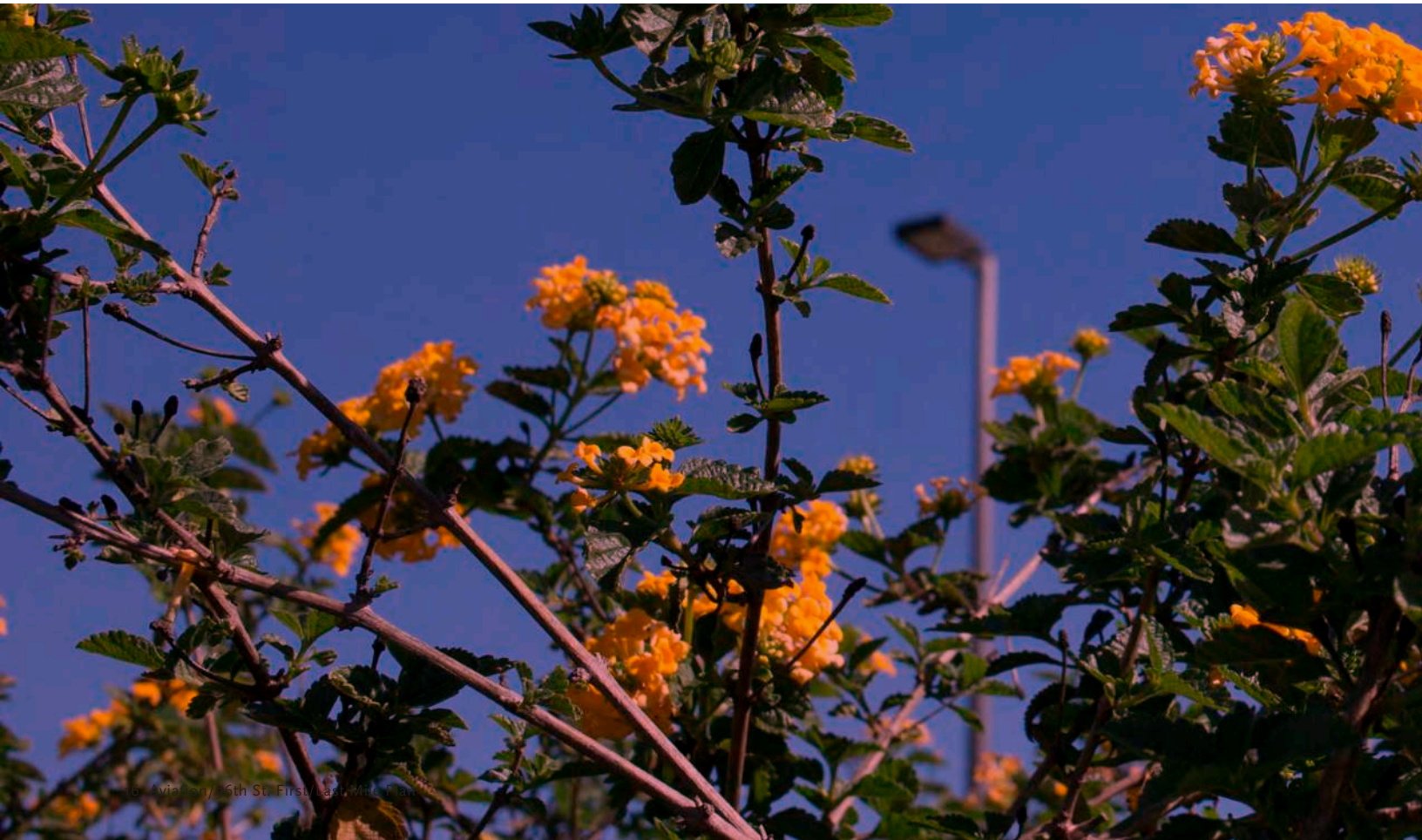
This Plan used a data-centered and community-centered process to build first/last mile recommendations for the station area. During the project, the team tested new ways to improve the first/last mile process, such as:

- > A data collection web application to increase walk audit efficiency
- > A project prioritization step (Tier 2 projects) to advance selected first/last mile improvements for implementation
- > An online project dashboard to promote transparency and engagement

The following pages detail each stage of the first/last mile process and the involvement from Metro, the consultant team, LAWA, the City of Los Angeles, the City of Inglewood, and the community.

Phases

Information Gathering



Drafting

Finalization & Prioritization

7

City & Agency
Input

9

Online
Dashboard

11

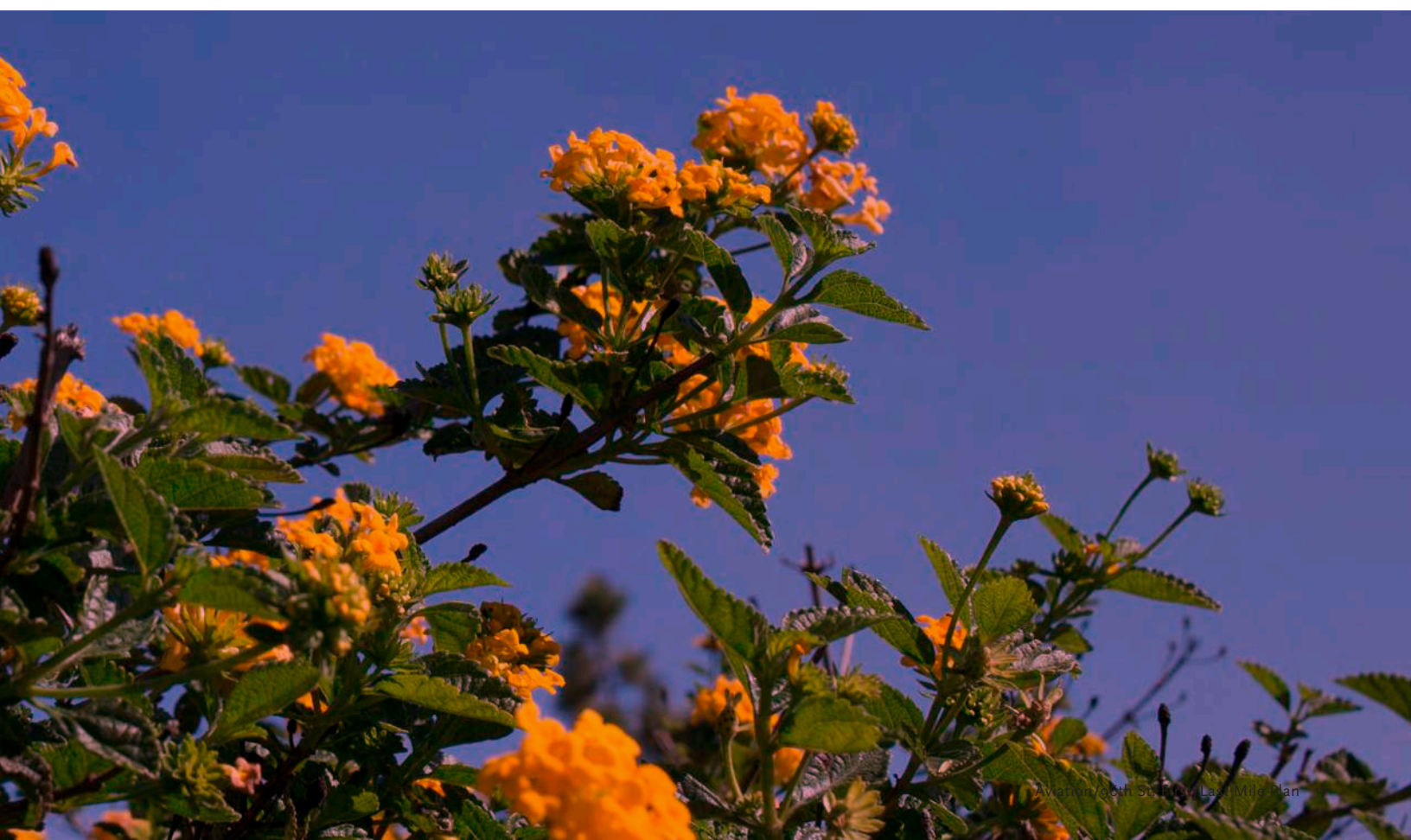
Online Survey

8

Final Plan

10

Prioritization
& Next Steps



1

Research & Discovery

Given the myriad of plans and projects that are adopted or underway around and within the station area, it was important to compile these and understand how they will impact or interact with first/last mile planning. Existing plans were analyzed and mapped. This initial analysis informed the base maps used during the walk audit and stakeholder interviews.

2

Web App Preparation

The information gathering phase for this project relied on the development of a first/last mile mobile web app. The web app integrates geo-located mapping with the first/last mile survey, digitizing the walk audit process. This was the first time that Metro used a digital tool for gathering data for a first/last mile study rather than an analog paper map-based approach. Community auditors used the web application during in-the-field review, placing digital pins to indicate where sidewalks or streets needed to be improved.

The web app greatly simplified and shortened the process of not only in-the-field reporting, but also synthesizing and interpreting the data gathered afterward.

3

Walk Audit

Community stakeholders audited the station area with the mobile web app in hand. The goal of the audit was to build a foundational understanding of the strengths and barriers around the station – what makes it easy or hard to access transit and what should be improved.

The audit process was structured so that each volunteer auditor was assigned a partner and a quadrant, given a tablet pre-loaded with the web app, and trained in safety and best audit procedures. Once out and walking, when auditors encountered a place along their walk route they felt illustrated first/last mile considerations, they could log a strength, barrier, or idea. In this way, the web app allowed auditors not only to comment on problems that need to be addressed (barriers), but also to reflect on elements that they felt were positive (strengths), and specific ideas for improvement (ideas). Once the main category was selected, auditors gave further detail using multiple choice options. On the back end, the project team could track responses in real time, compare responses, and quickly tally survey inputs to the post-audit questions integrated into the web app.

Metro's longer term goal is to develop the web app for use in all first/last mile projects, thus building a data set of existing conditions observed in walk audits around the County.

4 Stakeholder Conversations

After baseline information was compiled from the walk audit, stakeholder conversations were conducted with people who were knowledgeable about the station study area, such as local advocates, religious leaders, and community representatives. The goals of the conversations were to hear firsthand accounts of access challenges and to get in depth, geographically-specific insights about how to improve the environment around the station.

Conversations were held with representatives from:

- > Alliance for a Regional Solution to Airport Congestion
- > District 1 Block Captains
- > Faithful Central Bible Church
- > Gateway to LA BID
- > Healthy Active Streets
- > Hollywood Park / Stadium / Arena
- > Hollywood Studio Operations
- > Inglewood Airport Area Chamber of Commerce
- > Inglewood Area Ministerial Alliance
- > Inglewood Historic Preservation / Inglewood Cultural Arts
- > Inglewood Rotary Club
- > LAX Chamber of Commerce
- > LA County Bicycle Coalition
- > One-For-All
- > People for Mobility Justice
- > Ride On Bike Co-Op
- > South Bay Bicycle Coalition
- > US Veterans
- > Westchester Neighborhood Association

5 Draft Plan

All content generated in the walk audit and the stakeholder conversations was synthesized into a draft station area plan, showing selected pathway corridors where first/last mile improvements should be concentrated. This plan identified Pathway Arterials (the main routes that people will use to access the transit station), Pathway Collectors (the feeder routes), and Pathway Cut Throughs (paseos and passageways used by people walking or riding their bike).

Each identified pathway had corresponding improvement types identified, for example landscaping, bus stop enhancements, addition of bicycle facilities, new or enhanced crosswalks, etc.

6 Community Workshop

A community workshop was held to showcase the draft pathway map, vet recommendations, and begin to prioritize the solutions presented. The workshop ‘popped-up’ during the spring/summer of 2018 at:

- > Chamberfest near the Aviation/96th St. Station

At the workshop, a draft pathway map of the Aviation/96th St. station with several high-level project recommendations and comment cards were presented. Discussions with participants focused on the types and locations of first/last mile improvements needed. In summary, the following first/last mile improvements were most supported:

- > Pedestrian and bike lighting
- > New or improved sidealks
- > Bike facilities
- > Street furniture

Results from the community workshop is explained in more details in the Recommendations chapter’s Pathway Origins Map and Appendix C: Pathway Origin Matrix.

7 Online Survey

To augment the workshop, Metro developed an online survey that included the same questions that were asked during the workshop. Over the course of one month, the survey was advertised through Metro social media platforms. 862 people participated in the survey and identified which station (existing or future) they would use the most following the opening of the Crenshaw/LAX Transit Project. The Downtown Inglewood Station ranked the highest (30% of respondents), followed by the Crenshaw Station (20% of respondents) and the Fairview Heights Station (13% of respondents). Most respondents stated that they would use the new rail-line to get to special events (50%) and work (48%). Following these initial questions, participants were asked about streets surrounding the station they are most likely to use in the future. When asked about the types of first/last mile improvements that were most needed, the top three responses were pedestrian lighting (75%), improved sidewalks (70%), and signalized crosswalks (67%). (Note: participants were allowed to select more than one response to this question). The project team used findings from the survey to develop the final pathway network.

8 City & Agency Input

The City of Los Angeles, City of Inglewood, Los Angeles Council District 11, and the Los Angeles World Airports (LAWA) worked with Metro throughout the project process to vet concepts, give input about ongoing plans, and coordinate projects. These coordination meetings helped provide context for proposed plans and projects nearing or under construction around the future Aviation/96th St. Station.

9 Final Plan

The finalized pathway networks were completed based on the final rounds of input from the Los Angeles World Airports, City of Inglewood, City of Los Angeles, and the technical team. The final pathway shows specific locations for recommendations along points (e.g. intersections) and corridors (e.g. streets).

10

Dashboard

Map-based audit and outreach findings, along with the finalized pathway network map were organized into an interactive dashboard. The goal of the dashboard is to make the process and findings transparent, accessible, and downloadable by the public, and to directly tie findings from engagement to the project recommendations.

11

Prioritization & Next Steps

Once the pathway was finalized, four Tier 2 projects were identified and conceptually designed. Tier 2 projects address key corridors and connections, and were selected based on the criteria detailed in Chapter 4. An order of magnitude cost estimate was also prepared for each Tier 2 project.

RECOMMENDATIONS

This chapter outlines four project recommendations for the Aviation/96th St. Station. These recommendations require additional design analysis and do not necessarily represent the first-phase priorities for the station area.

Pathways & Projects

Pathways

A pathway network map has been drawn for the station area, detailing the proposed Pathway Arterials, Collectors, and Cut Throughs, and showing recommended spot and corridor improvement projects. The pathway network map should be used to understand the range of recommended improvements around the station. Elements on the pathway network map have been selected because they will most positively impact the experience of a transit rider accessing the Aviation/96th St. Station.

Tier 1, 2, & 3 Projects

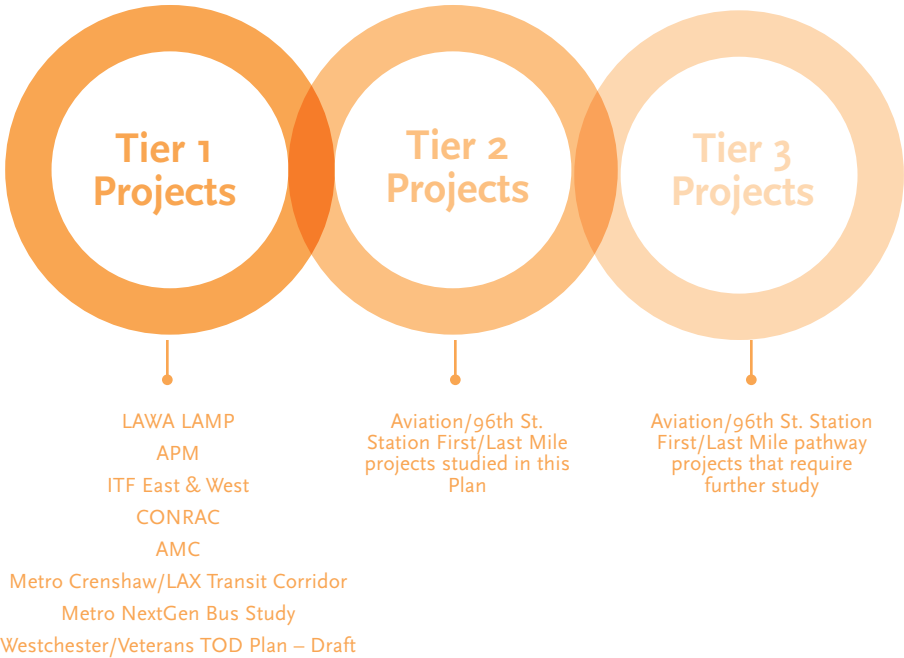
The pathway networks include Tier 1, 2, & 3 projects, which are described in the diagram below. Some projects identified in the pathway networks are already underway (Tier 1 projects). Others have been selected as a subset of an extensive list of recommendations from the pathway network map area for further study (Tier 2 projects). The remaining projects qualify as Tier 3.

Tier 2 projects have been chosen based on the following criteria:

- > Key spine/connection that poses unique first/last mile access opportunities
- > Corridor or link that has not yet been studied or is not already underway in pre-existing planning documents or design plans
- > Supported by the community or key stakeholders
- > Challenging locations that need additional design study

While the planning effort was scoped to analyze up to four Tier 2 projects for the station area, there may be several other projects identified in the overall pathway map that are important and could be prioritized as critical projects.

The Tier 2 projects defined in this chapter will help move the City of Los Angeles and LAWA forward with first/last mile planning and design. They are meant to provide a roadmap and design-outline for the area. Moving forward with the projects identified will ensure that local jurisdictions and agencies are not duplicating work already underway and is focusing resources on first/last mile projects that will positively impact a transit rider's experience. The City and LAWA can then select projects to move



forward with from the included Tier 2 projects, depending on available funding. The City and LAWA may choose to move forward with a full project, pieces of a project, or may decide to start with other projects from the pathway network maps.

> Trees and planting recommendations can range from street trees and understory planting to spot greening enhancements. Transparent trees in axonometric diagrams represent existing trees in the streetscape.

Level of Detail

These planning-level studies are reflective of existing right-of-way configurations and existing network data as provided to the Consultant team by Metro, LAWA, the City of Inglewood, and the City of Los Angeles. The studies are conceptual in nature; additional technical studies and traffic analysis will be needed as the designs move forward. Likewise, the cost estimates included are planning-level, intended to give a general sense of expected costs. More precise cost estimates will need to be assembled once detailed design drawings are prepared.

Design Assumptions

Several design assumptions are folded into the recommendations in this chapter. Specific assumptions are listed below:

- > All crosswalk enhancements also include recommendations for bi-directional curb ramps
- > All bus stop enhancements should be paired with wayfinding signage. Sidewalk widths to accommodate recommended bus shelters will require further analysis.

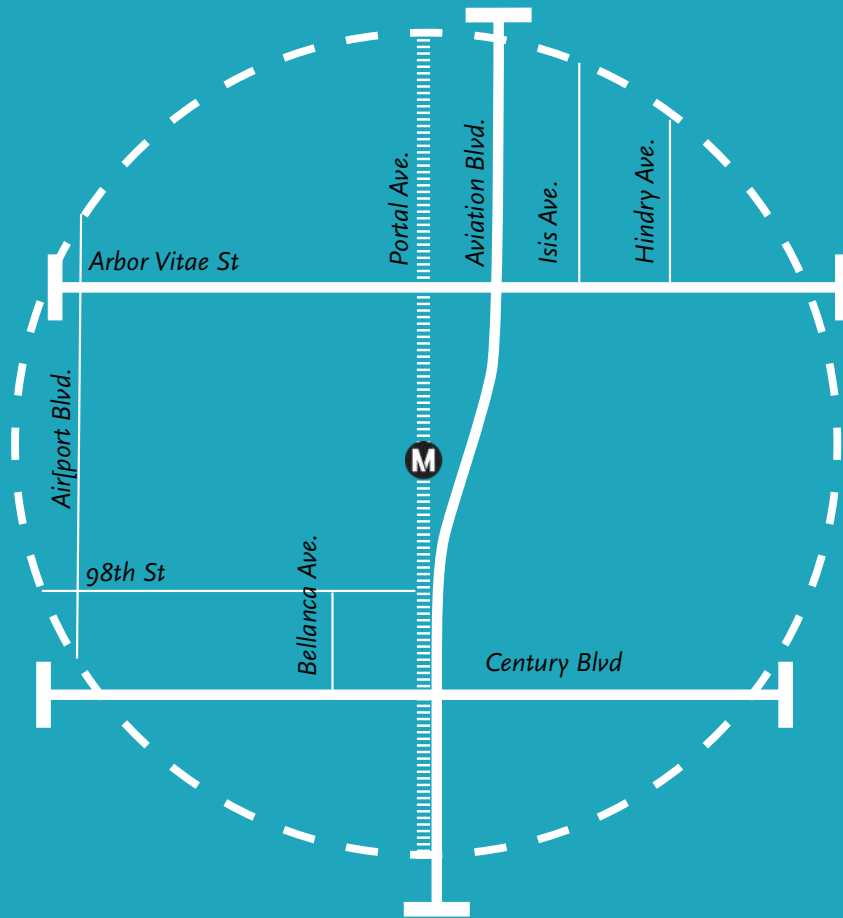
How this Chapter is Organized

Pathway Network Map. This showcases the pathway network and full suite of recommended improvements that have been developed after multiple rounds of review with the community, LAWA, the City of Inglewood, the City of Los Angeles, and Metro Staff. The pathway network map showcases important first/last mile corridors that will safely connect future transit riders to a station.

Idea Origin Map. This map shows how the pathway network was built – where ideas came from, whether from relevant existing and future plans, community input, and/or other stakeholder inputs. The Idea Origin Map helps tie the pathway network map to feedback received during the planning process.

Tier 2 Projects Detail. These pages describe the selected Tier 2 Projects for the station area. They include a description of the corridor and elements recommended, a key map, typical street section, axonometric vignette, and precedent imagery to bring the projects alive.

Tier 2 Projects

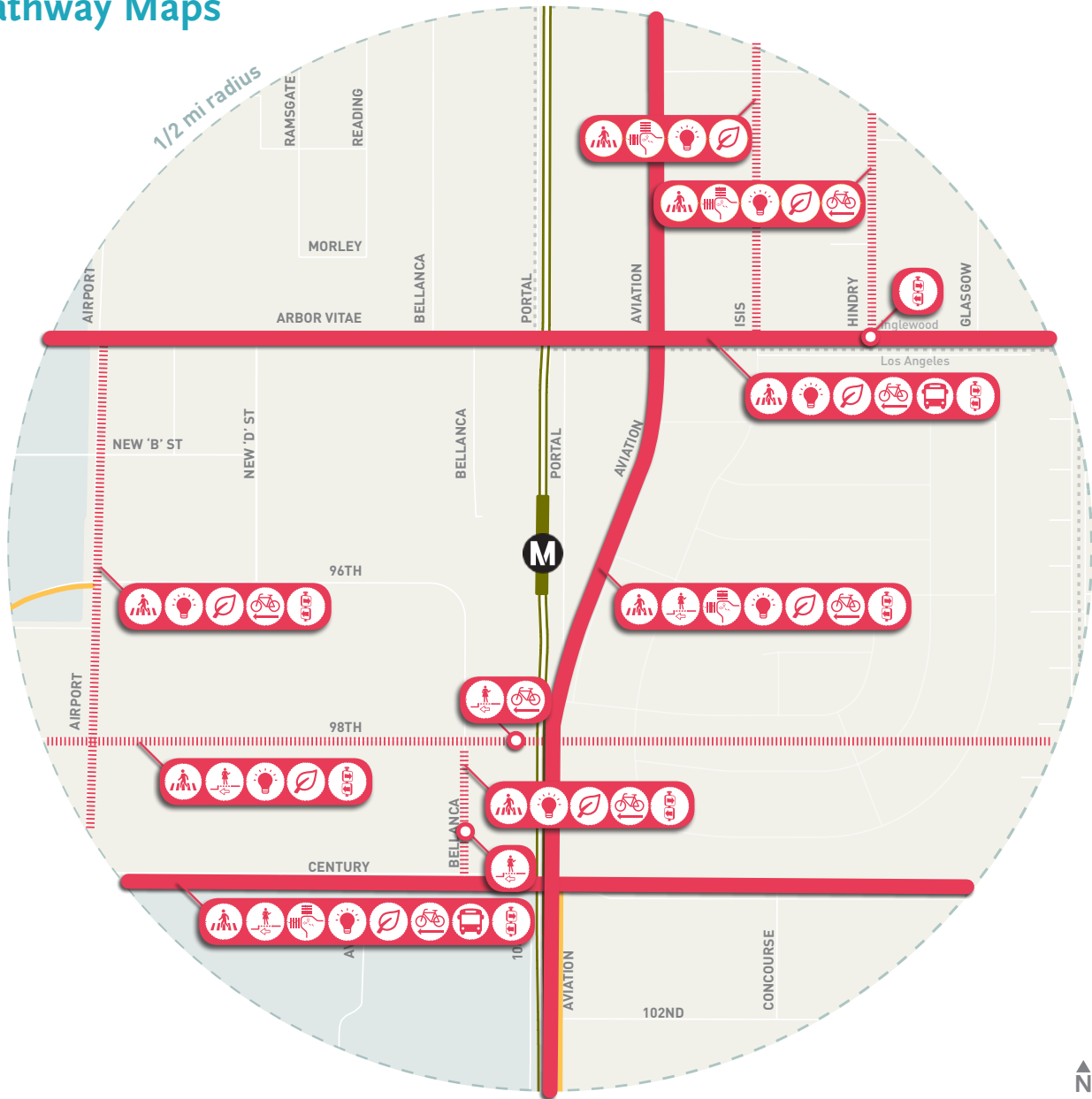


Aviation/96th St.
98th St.
Arbor Vitae Ave.
Bellanca Ave.
Hindry Ave.

Aviation/96th St. Station Pathway

The Aviation/96th St. Station is unique in that there are many plans already under construction. The pathway network shown below highlights many of the roadway reconfigurations that are moving forward and identifies first/last mile recommendations that target multi-modal gap closures.

Pathway Maps



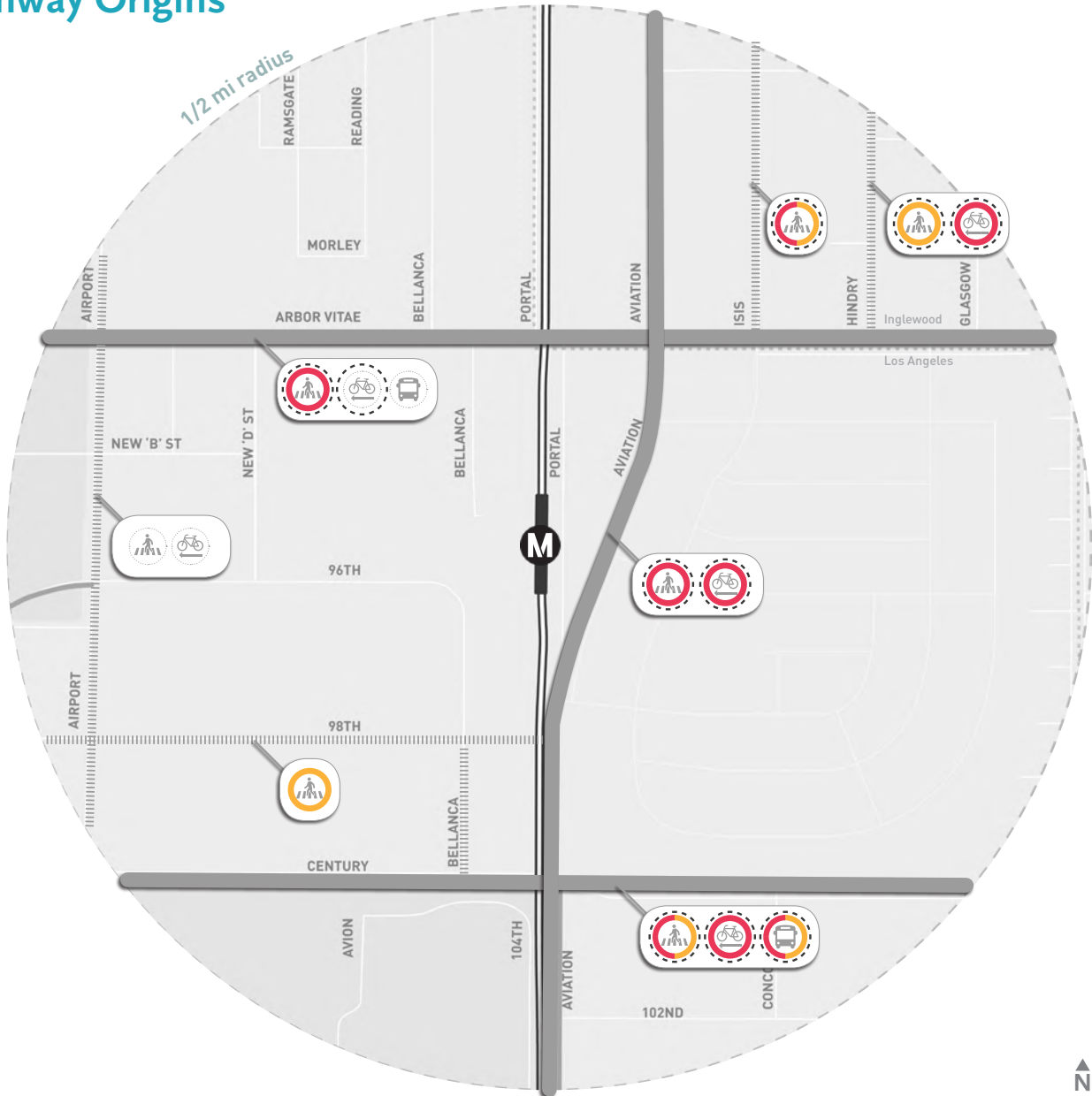
- | | | | | | | | | | | | |
|--|----------------------------|--|---------------------------|--|---------------------------|--|----------------------------|--|--------------------|--|-----------------------------|
| | Proposed FLM Arterials | | Proposed FLM Collectors | | Proposed FLM Cut Throughs | | Location-Specific Idea | | Corridor-Wide Idea | | Existing Class II Bike Lane |
| | New or Improved Crosswalks | | New or Improved Sidewalks | | Curb Improvements | | Pedestrian & Bike Lighting | | Street Furniture | | Landscaping & Shade |
| | Bike Facility or Amenity | | Bus Stop Improvements | | Wayfinding Signs | | Visual Enhancements | | Traffic Calming | | |

Project Tiers

	Arbor Vitae St.	Aviation Blvd.	Century Blvd.	98th St.	Airport Blvd.	Hindry Ave.	Isis Ave.	Bellanca Ave.
Tier 1	✓ ₁	✓	✓	✓ ₂	✓			✓ ₃
Tier 2	✓ ₁			✓ ₂		✓		✓ ₃
Tier 3							✓	

1. Arbor Vitae St.: Tier 1 includes restriping plans. Tier 2 adds protected bike lanes.
2. 98th St.: Tier 1 includes restriping plans. Tier 2 includes bike sharrows.
3. Bellanca Ave.: Tier 1 includes sharrow markings. Tier 2 includes completion of eastern sidewalk.

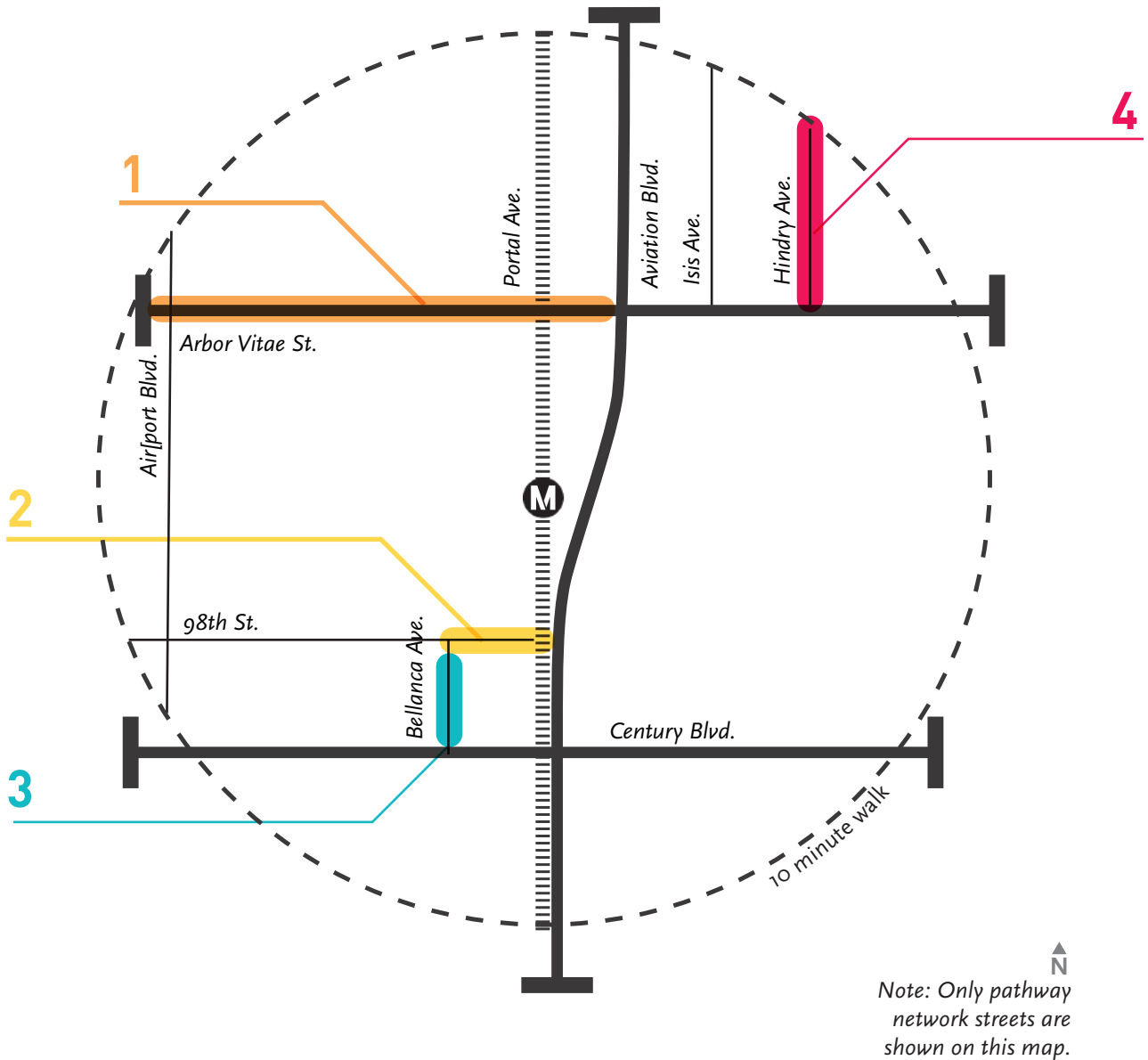
Pathway Origins



Pathway Origins

- Community Workshop
- Walk Audit
- Stakeholder Interview
- Community Based Organization
- Correlates with Existing City Plans
- Proposed FLM Arterials
- Proposed FLM Collectors
- Proposed FLM Cut Throughs
- Existing Bike Facility
- Pedestrian Improvements
- Bicycle Improvements
- Transit Improvements

Aviation/96th St. Station Tier 2 Projects



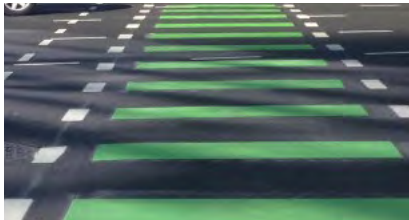
The goal of the Aviation/96th St. Station Tier 2 projects is to suggest ways to augment what is already proposed surrounding the future station area. Many of the key corridors, such as Century Blvd. or Aviation Blvd. already have detailed design plans. The selected Tier 2 projects represent gaps or areas

where additional study was needed. Arbor Vitae St. (Tier 2 project) will serve as a key connector to the future CONRAC site, while 98th St. and Bellanca Ave. (also Tier 2 projects) have the potential to serve as safe pedestrian and bicycle alternatives to Aviation Blvd. south of the station. The fourth

project selected, Hindry Ave., in the northeast quadrant of the station area, represents a more regional bike connection to the Westchester/Veterans Station and beyond.

1. Arbor Vitae St.

Arbor Vitae St. connects to the future Airport Metro Connector (AMC) and to the Consolidated Rental Car Facility Site (CONRAC). East of Aviation Blvd., a bi-directional cycle track can be constructed. A gap in the proposed bicycle network exists between Airport Blvd. and Aviation Blvd. due to a constrained right-of-way. Recommendations include a re-configuration of the roadway to accommodate a bicycle facility.



2. New 98th St.

A new segment of 98th St. will be constructed to connect to the southern edge of the future Airport Metro Connector. For the purposes of this study, 98th St. will serve as an alternative to Aviation Blvd. by connecting to sharrows on Bellanca Ave. Bicycle sharrows are recommended along 98th St.



3. Bellanca Ave.

Bellanca Ave. acts as a calm alternative street to busy Aviation Blvd. Bellanca Ave. will complete the bicycle connection from 98th St., connecting down to Century Blvd. This will provide a seamless transition from the Metro multi-modal path on Aviation Blvd. to the proposed multi-modal path on Century Blvd.



4. Hindry Ave.

Hindry Ave. is a key north/south spine that connects to the multi-modal path proposed on Arbor Vitae Ave. For continuity, similar treatments are proposed on Hindry Ave. north of Hillcrest Ave. near the Westchester/Veterans Station. Improvements on Hindry Ave. include creation of a bicycle-friendly street, street trees, lighting, and enhanced crosswalks.



Other Streets

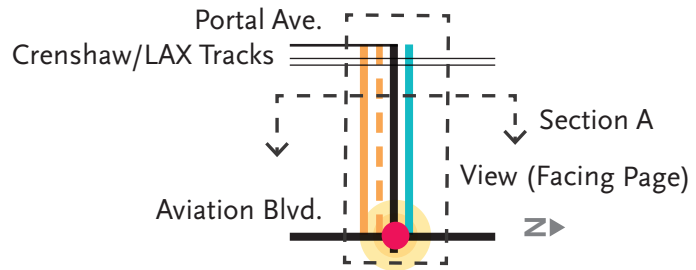
> Several key corridors were not included in this study, as many plans are already in early construction phases.






Aviation/96th St. Station: Project 1A

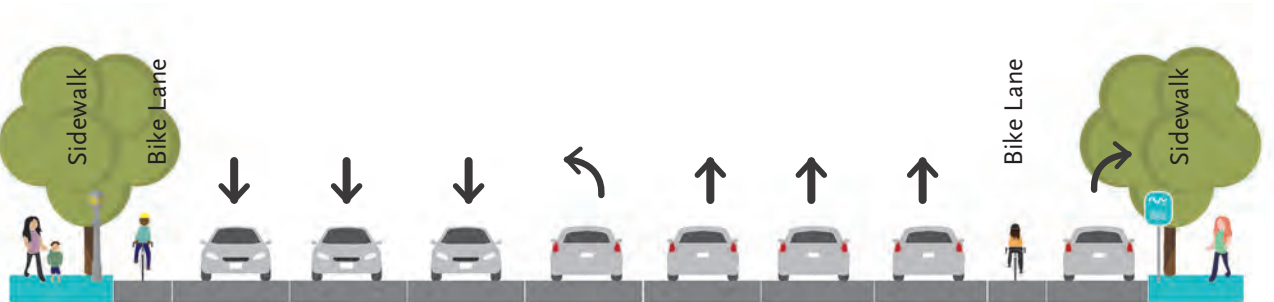
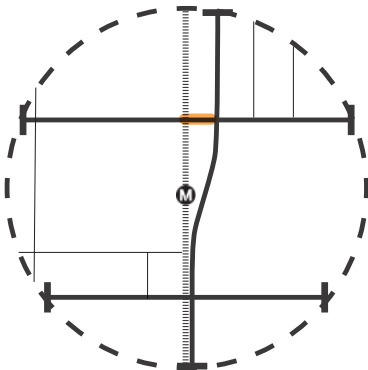
1a. Arbor Vitae St.

Segment A: Portal Ave. to Aviation Blvd.

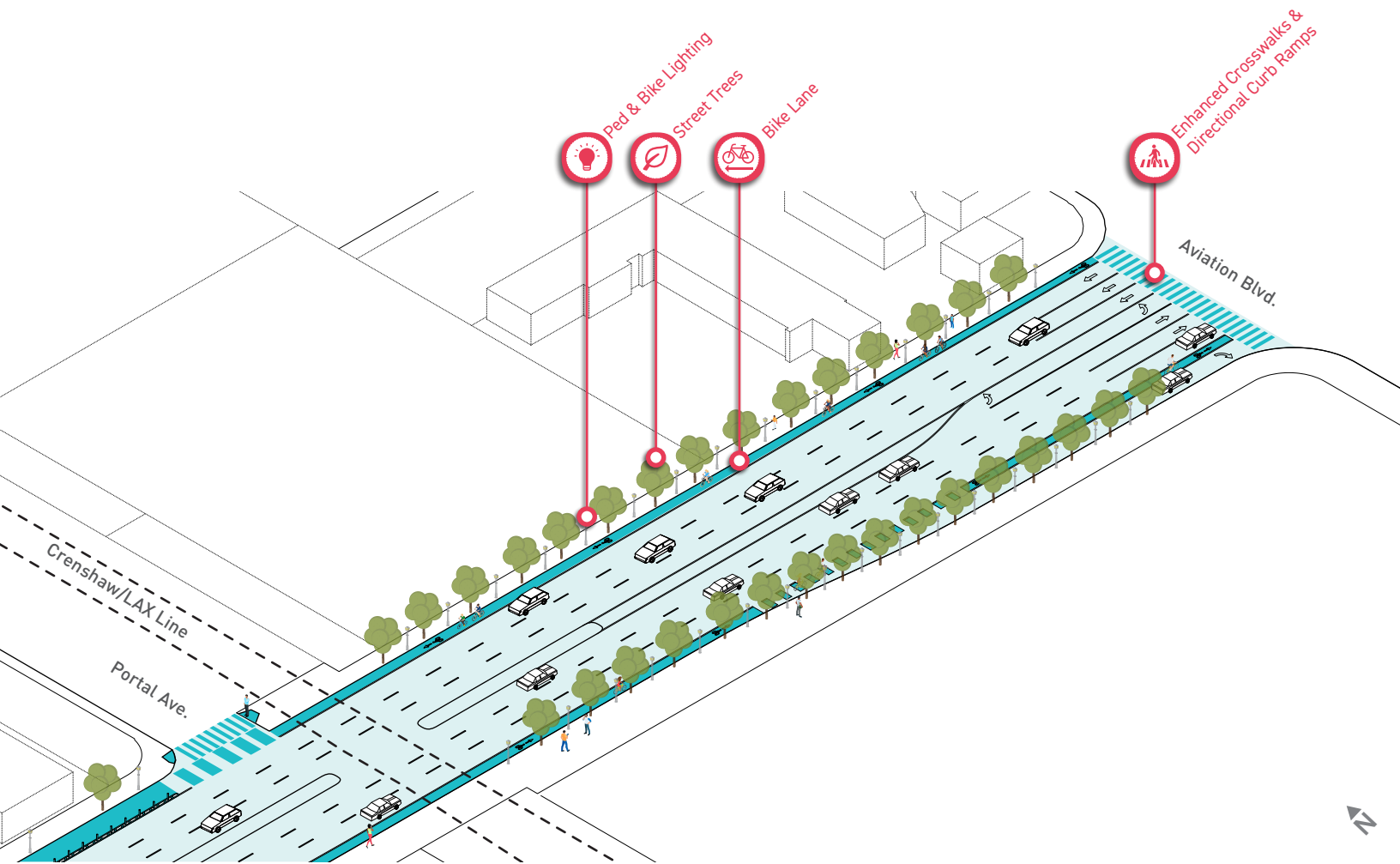
Arbor Vitae St. connects to the northern edge of the future Airport Metro Connector (AMC) and the Consolidated Rental Car Facility Site (CONRAC). East of Aviation Blvd., a bi-directional cycle track will connect eastbound movements from the AMC. A gap in the planned bicycle network exists between Airport Blvd. and Aviation Blvd. due to a constrained right-of-way. Recommendations for Arbor Vitae St. are broken into two segments (A & B). Section A, shown here, addresses roadway configuration from Portal Ave. to Aviation Blvd. A bike lane here can be accommodated through the reduction of lane widths. Planning-level cost estimate: \$557,000. See Appendix D for detailed cost estimates.



-  New / Enhanced Crosswalks
-  Wayfinding
-  Ped & Bike Lighting
-  Street Trees
-  Bike Lane



Proposed – Typical Street Section (Section A) Re-Striping Proposed



Proposed – Typical Street Configuration & Precedent Photos

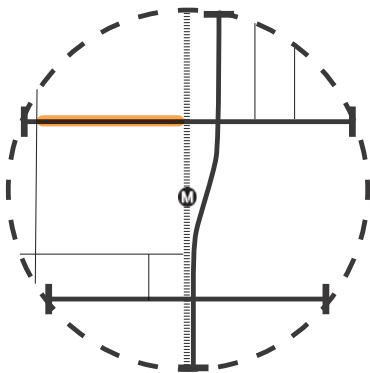
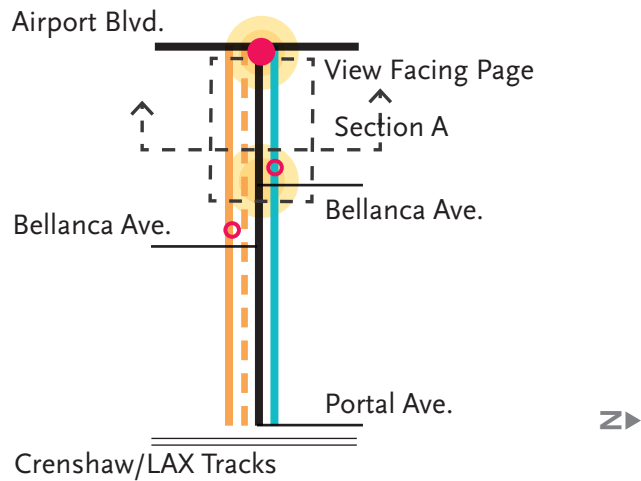








Aviation/96th St. Station: Project 1B

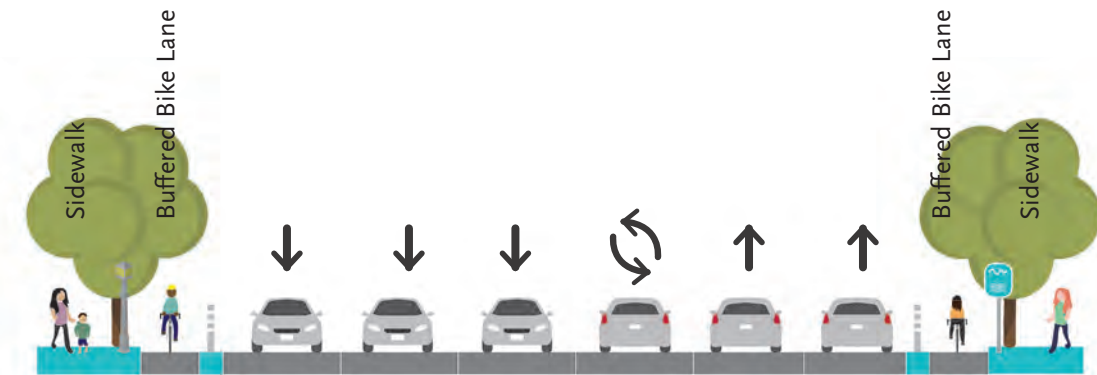
1b. Arbor Vitae St.

Segment B: Airport Blvd. to Portal Ave.

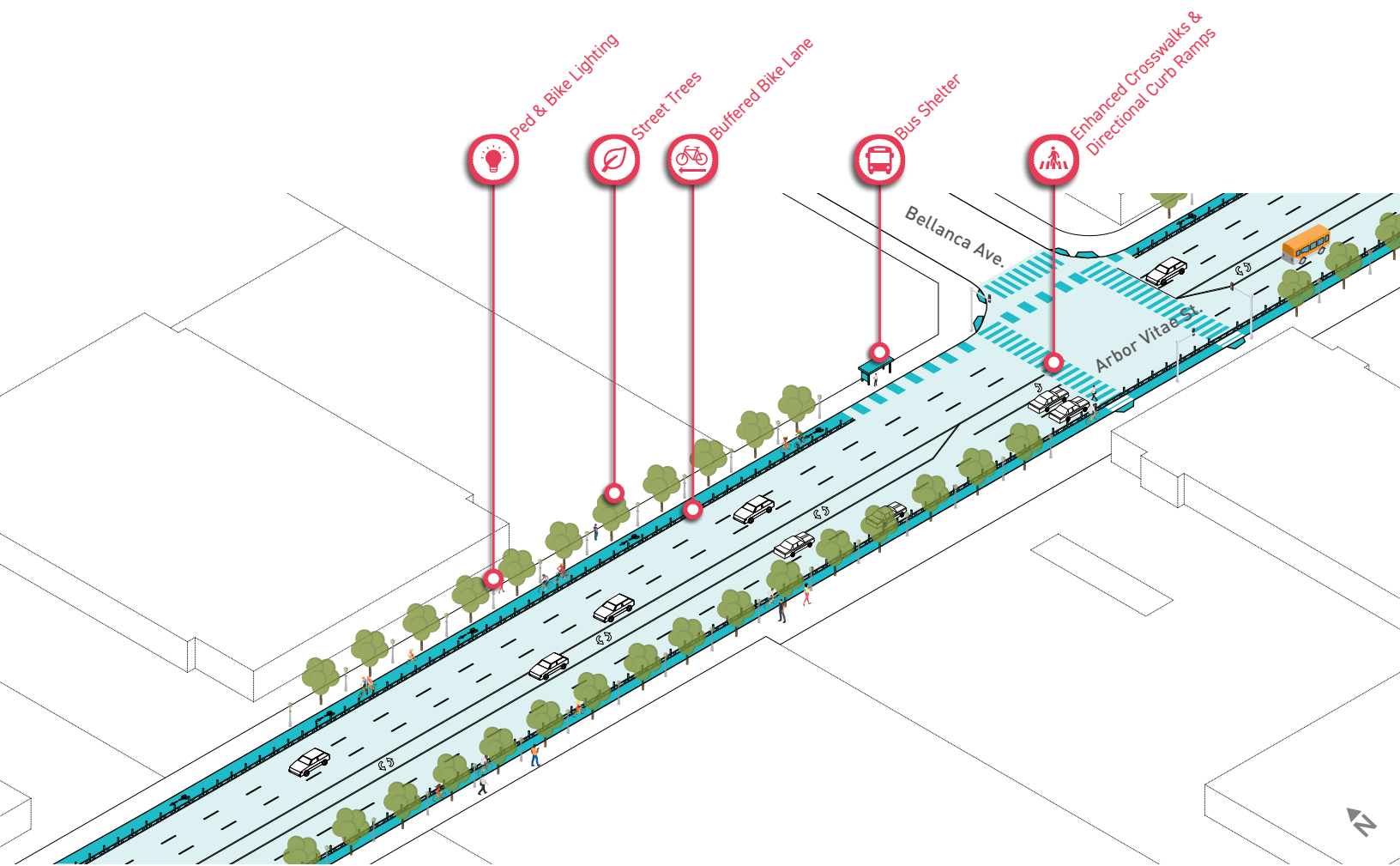
Arbor Vitae St. connects to the northern edge of the future Airport Metro Connector (AMC) and the Consolidated Rental Car Facility Site (CONRAC). East of Aviation Blvd., a bi-directional cycle track will connect eastbound movements from the AMC. A gap in the planned bicycle network exists between Airport Blvd. and Aviation Blvd. due to a constrained right-of-way. Arbor Vitae St. is broken into two segments (A & B). Segment B, shown here recommends a buffered bike lane that can be accommodated through the removal of a parking lane. Currently the on-street parking lane serves many car rental facilities that may be consolidated through CONRAC. Planning-level cost estimate: \$2,632,000. See Appendix D for detailed cost estimates.



-  New / Enhanced Crosswalks
-  Wayfinding
-  Bus Shelter
-  Ped & Bike Lighting
-  Street Trees
-  Buffered Bike Lane



Proposed – Typical Street Section (Section A) Re-Striping Proposed



Proposed – Typical Street Configuration & Precedent Photos

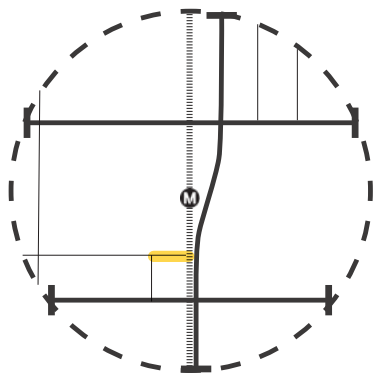
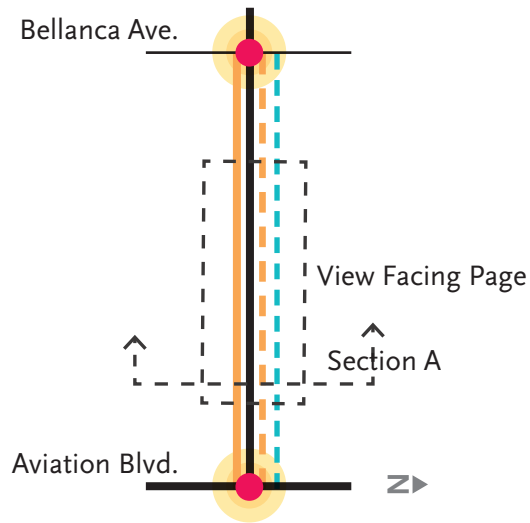


Aviation/96th St. Station: Project 2

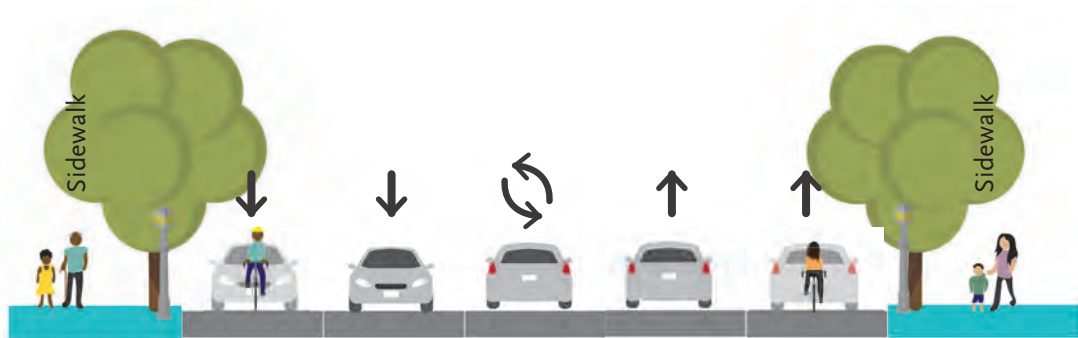
2. New 98th St.

Bellanca Ave. to Aviation Blvd.

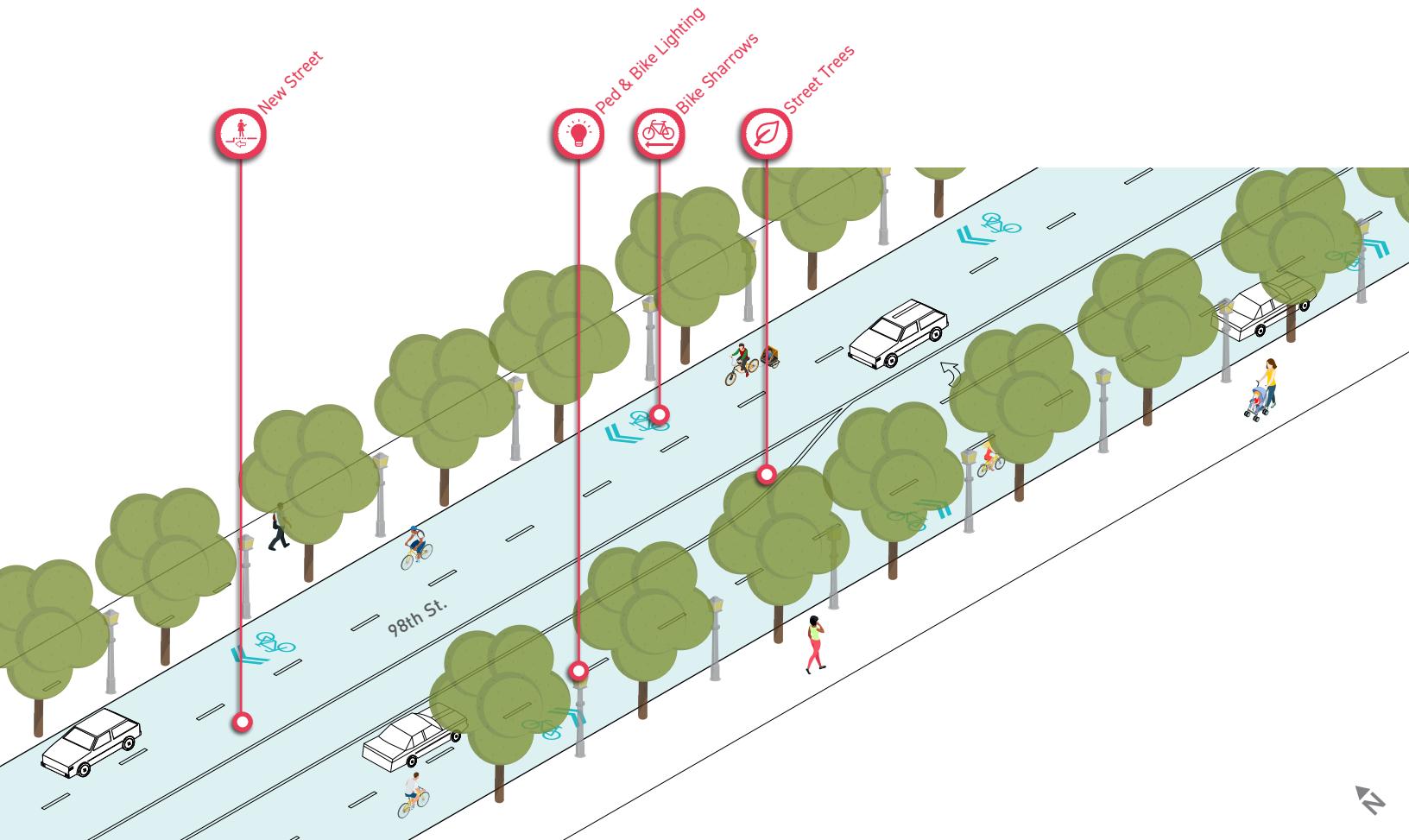
A new segment of 98th St. will be constructed to connect to the southern edge of the future Airport Metro Connector (AMC). For the purposes of this study, sharrows on 98th St. will serve as a connection for bicyclists traveling from Aviation Blvd. to Bellanca Ave. to connect south to Century Blvd. This will provide a seamless connection and transition from the multi-modal path on Aviation Blvd. Detailed bicycle connections at the intersection of Aviation Blvd. and 98th St. will need to be developed further. Planning-level cost estimate: \$645,000. (Does not include construction of the new street). See Appendix D for detailed cost estimates.



-  New / Enhanced Crosswalks
-  Wayfinding
-  Ped & Bike Lighting
-  Street Trees
-  Sharrows



Proposed – Typical Street Section (Section A) New Street Proposed



Proposed – Typical Street Configuration & Precedent Photos

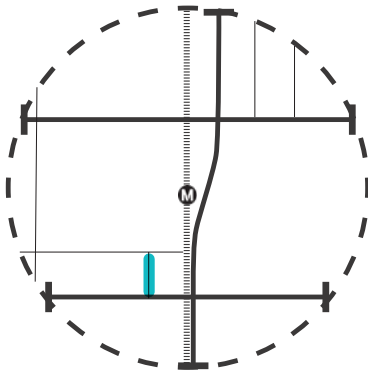
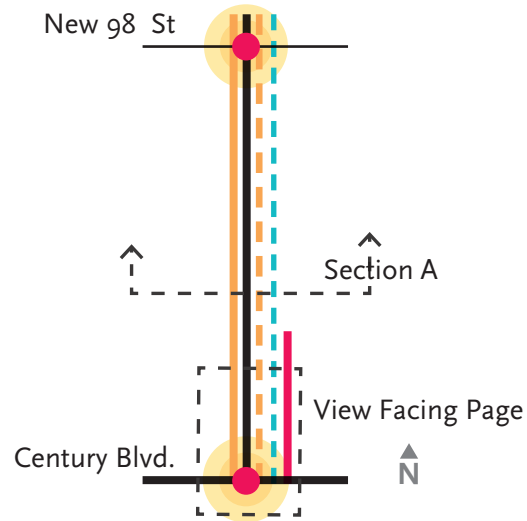




Aviation/96th St. Station: Project 3

3. Bellanca Ave.

98th St. to Century Blvd.

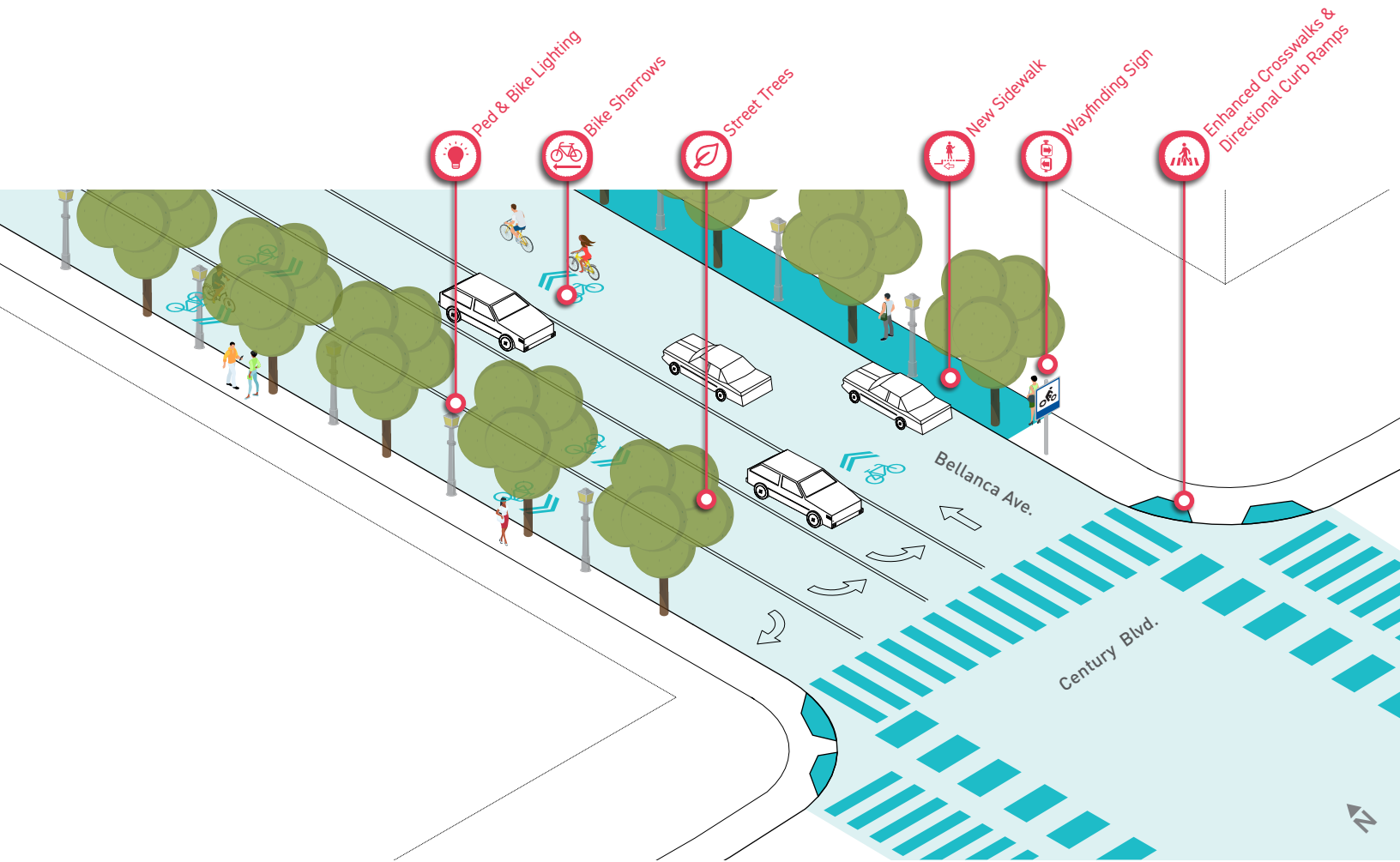
Bellanca Ave. acts as a calm alternative street to busy Aviation Blvd. Bellanca Ave. will complete the bike connection that bridges Aviation Blvd. to, 98th St., connecting down to Century Blvd. This will provide a seamless connection and transition from the Metro multi-modal path on Aviation Blvd. to the proposed multi-modal path on Century Blvd. Pending future design of Century Blvd., the intersection that connects cyclists to the multi-modal path on the southern edge of Century Blvd. will need to be designed. Planning-level cost estimate: \$704,000. See Appendix D for detailed cost estimates.



-  New / Enhanced Crosswalks
-  Wayfinding
-  Ped & Bike Lighting
-  Street Trees
-  Sharrows
-  New Sidewalk



Proposed – Typical Street Section (Section A) No Re-Striping Proposed



Proposed – Typical Street Configuration & Precedent Photos

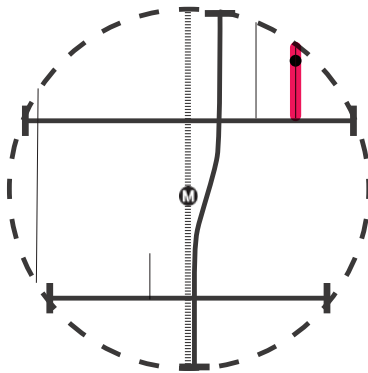
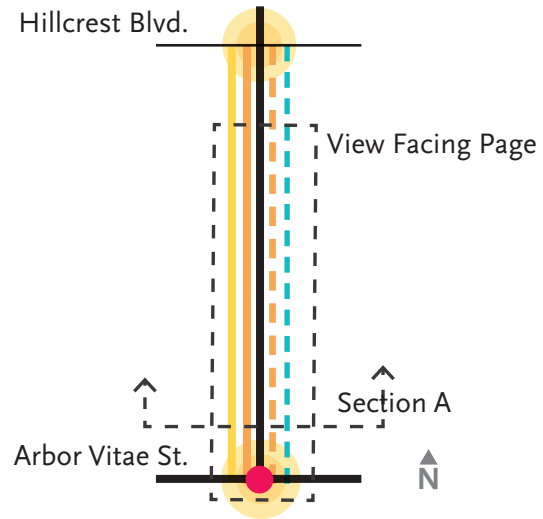


Aviation/96th St. Station: Project 4

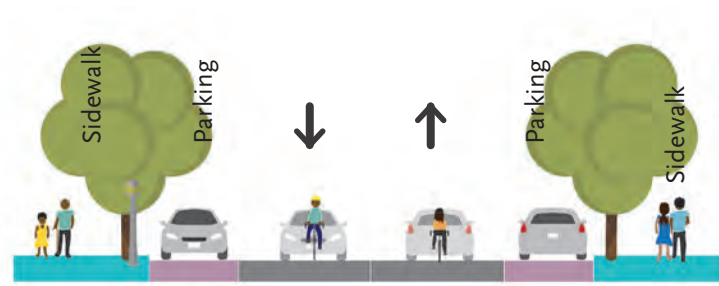
4. Hindry Ave.

Hillcrest Blvd. to Arbor Vitae St.

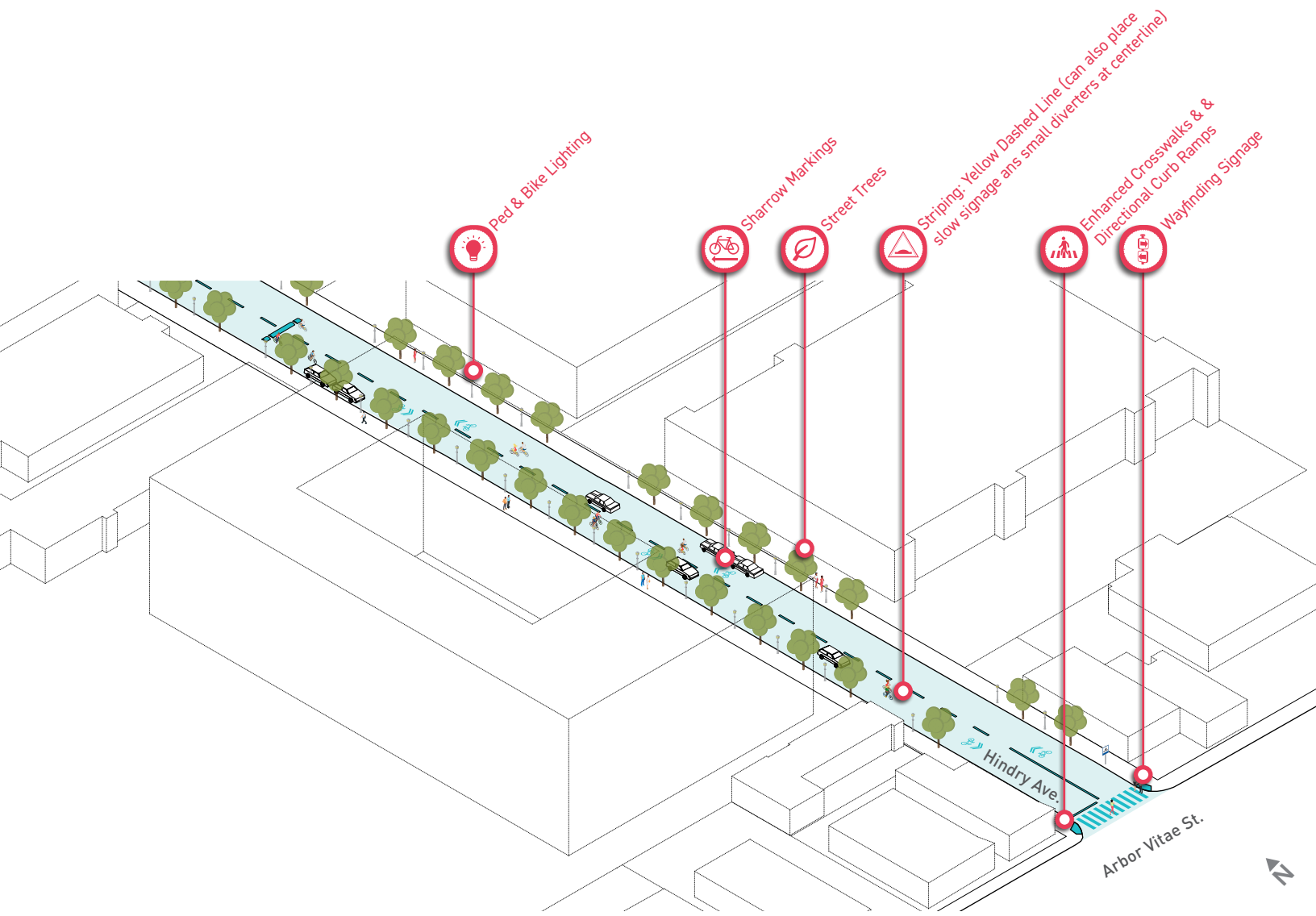
Hindry Ave. is a key north/south spine that connects to the multi-modal path proposed on Arbor Vitae Ave. For continuity, similar treatments are proposed on Hindry Ave. north of the 1/2 mile radius, connecting to facilities proposed closer to the Westchester/Veterans Station. Improvements on Hindry Ave. include the creation of a bicycle-friendly street, street trees, lighting, and enhanced crosswalks. Planning-level cost estimate: \$866,000. See Appendix D for detailed cost estimates.



-  New / Enhanced Crosswalks
-  Wayfinding
-  Lane Striping
-  Ped & Bike Lighting
-  Street Trees
-  Sharrow Markings



Proposed – Typical Street Section (Section A) Striping Proposed



Proposed – Typical Street Configuration & Precedent Photos



NEXT STEPS

This chapter outlines the next steps for implementation of the pathway network and project recommendations.

Implementation

Through the First/Last Mile Metro Board Motions 14.1 and 14.2, Metro transit projects are required to integrate first/last mile improvements in project planning and delivery.

Action steps presented in this plan will be pursued at the direction and discretion of the Metro Board of Directors. Successful first/last mile implementation at this station requires partnership from various agencies. Metro will aim to work with the different stakeholders to develop implementation options for first/last mile improvements identified in this plan.

The Aviation/96th St. Station First/Last Mile Plan will be finalized through the adoption of the plan by the Metro Board of Directors. Metro will remain as a partner and advisor to support implementation of first/last mile improvements that emerge from this plan.

LESSONS LEARNED

This chapter describes the process taken and any lessons learned throughout the development of this Plan. Lessons listed here will be especially important as Metro continues to execute additional first/last mile studies and begins to develop station area plans for the rest of the County network.

Lessons Learned

The following section includes lessons learned from the Inglewood First/Last Mile Plan process. These lessons learned can be used in future first/last mile studies to improve project flow, processes, and outcomes.

Involve the public. Involving local stakeholders in the walk audits adds a level of specificity and local insight into walk audit findings. Future walk audits would benefit from a continued community-focus approach.

Make sure pathway ideas are traceable. As there are many iterations of the pathway network and related projects, keeping track of the evolving pathway concepts proved to be a helpful step. A dashboard was created to serve as a central repository for all pathway comments/edits of this plan (https://www.metro.net/projects/inglewood_flm).

Embedding community events in well established traditions.

Workshops as pop-ups at well attended local events best served the data collection process. These events were driven by local community participants and ensured a range of voices and perspectives.

A final wrap-up pop-up to showcase final design to the public could better inform the community on the results of their input.

Take first/last mile planning to the next level. Develop strategies for projects that are already in the planning process. For example, as more first/last mile plans are conducted, there will be active transportation projects that are in the works. Encourage first/last mile plans to go beyond conceptual design.

Next stop: our healthy future.

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

3/22/19



Metro[®]

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

Appendix A

Walk Audit Summary



Inglewood First/Last Mile

Walk Audit Summary

4/11/18



Walk Audit Summary



The Inglewood First/Last Mile walk audits covered four future Crenshaw/LAX Line stations and the existing Crenshaw Green Line station in the City of Inglewood over the course of three days. The walk audits began at Inglewood City Hall and included a presentation on the First/Last Mile open-source audit process, a tutorial on how to use the Inglewood First/Last Mile App (App), and approximately 1 hour and 15 minutes for attendees to conduct the walk audit. Light refreshments and incentives (for non-city/non-Metro staff) were given to participants.

Following the presentation, 8" tablets were distributed to pre-assigned groups to conduct the walk audits using the App. Groups were assigned based on carpool availability, age-appropriate pairing, and attendee preference. The App allowed users to input strengths, barriers, ideas, and photos onto a digital map while in the field. This process greatly streamlined the walk audit data collection process. Through the App, data is automatically summarized and digitally mapped onto a single interface, bypassing the analog-to-digital conversion that has been required with previous First/Last Mile audits.

The first round of walk audits were held on Saturday March 10, 2018 with community members and stakeholders. The 24 attendees included members of a local non-profit organization group (One For All), Inglewood Police, Inglewood One-Stop Business & Career Center, and Inglewood residents. The majority of attendees were members of One For All and were predominately high school students who were familiar with public transit and the Inglewood area. During the audit, weather was about 61°F, with a light rain.

The second round of audits were held on Monday March 12, 2018, and consisted of 26 attendees from City of Inglewood, Inglewood Community Emergency Response Team, LA Stadium, and LA Metro. During the audit on Monday, weather was approximately 69°F and was overcast.

21 Completed audits
233 total conditions
53 attendees

149 Barriers

Top 3



Sidewalks (59)



Crosswalks (30)



Maintenance (18)

24 Strengths

Top 3



Sidewalks (6)



Crosswalks (3)



Landscaping/Shade (3)

60 Ideas

An additional audit was held separately for the Aviation/96th St Station on Monday March 26, 2018. This audit included 3 attendees representing GatewayLA Business Improvement District, Los Angeles World Airports Landside Access Modernization Program, and an Inglewood resident. During the audit, weather was 68°F and sunny.



Walk Audit Summary



Overall, the walk audits consisted a total of 53 participants and 21 audits of the five stations. The three walk audit sessions had participants with unique affiliations with Inglewood including: community (1st round), government (2nd round), and airport (additional round). Observations and comments were consistent through all three walk audit sessions. Barriers were the most common conditions (149), followed by ideas (60) and strengths (24). The most common barriers were sidewalks (59), crosswalks (30), and maintenance (18). Auditors often noted uneven, narrow, and obstructed sidewalks, crosswalks that needed repair or improvements, areas that needed new crosswalks, and cited locations in need of maintenance. The most commonly noted strengths were wide and clean sidewalks, effective crosswalks, and landscaping/shade. The following pages present detailed descriptions of all conditions entered.

Lessons Learned

At the end of each walk audit, auditors verbally expressed that the App was easy to use and that they generally enjoyed the overall experience. There were 2 incidents where the App failed. However, the auditors still conducted a walk audit and took valuable photos with notes that were geo-located, which are included in this summary. Lessons learned related to the logistics of the walk audit including presentation, the App, and outreach approach include:

- Shorten the presentation by removing tutorial slides and using video instead
- Should the App fail, instruct participants to take photos (which will be automatically geotagged)
- Emphasize that participants need to hit “allow GPS to track” on tablet
- Explain why we are asking people to identify in “pairs” as they sign in
- Extend actual walk audit time to 1.5 hours to account for travel time and time spent inputting conditions
- Discourage participants from opening multiple

tabs with the App active to avoid issues with GPS route tracking

- Set tablets to delete previous sign-ins

Opportunities

Building off the lessons learned with the app and walk audits, opportunities have been identified to consider for an App Version 2.

- Streamline assignment of quadrants
- Allow participants to draw a line for corridors
- Allow participants to draw a line for areas
- Develop a ‘test audit’ page for volunteers to sandbox before conducting the actual audit
- Streamline sign-in (perhaps have them sign in on a tablet?) so that participants do not need to enter information twice.
- Remove the “next” button
- Emphasize that participants can choose “other” when unsure of what category to select

Next Steps

Taking into account all of the findings reflected in this memo, the next step will be to develop and propose draft pathway network maps for each of the stations. These pathway network maps will include high-level project ideas and will take into account in-the-field observations, as well as plans and projects in the pipeline in the City.



Aviation/96th St



Station Area Summary

2.1 Overall Station Area Score
(Out of 5)

Safety 2.38



Aesthetics 2.16



Accessibility 1.88



Key Takeaways

- Station area is expecting major overhaul to include CONRAC Center east of the station and the Airport Metro Connector.

1 Completed audit
11 total conditions

6 Barriers

Top 3



Maintenance (2)



Safety (2)



Sidewalks (1)

0 Strengths

5 Ideas

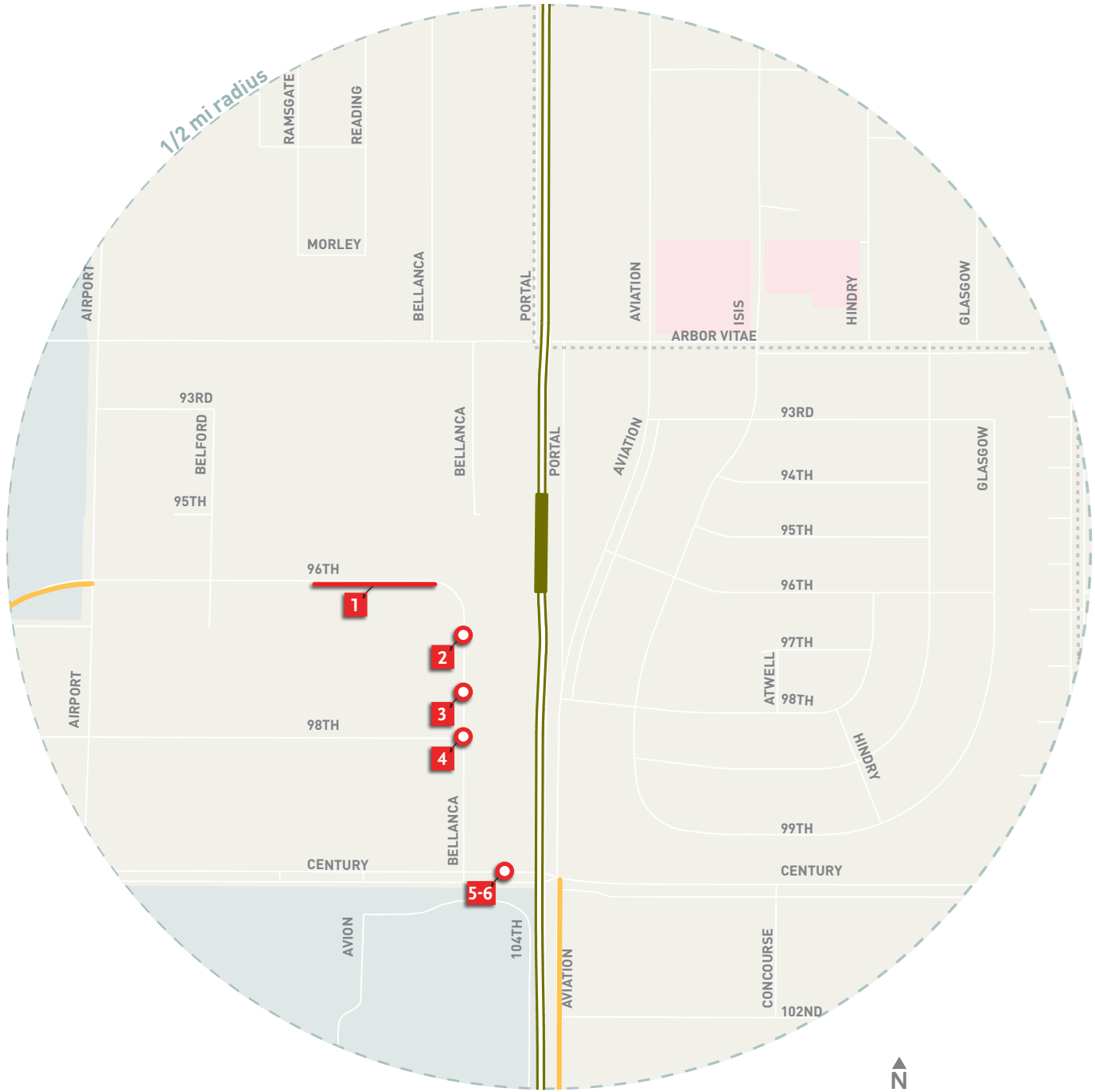
WALK AUDIT EXISTING CONDITIONS & OBSERVATIONS



Aviation/96th St



Barriers



- Crenshaw/LAX Line
- Crenshaw/LAX Station
- Point/Intersection Condition
- Corridor Condition

- Parks
- Schools
- Destinations
- Class II Bike Lane





Aviation/96th St



Barriers



1. Overgrown landscaping



3. Uplifted sidewalk



4. Overgrown landscaping



5. Trip hazards

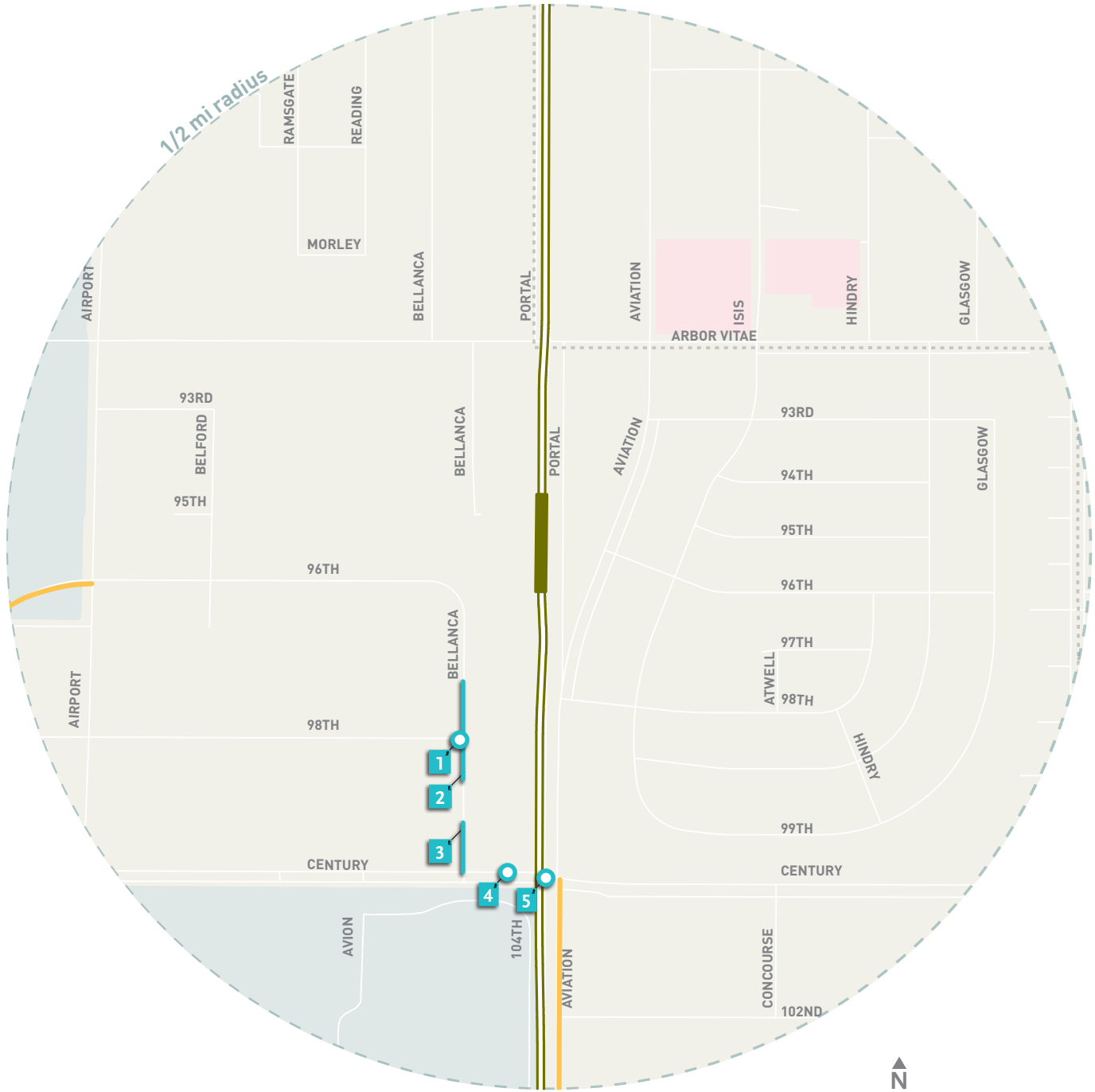
WALK AUDIT EXISTING CONDITIONS & OBSERVATIONS











Aviation/96th St



Ideas



- | | |
|--|--|
|  Crenshaw/LAX Line |  Parks |
|  Crenshaw/LAX Station |  Schools |
|  Point/Intersection Condition |  Destinations |
|  Corridor Condition |  Class II Bike Lane |

WALK AUDIT EXISTING CONDITIONS & OBSERVATIONS



Aviation/96th St



Ideas



Note: Not all conditions have accompanying photos



2. Continue sidewalks



3. Add sidewalks



4. Bus stop amenities



5. Add crosswalk

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

Appendix B

Existing Plans & Projects Memo



Inglewood First/Last Mile

Existing Plans and Projects Memo

Revised 6/6/18

Table of Contents

1 Introduction

Relevant Plans and Projects Introduction	1
--	---

2 Station Specific Plans

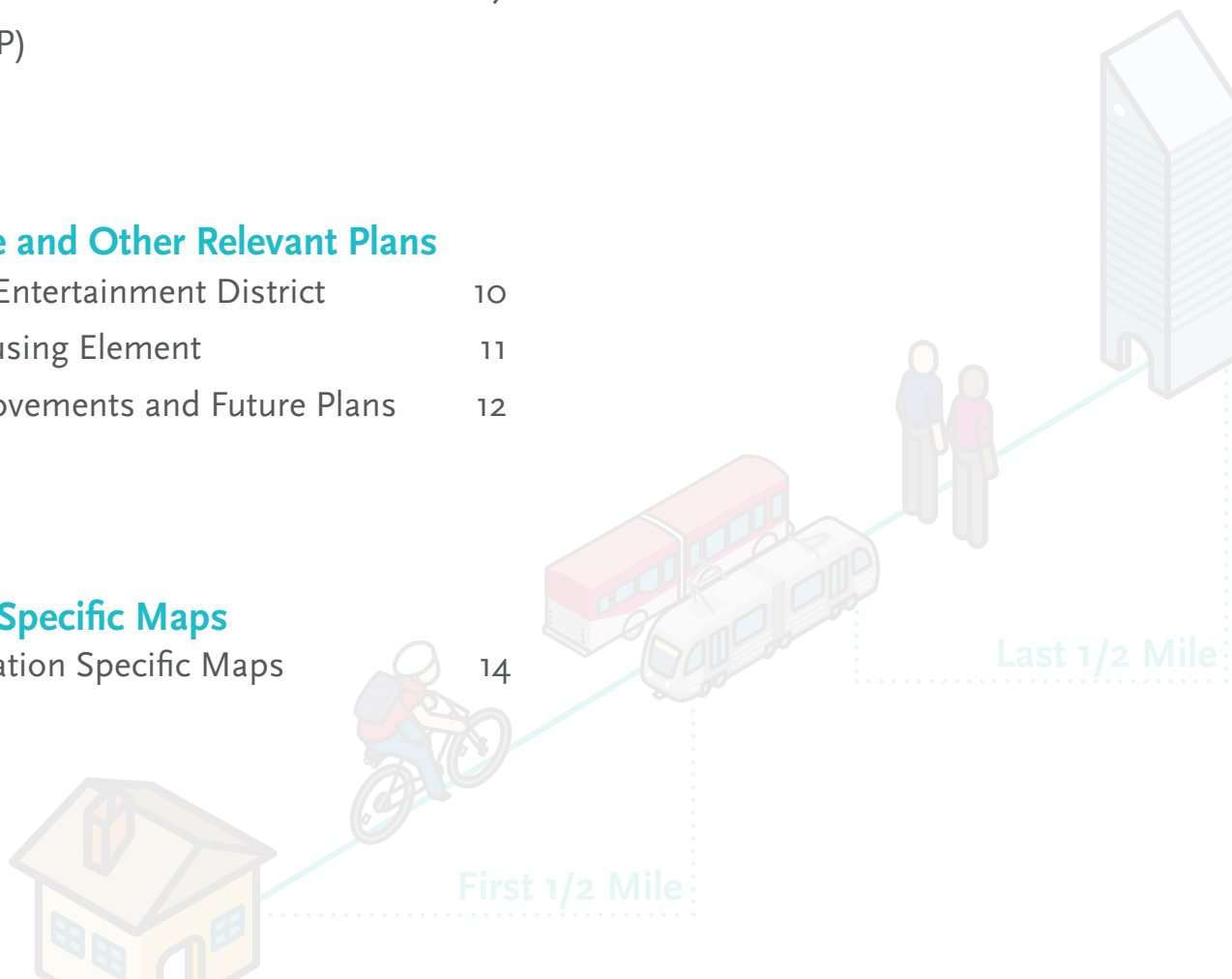
Downtown Inglewood TOD Plan	3
Fairview Heights TOD Plan	4
Westchester/Veterans TOD Plan	5
Crenshaw/Imperial TOD Plan	6
LAX Landside Access Modernization Program (LAMP)	7

3 Citywide and Other Relevant Plans

LA Stadium & Entertainment District	10
Inglewood Housing Element	11
Roadway Improvements and Future Plans	12

4 Station Specific Maps

Overview & Station Specific Maps	14
----------------------------------	----



Relevant Plans and Projects

Introduction

The Inglewood First/Last Mile (FLM) Planning project signals a step forward for FLM implementation in Los Angeles County, and will result in project recommendations for areas surrounding four new Crenshaw/LAX transit stations and the existing Green Line Crenshaw station in Inglewood. For this effort, Metro is directly partnering with City staff to provide critical feedback at each stage of the first/last mile planning process. This relationship is invaluable, and will ensure continuity in future implementation phases.

The Inglewood First/Last Mile Plan is being developed during a unique time in the City of Inglewood. In anticipation of the new Crenshaw/LAX rail-line, the City has adopted a series of multi-modal supportive plans and projects that will guide development surrounding the existing and future stations.

This memo presents a brief description of relevant City plans and projects, and an overview of first/last mile implications that may result.

Relevant plans and projects include:

- Station Specific Plans
 - Downtown Inglewood TOD Plan
 - Fairview Heights TOD Plan
 - Westchester/Veterans TOD Plan (Draft)
 - Crenshaw/Imperial TOD Plan (Draft)
 - LAX LAMP
- Citywide and Relevant Plans
 - LA Stadium & Entertainment District
 - Inglewood Housing Element
 - Planned Roadway Improvements and Future Plans

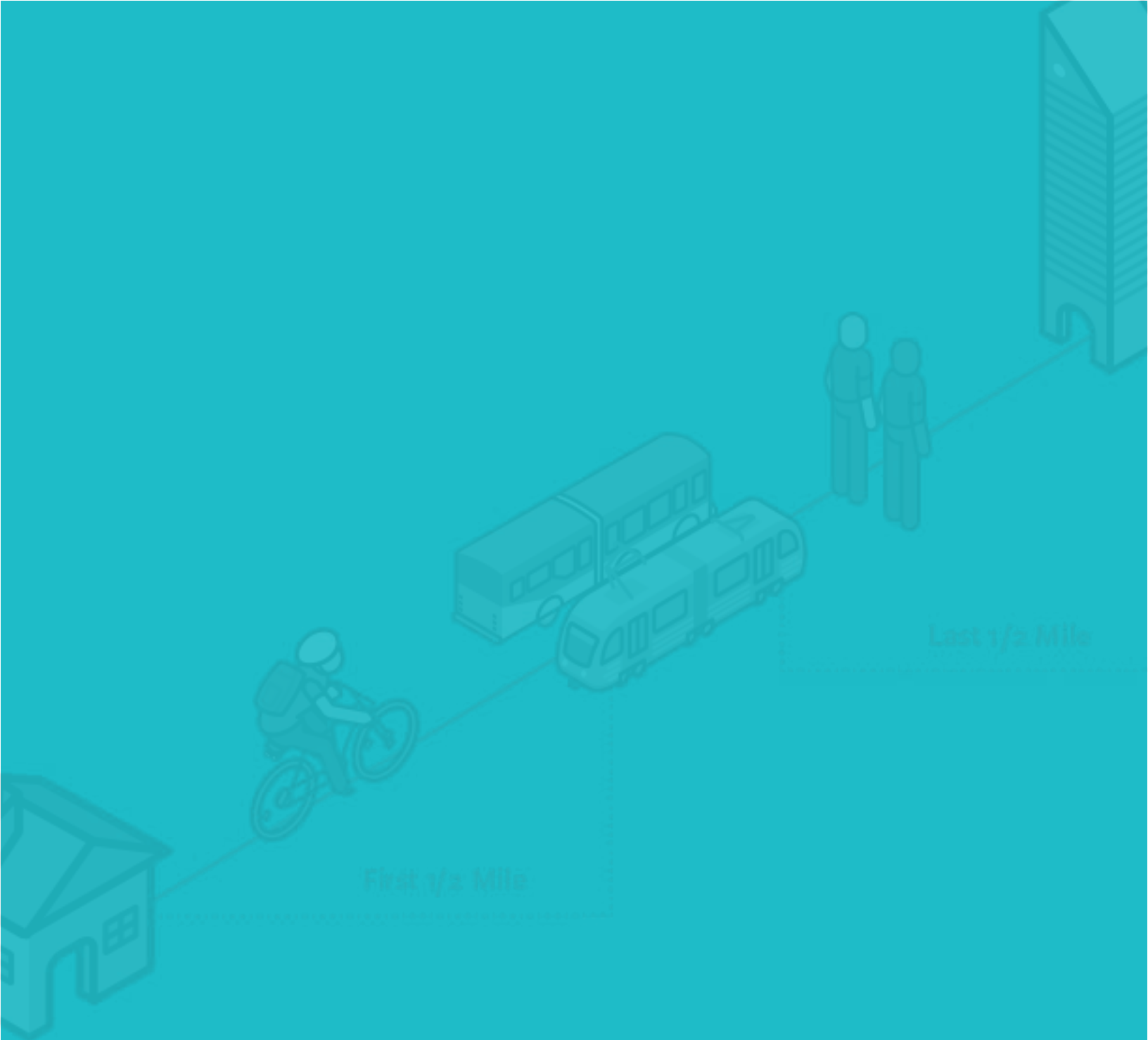
The plans and projects referenced in this memo include a range of elements that include First/Last Mile components such as:

- New roadway configurations
- Streetscape enhancements
- New public/open spaces
- New development, attractions, and destinations
- Changes to circulation patterns

The matrix below provides a brief snapshot of the plans and projects analyzed in this memo.

	Within 1/2 Mile of Rail Station	Includes New Roadways	Includes Streetscape Enhancements	Includes New Open Space	Includes New Development	Changes Circulation Patterns*
Downtown Inglewood TOD Plan	✓		✓	✓	✓	
Fairview Heights TOD Plan	✓		✓	✓	✓	
Westchester/Veterans TOD Plan	✓		✓	✓	✓	
Crenshaw/Imperial TOD Plan	✓		✓	✓	✓	
LAX LAMP	✓	✓	✓		✓	✓
LA Stadium & Ent. Dist		✓		✓	✓	✓
Inglewood Housing Element	✓					
Planned Roadway Improvements & Future Plans	✓	✓			✓	✓

*New roadways, street reconfigurations, or ITS improvements



2 Station Specific Plans

Downtown Inglewood TOD Plan

Year Adopted: 2016

The Downtown TOD Plan extends approximately 1/2 mile from the future Downtown Inglewood Crenshaw/LAX station at the intersection of Florence Avenue and La Brea Avenue. The recommended TOD area includes 585 acres and encompasses Downtown Inglewood's Historic Market Street commercial corridor and the Inglewood Civic Center. The Downtown TOD area reaches the northern edge of The Forum and is a short distance from the future LA Stadium and Entertainment District. Given its proximity to these existing and future attractions, the Downtown Station area will likely service residents, employees, and tourists alike.

The vision for the Downtown TOD plan is guided by a community-driven desire to provide public gathering spaces and to ensure economic investment in Inglewood.

The key urban design components of the Downtown Inglewood TOD Plan include the following:

- » Creation of a new North Market Place destination with new pedestrian-oriented gathering spaces.
- » Creation of a new South Market Place destination that includes a mix of uses (retail, residential, hotel, and office).
- » Restoration of the Fox Theater.
- » Development of a Market Street infill project.
- » Development of a "TechTown Campus" on the current City Yard, with multi-modal connections throughout.
- » Development of retail and residential complex adjacent to the future Downtown Crenshaw/LAX station.
- » Enhancement of the pedestrian circulation network throughout the 1/2 mile surrounding the future station.
- » Creation of an Arts district.
- » Creation of a green bikeway network.
- » Creation of a Downtown Parking district.
- » A linkage between the future Downtown station and the Stadium.



First/Last Mile Implications

- » Increased commercial density in North and South Market Place will increase pedestrian and multi-modal demand on Market Street between Florence Boulevard and Spruce Avenue.
- » The proposal of a TechTown Campus, in the northwestern quadrant of the 1/2 mile surrounding the station may mean increased foot traffic due to future employment opportunities and office space. Complete streets and multi-modal connections will be needed to provide access to food, entertainment, and services for employees (potentially located within the Historic Market Street hub).
- » Increased residential density proposed in the D-3 site will necessitate improved multi-modal infrastructure.
- » The Parking District "Park Once" design will require intuitive multi-modal pathways for visitors to navigate the area on foot.
- » Increased foot-traffic will require additional streetscape infrastructure, such as street trees, lighting, furniture, wayfinding, and public art.

Fairview Heights TOD Plan

Year Adopted: 2016



Figure 5.2 Fairview Heights Urban Design Concept

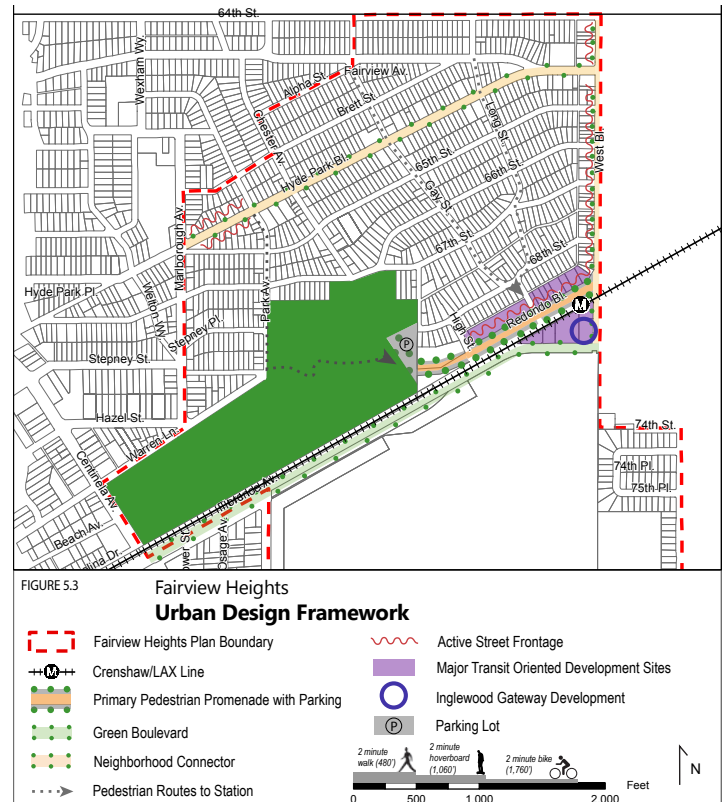


FIGURE 5.3

Fairview Heights Urban Design Framework

- Fairview Heights Plan Boundary
 - Crenshaw/LAX Line
 - Primary Pedestrian Promenade with Parking
 - Green Boulevard
 - Neighborhood Connector
 - Pedestrian Routes to Station
 - Active Street Frontage
 - Major Transit Oriented Development Sites
 - Inglewood Gateway Development
 - Parking Lot
- 2 minute walk (480') 2 minute hoverboard (1,080') 2 minute bike (1,760')
- 0 500 1,000 2,000 Feet

The Fairview Heights TOD Plan includes approximately 328 acres, and is centered around the future Crenshaw/LAX light-rail station at the intersection of Florence Avenue and West Boulevard. The TOD area is significantly smaller than that of the Downtown Plan, as the eastern half of the 1/2 mile around the station falls within City of Los Angeles jurisdiction. The 1/2 mile surrounding the station includes the Inglewood Park Cemetery, and therefore is not a part of the TOD area. The western terminus of the Rail to River Project will also fall within this area.

The vision for the Fairview Heights TOD plan is to preserve the unique residential neighborhood that sits north of Florence Avenue adjacent to Vincent Park; an area that has historically been a gathering place for artists to live and work.

The key urban design components of the Fairview Heights TOD Plan include:

- » Construction of a promenade along Redondo Boulevard.
- » Redevelopment of the existing County building located on Redondo Boulevard between High Street and Long Street.
- » Higher density planned surrounding the future

Fairview Heights station site.

- » Preservation and enhancement of West Boulevard and Hyde Park Boulevard.
- » Preservation and enhancement of the historic Fairview Heights Neighborhood.
- » Extension of the Florence Avenue Green Boulevard from downtown to the City's eastern boundary.
- » Creation of an attractive entrance to Vincent Park from Redondo Boulevard.

First/Last Mile Implications

- » Increased foot traffic may require enhanced connections for Vincent Park visitors and to the historic Fairview Heights neighborhood.
- » The possibility of increased residential density proposed in the County building north of the future station site will necessitate improved multi-modal infrastructure for new residents.
- » Redondo Boulevard may emerge as a key pedestrian pathway to the Fairview Heights Station, as it provides a calmer, parallel alternative to Florence Avenue.
- » This station will serve as the gateway to Inglewood for those traveling westward into the City. Signage and public art may help welcome visitors to the area.

Westchester/Veterans TOD Plan

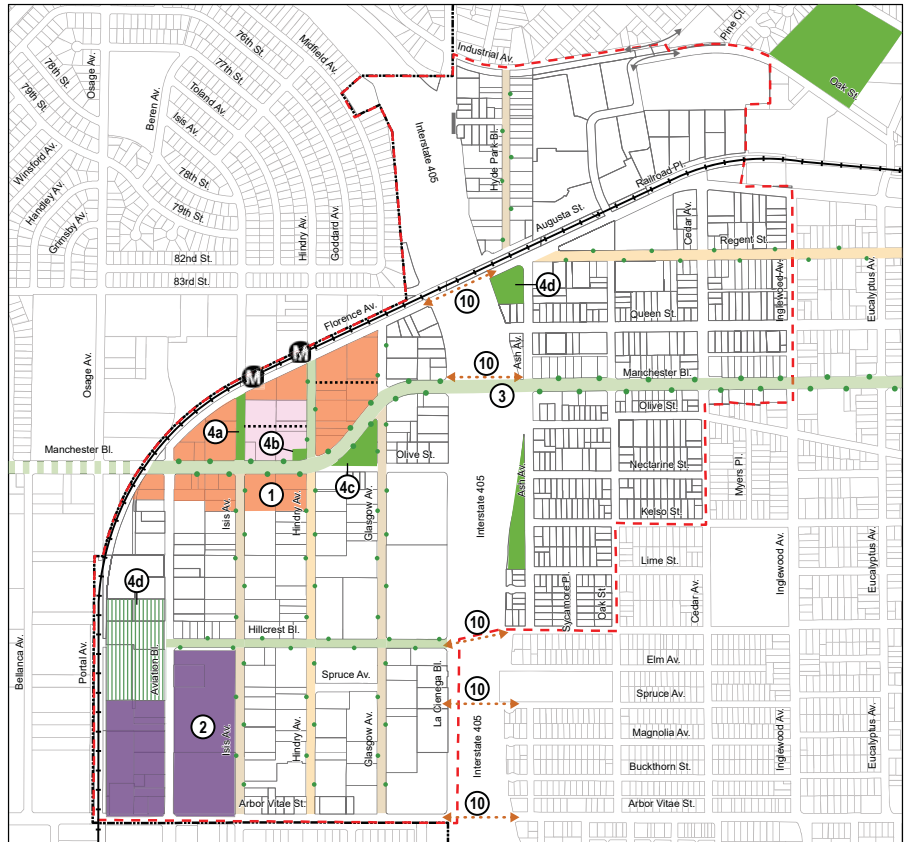
Public Review Draft 2017

The Draft Westchester/Veterans TOD Plan includes approximately 432 acres, and is centered around the future light-rail station at the north west corner of Florence Avenue and Hindry Ave. The area of the TOD Plan lies along the western edge of the City of Inglewood on Florence Avenue. As a result, the residential neighborhood north of Florence Avenue is not included in this plan. The future site for the Consolidated Rent-a-Car (CONRAC) Center, the Automated People Mover (APM), and the Aviation/96th St. Metro Station are located just south of the TOD Plan area.

The vision for the Westchester/Veterans TOD is to create an accessible multi-modal western gateway to the City of Inglewood. The area will cater to art and technology businesses and provide unique open space resources.

The main urban design components of the Westchester/Veterans TOD Plan include:

- » Mixed-use arts district surrounding the Westchester/Veterans Station.
- » Conversion of current rental car facilities near the corner of Aviation Boulevard and Arbor Vitae Street into an Airport Campus.
- » Integration with the Downtown Green Boulevards network along Manchester Boulevard.
- » Plaza on Isis Avenue north of Manchester Boulevard.
- » Arts Park at the 1019 building on the north west corner of Hindry Avenue and Manchester Boulevard.
- » Triangle Block Park at the intersection of Olive Street and Glasgow Avenue.
- » Public garden at Hillcrest Boulevard west of Aviation Boulevard.
- » Neighborhood Park at 405 freeway and Florence Avenue.
- » Pedestrian and bicycle connections across the 405 freeway, among other active transportation improvements.



First/Last Mile Implications

- » The future mixed used arts district adjacent to the Westchester/Veterans station will increase foot traffic around the station. Pedestrian connections may need to be formalized along both sides of Florence Avenue.
- » Connections to the east across the 405 freeway will be critical to connect residents living nearby to the future station site.
- » The adjacent CONRAC facility and ITF East may increase traffic volumes on Arbor Vitae and the southern portion of the TOD area.

Crenshaw/Imperial TOD Plan

Public Review Draft 2017

The Draft Crenshaw/Imperial TOD Plan includes approximately 221 acres along the southern edge of the City of Inglewood and extends roughly 1/2 mile north of the Metro Green Line Crenshaw station. The TOD area is bordered by the 105 freeway and the City of Hawthorne to the south. As a result, the TOD area only includes land north of the 105 freeway.

The vision for the Crenshaw/Imperial TOD is to create a complete neighborhood hub that provides mixed use destinations for all ages. The TOD area will be the southern gateway to the City of Inglewood and will encourage multi-modal accessibility.



The main urban design components of the Fairview Heights TOD Plan include:

- » City Gateway/District Center Focal Plazas on all 4 corners of the Crenshaw Boulevard and Imperial Highway intersection. The plazas may support outdoor dining, sitting, small events, and serve as gateways to all four corners of development.
- » Public/private open spaces that will complement and support mixed retail and residential uses.
- » An open space ring that provides recreational opportunities and serves as a buffer between existing single family uses and higher density mixed use within the Plan area.
- » Pedestrian pathways connecting the Gateway Focal Plazas, public/private open spaces, the Ring Open Spaces, and to sidewalks fronting Crenshaw Boulevard and Imperial Highway.
- » Gateway park and modified freeway entrance at the 105 freeway and Crenshaw Boulevard to improve pedestrian crossing.

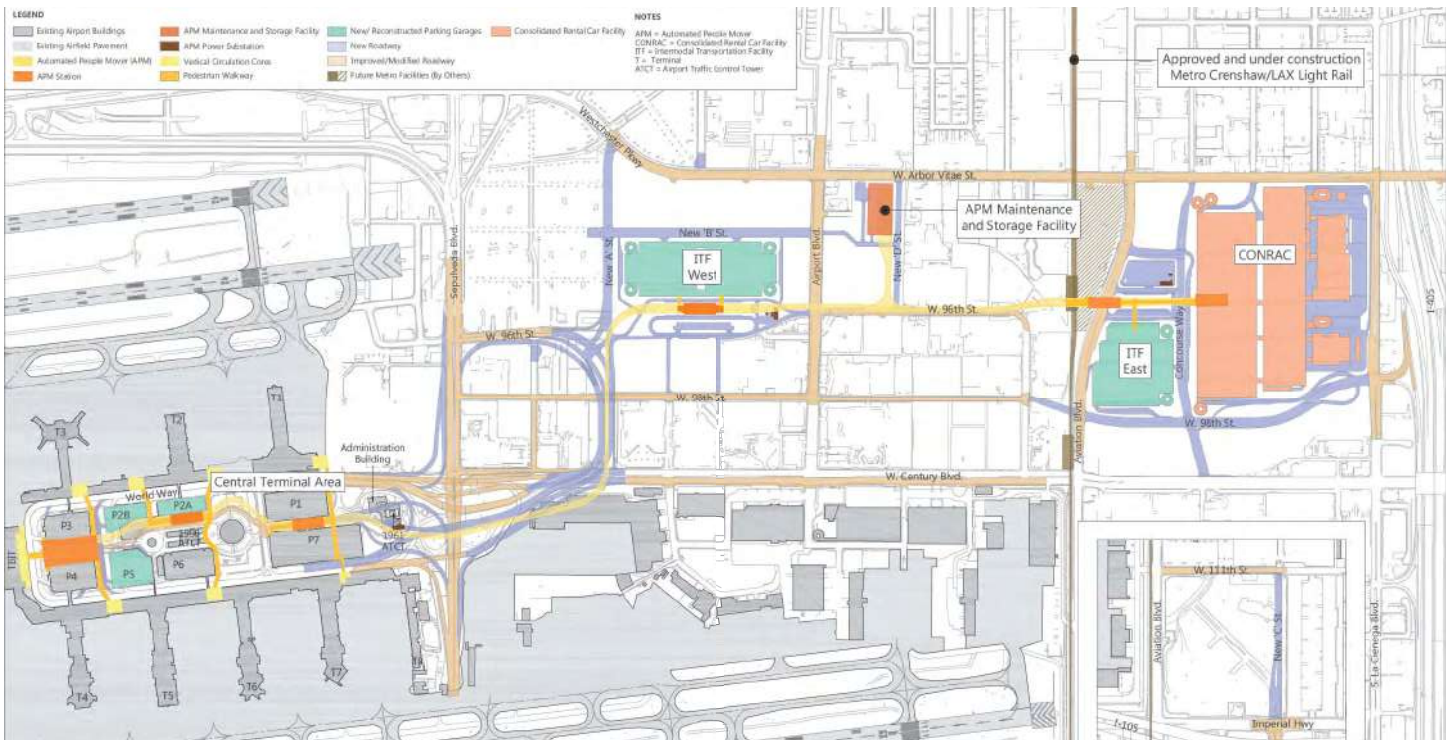
- » City and District Center signage.
- » New and improved traffic signals and pedestrian crossings to allow safe passage across Crenshaw Boulevard, Imperial Highway, and into the new mixed use projects.

First/Last Mile Implications

- » Enhanced connections will be needed for those living in and visiting the new District Center to the north of the 105 freeway.
- » Multi-modal connections may be centered around northbound movements from the Green Line station to the District Center. Further safety enhancements for pedestrians crossing the 105 freeway may be considered.
- » Wayfinding, signage, lighting, landscaping, shade, and public art may enhance the overall pedestrian experience surrounding and within the District Center.

LAX Landside Access Modernization Program (LAMP)

Year Adopted: 2017



The LAX Landside Access Modernization Program (LAMP) will improve overall access to and from Los Angeles International Airport (LAX). LAX often faces traffic congestion in the Central Terminal Area (CTA) and on nearby and connecting streets. Traffic is further congested as a result of independent shuttle operations and several rental car agencies that surround LAX. The lack of a direct connection to the Metro transit system also increases private vehicle volumes in the CTA. The goals of the LAMP include: improved connectivity for LAX passengers and employees, improved off-site passenger pick-up, drop-off, and parking, and the creation of a direct connection with the future Metro Aviation/96th St. station.

Key components of the program include:

- » Automated People Mover (APM) System
- » Consolidated Rent-A-Car Center (CONRAC)
- » Intermodal Transportation Facilities (ITF)
- » Roadway Improvements

Automated People Mover

The APM is an elevated rail system that would allow LAX passengers to bypass the existing roadway loop in the CTA. The APM would provide connections to the CONRAC Center, parking, pick-up, and drop-off areas at ITF West and ITF East, and the Airport Metro Connector. The APM would also include 3 stops in the CTA.

Consolidated Rent-A-Car Center

The CONRAC Center will consolidate the existing car rental locations that currently surround LAX into one location. The boundaries of CONRAC will be Arbor Vitae Street, Concourse Way, Century Boulevard, and La Cienega Boulevard. CONRAC has vehicle capacity for 18,000 rental cars.

Intermodal Transportation Facilities

Two Intermodal Transportation Facility (ITF) sites will provide private vehicle parking. The ITF connects to APM stations and will be a hub for shuttles, buses, and taxis.

LAX Landside Access Modernization Program (Continued)

Other components include passenger pick-up and drop-off areas, waiting areas, concessions, and ticketing and information kiosks. ITF East will be located to the west of the future CONRAC Center. ITF West will be located north of 96th Street between Airport Boulevard and “A” Street.

Roadway Improvements

A series of new roads, roadway improvements, multi-use paths, and protected bike lanes will be implemented to accommodate the LAX LAMP. New roadway configurations and improvements will improve overall traffic circulation and vehicle access to CONRAC, ITF, APM, and LAX.

Multi-use paths are planned for:

- » Arbor Vitae St from La Cienega Blvd to Aviation Blvd
- » Aviation Blvd from Arbor Vitae to Century Blvd
- » Century Blvd from Aviation Blvd to Airport Blvd

Protected bike lanes are planned for:

- » Airport Blvd from Century Blvd to Westchester Pkwy
- » Westchester Pkwy from Airport Blvd to New “A” St

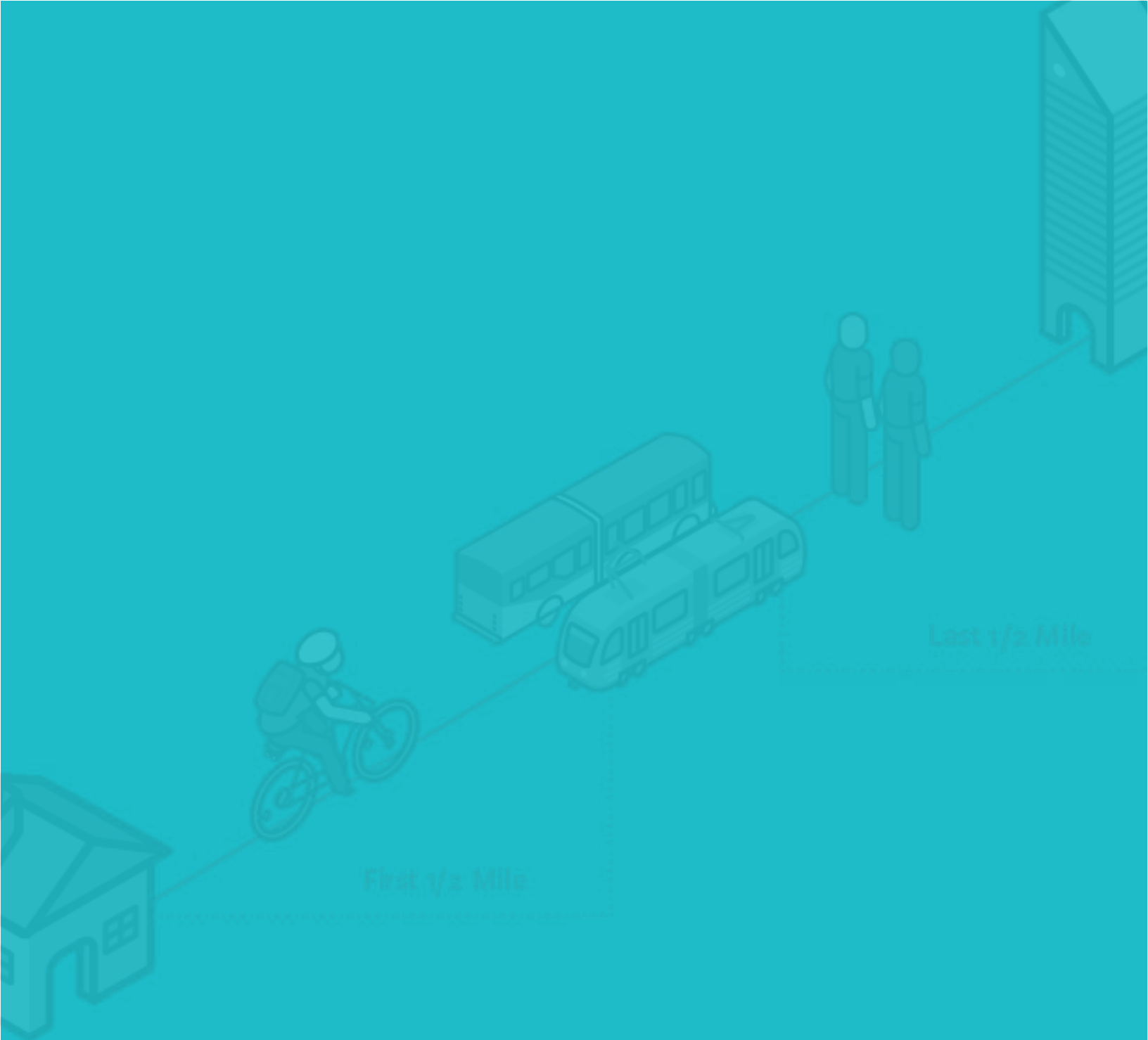
Airport Metro Connector

The Airport Metro Connector (AMC) is planned by Metro as an independent project separate from the LAMP. The AMC is located at the Crenshaw/LAX Aviation/96th St station and will allow transit connections to CONRAC, ITF sites, LAX, APM, the Metro Crenshaw/LAX line, and Metro buses. The Metro AMC project is responsible for building the multi-use path fronting the site on Aviation Blvd.

First/Last Mile Implications

- » The Airport Metro Connector will be a key transit hub and gateway providing connections to CONRAC, ITF sites, LAX, APM, the Metro Crenshaw/LAX line, and Metro buses.
- » Signage will be essential in directing transit users, pedestrians, bicyclists, and vehicles to the many new locations that are built.
- » Aviation Boulevard and Arbor Vitae Street will widen by one lane and include a multi-use bicycle/pedestrian path. Additional amenities (bike parking, fix-it stations, etc) may be considered near the future station.





3

Citywide & Relevant Plans

LA Stadium & Entertainment District

Anticipated Completion: 2020



The Los Angeles Stadium and Entertainment District at Hollywood Park is currently converting the Inglewood Hollywood Park Racetrack into a year-round sport and entertainment district that will draw hundreds of thousands of visitors to the site annually.

- » Approximately 25 acres of public parks, open space, pedestrian walkways and bicycle paths
- » Family and fine dining
- » State-of-the-art event, conference and meeting space

The LA Stadium and racetrack will cover 298 acres, and is located off of La Brea and Prairie Avenues in the City of Inglewood. Amenities listed per the official LA Stadium and Entertainment District website include:

- » 70,000 seat open air stadium, expandable up to 100,000 seats
- » 6,000 seat performing arts venue
- » 780,000 sqft of office space
- » 890,000 sqft of retail space
- » 300 boutique hotel rooms
- » 2,500 modern residences

First/Last Mile Implications

- » The Los Angeles Stadium and Entertainment District at Hollywood Park will be a major local and regional destination for visitors, residents, and employees, increasing foot-traffic along major corridors such as Prairie Avenue.
- » Pedestrian oriented amenities may need to be incorporated to accommodate crowds during events.
- » Transit connections may be considered to alleviate potential automobile congestion.
- » Signage and wayfinding will need to be clear to help orient bicyclists and pedestrians within and around the district.

Inglewood Housing Element

Year Adopted: 2014

The 2013-2021 Inglewood Housing Element sets forward a framework that supports affordable housing development, aging-in-place, and residential neighborhood preservation in the City. The Housing Plan also notes that Inglewood's population has been fairly constant for nearly two decades, suggesting that infill and high density development will be the City's opportunity for growth.

Income and unemployment trends in Inglewood suggest the need for more opportunities for affordable housing development. Per the 2010 Census, over 80% of Inglewood households have income levels that would qualify for some level of affordable housing, with approximately 20% of Inglewood households falling into the "extremely low-income" category. As a result, the Plan identifies that "locating housing close to jobs or in mixed-use configurations" are strategies to support this trend.

Similar to other cities in Los Angeles County, Inglewood is experiencing an age shift, with an increasing percentage of the population aged 65 years or older. The Plan identifies that with this growing and aging population, "an increased demand for senior housing or modifications to existing housing to allow seniors to age in place" may be needed.

First/Last Mile Implications

- » With a high percentage of low and extremely low-income residents, transit options will likely be necessary for workforce residents that may not have access to vehicles. First/Last Mile improvements around the future Crenshaw/LAX line stations and the existing Green Line station may increase mobility for transit-dependent residents.



- » An increasing senior (65 years and older) population will mean demand for transit-supportive housing and services. As the population ages, high-quality non-motorized infrastructure will be needed to ensure that seniors are able to safely access public transportation.
- » The need for more housing options throughout the City will translate to higher-density housing around existing and future transit hubs. Increased housing density is also supported by the City's 4 TOD Plans. New motor and foot traffic surrounding these areas will require First/Last Mile planning that anticipates a higher-demand on public facilities and infrastructure.

Planned Roadway Improvements & Future Plans

Century Boulevard Streetscape Plan

The Century Boulevard Streetscape Plan provides guidelines and standards for streetscape improvements for approximately 1.5 miles of Century Boulevard within the city of Los Angeles from Sepulveda Blvd to La Cienega Blvd. The purpose of this plan is to create a complete street that reflects Century Blvd’s role as a “Gateway to Los Angeles.” In addition to proposed complete streets elements, significant improvements include:

- » Increase sidewalk and landscape areas by utilizing public right-of-way and Pedestrian Amenity Area on adjoining private properties.
- » Conversion of frontage road to enhanced pedestrian area on the south side of Century Blvd from Aviation Blvd to La Cienega Blvd.

Recommended Speed Changes

Following a Citywide study of vehicular speeds, the City has recommended the following table of recommended speed changes (below).

No.	Street	From	To	Existing	New	Change
5	108th Street	Crenshaw Boulevard	Van Ness Avenue	30	35	+ 5
19	Crenshaw Boulevard	79th Street	Manchester Boulevard	35	40	+ 5
31	Grace Avenue	Hillcrest Boulevard	Prairie Avenue	25	30	+ 5
33	Grevillea Avenue	Arbor Vitae Street	S/O Century Boulevard	25	30	+ 5
36	Hawthorne Boulevard	Century Boulevard	104th Street	35	40	+ 5
40	Hindry Avenue	Florence Avenue	Arbor Vitae Street	30	35	+ 5
45	Imperial Highway	Yukon Avenue	Van Ness Avenue	40	35	- 5
58	Locust Street	Florence Avenue	Manchester Boulevard	30	35	+ 5
61	Manchester Boulevard	La Brea Avenue	Prairie Avenue	35	40	+ 5
62	Manchester Boulevard	Prairie Avenue	Crenshaw Boulevard	35	40	+ 5
63	Manchester Boulevard	Crenshaw Boulevard	Van Ness Avenue	35	40	+ 5
65	Pincay Drive	Prairie Avenue	Crenshaw Boulevard	45	50	+ 5
71	Regent Street	La Brea Avenue	Prairie Avenue	35	40	+ 5

ITS Improvements

In anticipation of future projects such as LA Stadium & Entertainment District and the LAX Landside Access Improvement Program, a series of Intelligent Transportation System (ITS) improvements are planned within the City of Inglewood. ITS site improvements are planned at key intersections along:

- » Century Blvd
- » Manchester Blvd
- » Florence Ave
- » La Cienega Blvd
- » La Brea Ave
- » Centinela Ave
- » Crenshaw Blvd
- » Arbor Vitae St (adjacent to CONRAC)

CIP Striping Plans

A series of roadway capital improvement projects are planned in the City of Inglewood on the following streets:

- » Century Blvd: La Cienega Blvd to Van Ness Ave
- » Imperial Hwy: Prairie Ave to Van Ness Ave
- » La Brea Ave: 64th St to Florence Ave

Planned Roadway Improvements & Future Plans

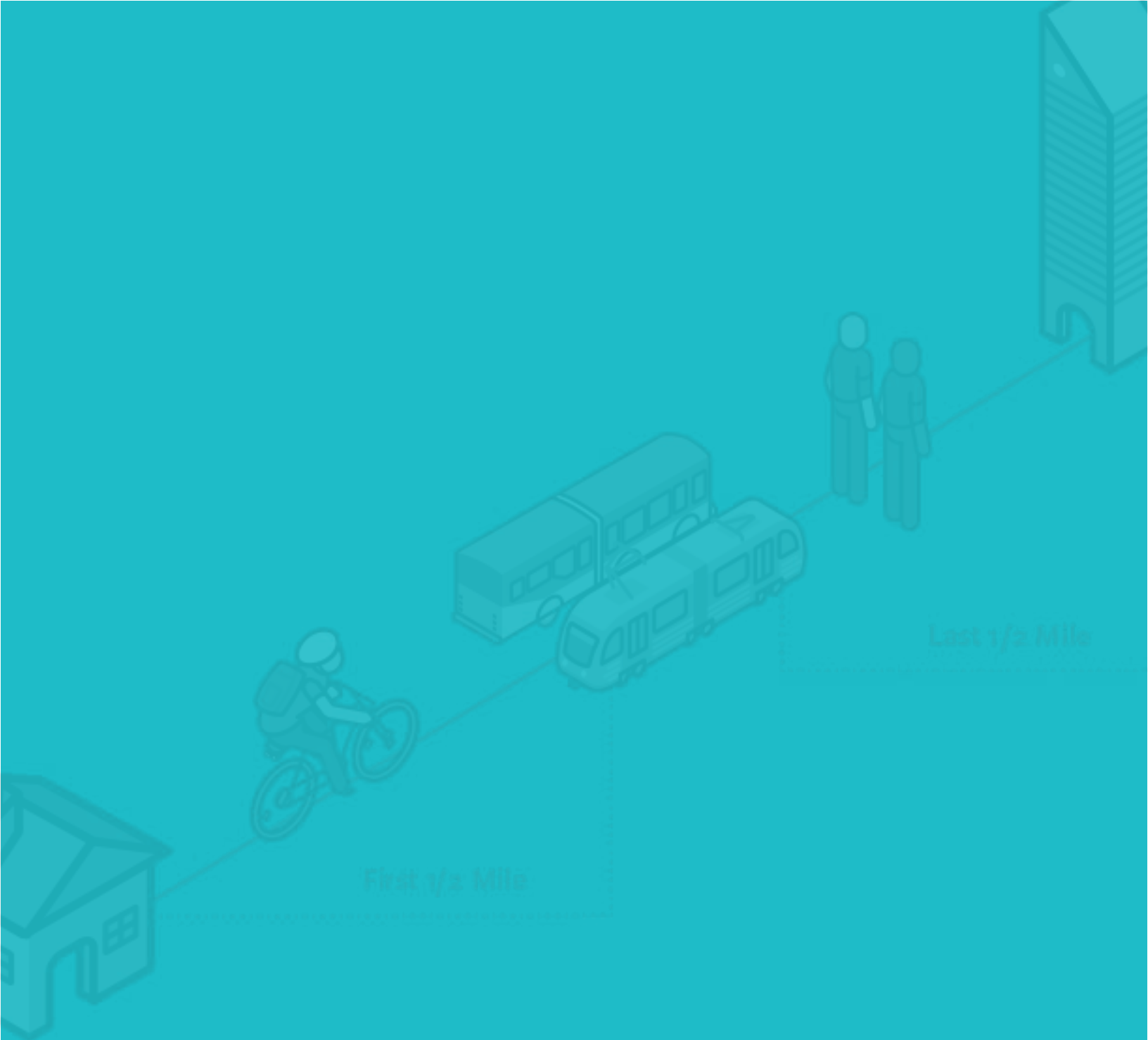
Inglewood Basketball & Entertainment Center

The proposed Inglewood Basketball & Entertainment Center would include an arena designed to host the Los Angeles Clippers basketball team and up to 18,000 fixed seats for NBA games. The arena site lies just south of the LA Stadium & Entertainment District between Century Boulevard, Prairie Avenue, 103rd Street, and to Doty Avenue. The proposed project would include approximately:

- » 85,000 sqft team practice and athletic training facility.
- » 55,000 sqft LA Clippers team office space.
- » 25,000 sqft sports medicine clinic for team and potential general public use.
- » 40,000 sqft of retail and other ancillary uses including community and youth-oriented space.
- » 260,000 sqft including outdoor plaza, landscaped areas, outdoor basketball courts, outdoor community gathering space, and parking facilities.

LA Philharmonic Youth Orchestra Campus

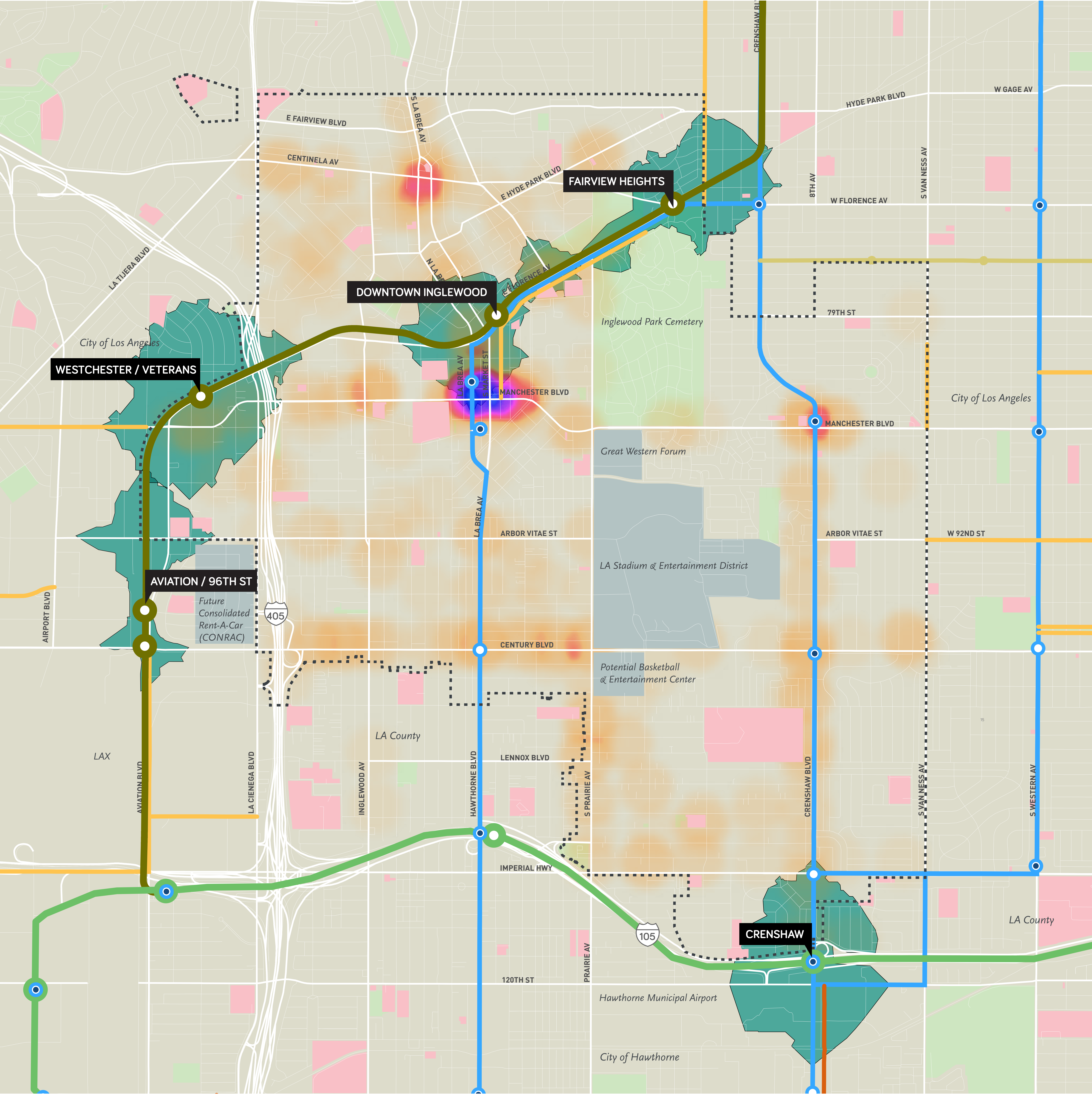
The Los Angeles Philharmonic recently assigned Frank Gehry to design an art, music, and cultural campus for Youth Orchestra Los Angeles. The future campus will be located in a 17,000 sqft former bank building adjacent to Inglewood City Hall and will include classrooms and space for the Youth Orchestra rehearsal, activities, and services.





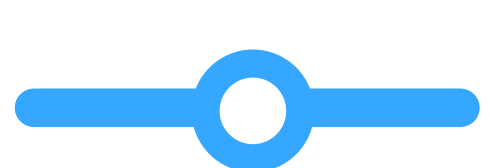










4 Overview & Station Specific Maps

Inglewood First/Last Mile

Existing Conditions Overview Map

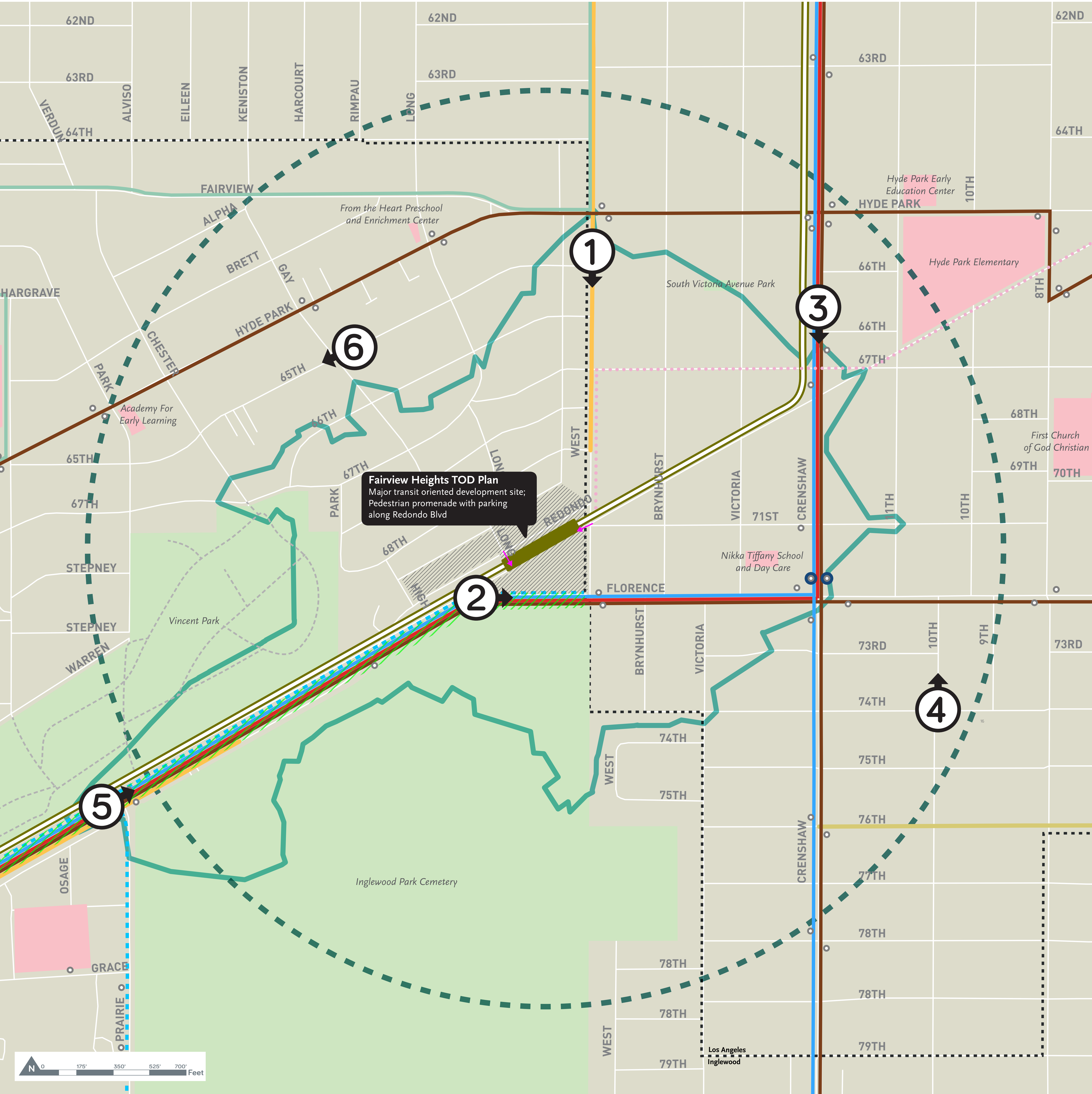


Legend

-  Metro Crenshaw / LAX Line
-  Metro Green Line
-  Metro Bus Rapid Transit
-  ATSP High Ridership (> 800 daily on & off boardings)
-  Parks/Cemetery
-  Schools
-  Destinations
-  Walkshed
-  TIMS Ped/Bike Collision Heat Map (2012-2016)
Low 0 High >14
-  Inglewood City Boundary
-  Class I Bike Path
-  Class II Bike Lane
-  Class III Sharrow

Inglewood First/Last Mile

Fairview Heights Station



Station Rendering



1 West Blvd & Hyde Park



2 Florence Ave & West Blvd



3 Crenshaw Blvd & 66th Pl



4 74th St & 10th Ave



5 Florence Ave & Prairie Ave



6 65th St & Gay St



Metro Crenshaw / LAX Line

Crenshaw Station

Station Access

Inglewood City Boundary

Half Mile Radius From Station

Station Walkshed

Parks/Cemetery

Schools

Roadway Speed Limit > 35mph

Metro Rapid & Transit way

Metro Commuters & Circulators

Metro Local Central Business District Routes

Metro Non-Local Central Business District Routes

Bus Stop

ATSP High Ridership (> 800 daily on & off boardings)

Class II Bike Lane

Class III Bike Sharrow

Trails

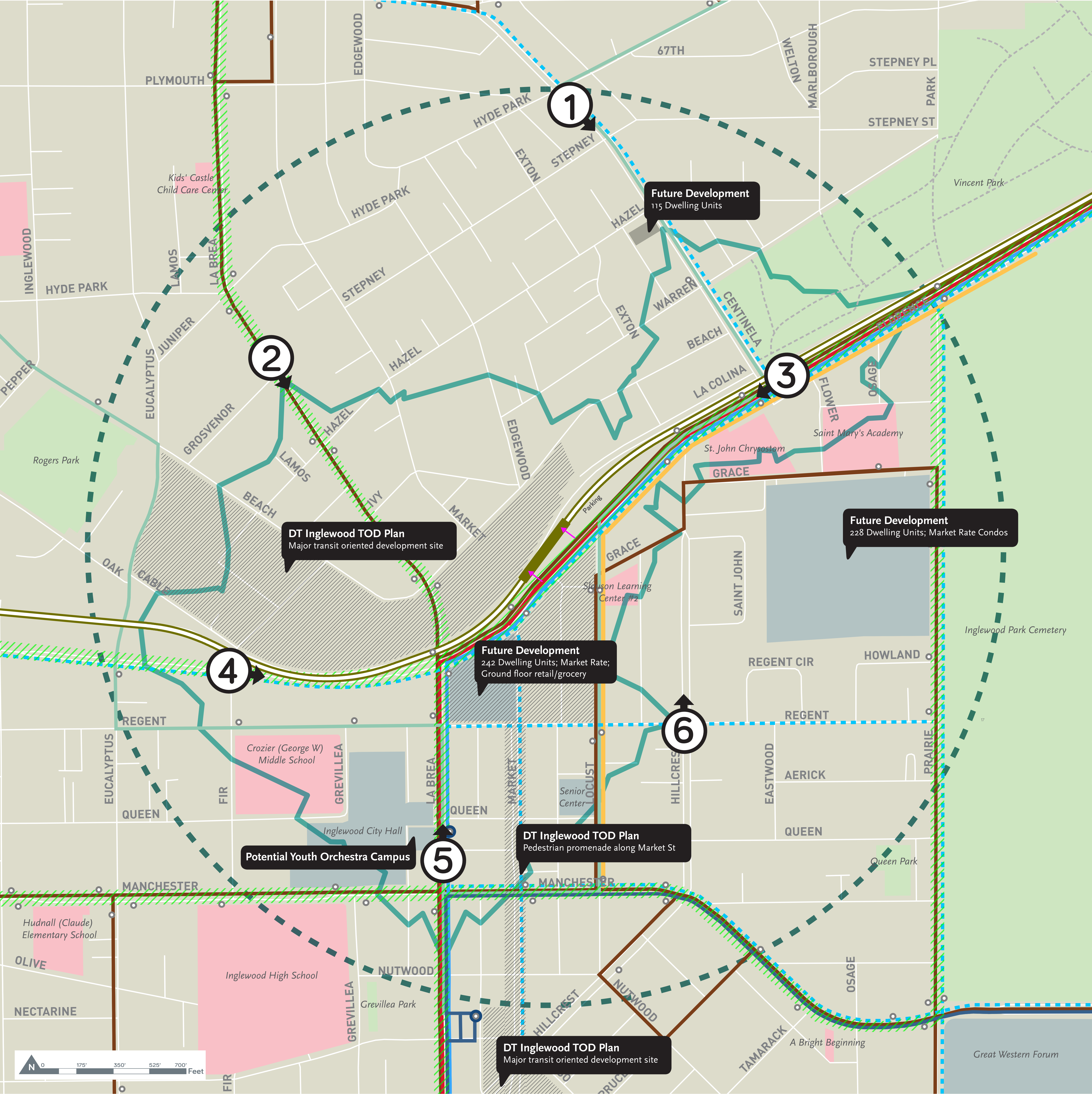
Rail to River Corridor

Planned TOD Area

Planned TOD Green Boulevards

Inglewood First/Last Mile

Downtown Inglewood Station

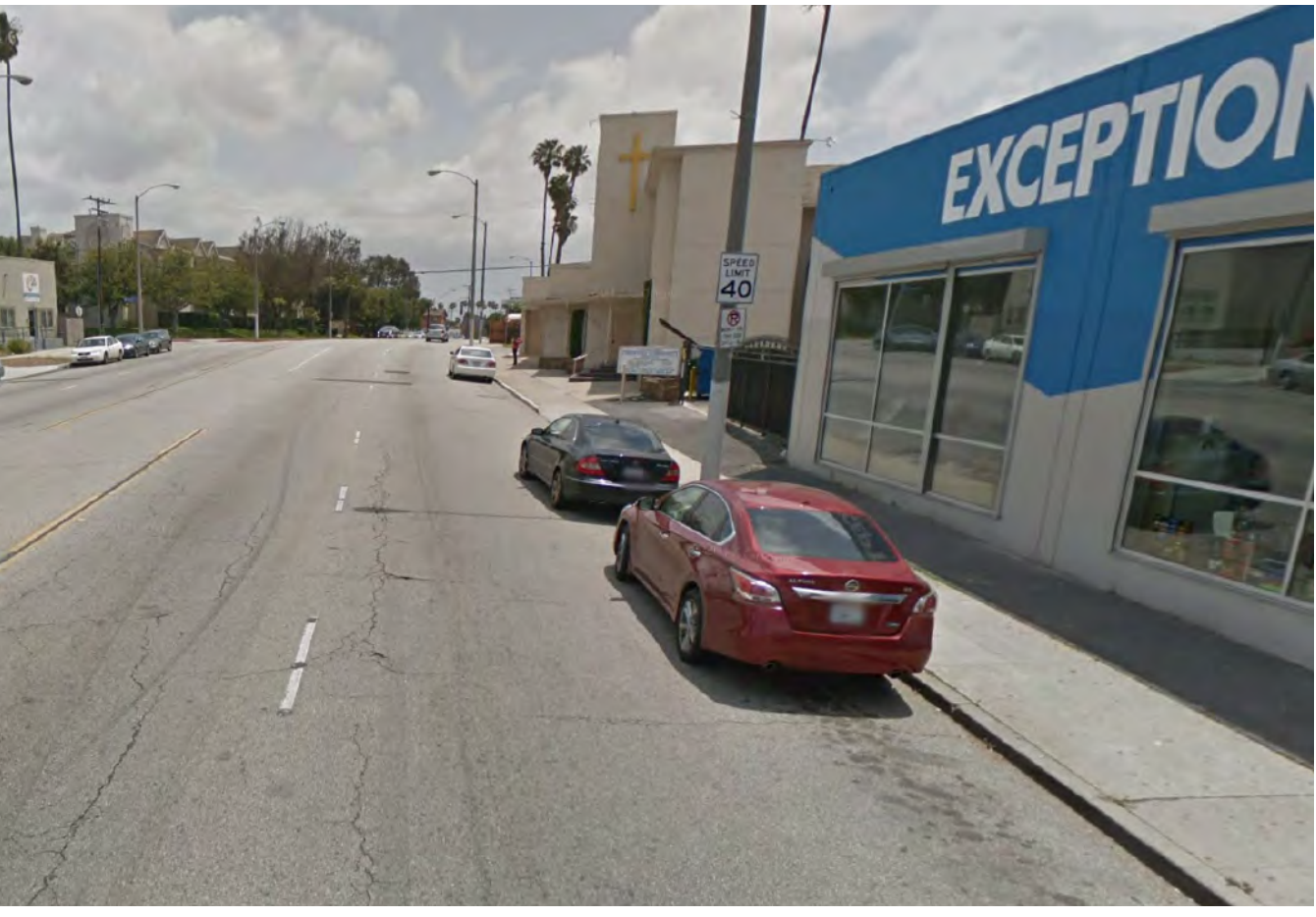


Station Rendering



1 Centinela Ave & Hyde Park Blvd

2 La Brea Ave & Grosvenor St



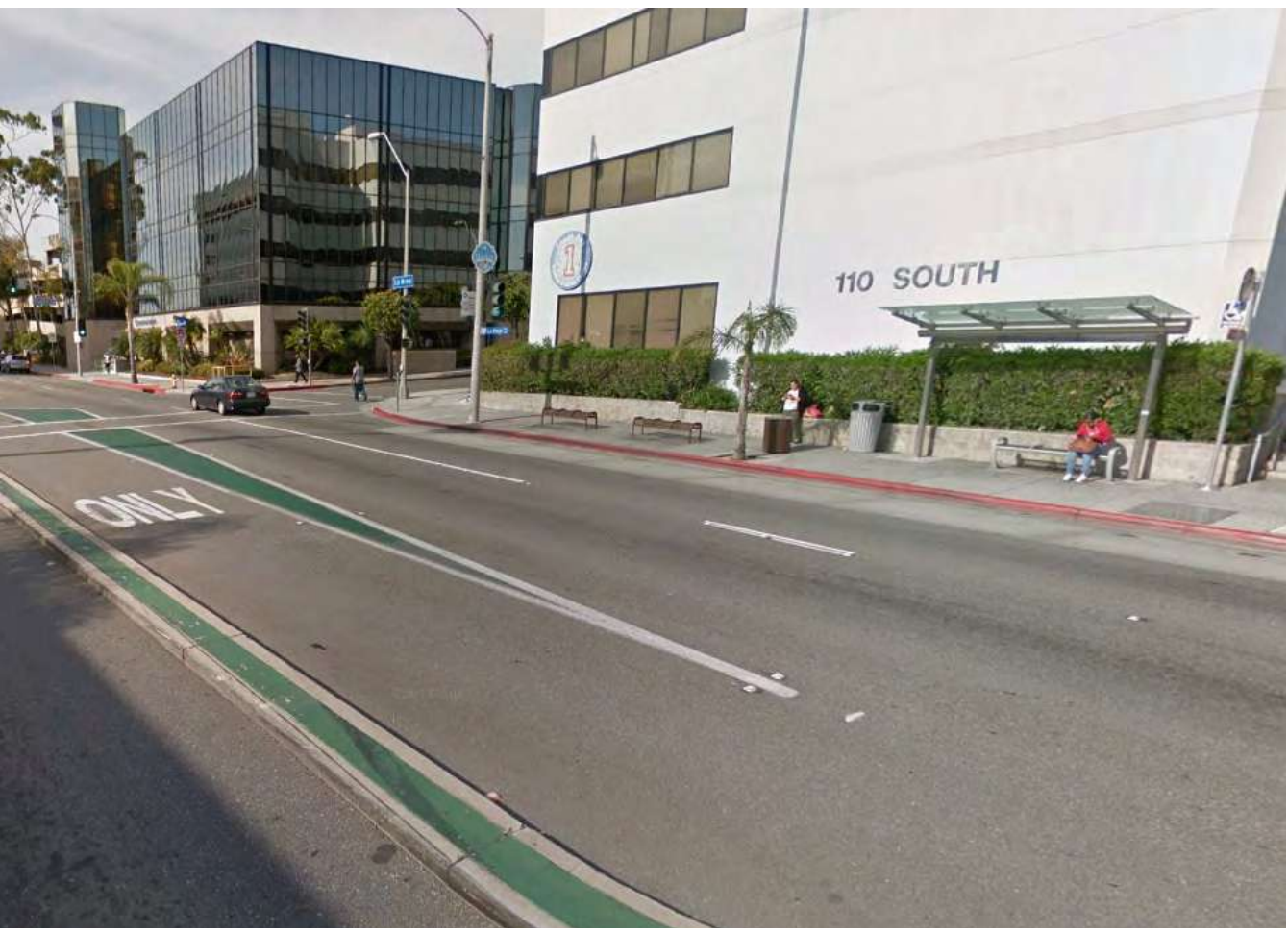
3 Centinela Ave & Florence

4 Florence Ave & Fir Ave



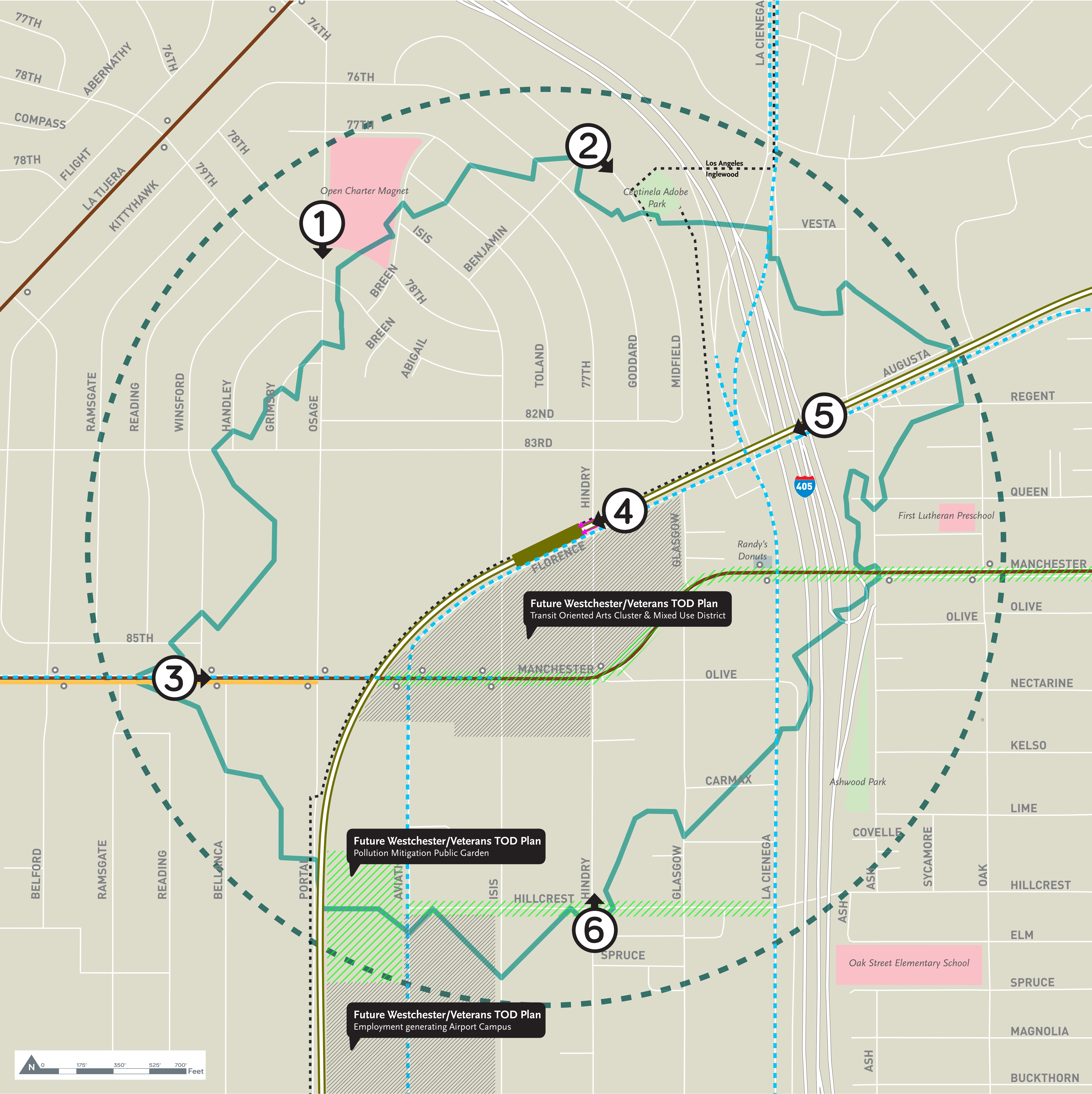
5 La Brea Ave & Queen St

6 Hillcrest Blvd & Regent St



Inglewood First/Last Mile

Westchester / Veterans Station



Station Rendering



1 Osage Ave & 78th St



2 Midfield Ave & Benjamin Ave



3 Manchester Ave & Bellanca Ave



4 Florence Ave & Hindry Ave



5 Florence Ave & 405 Fwy



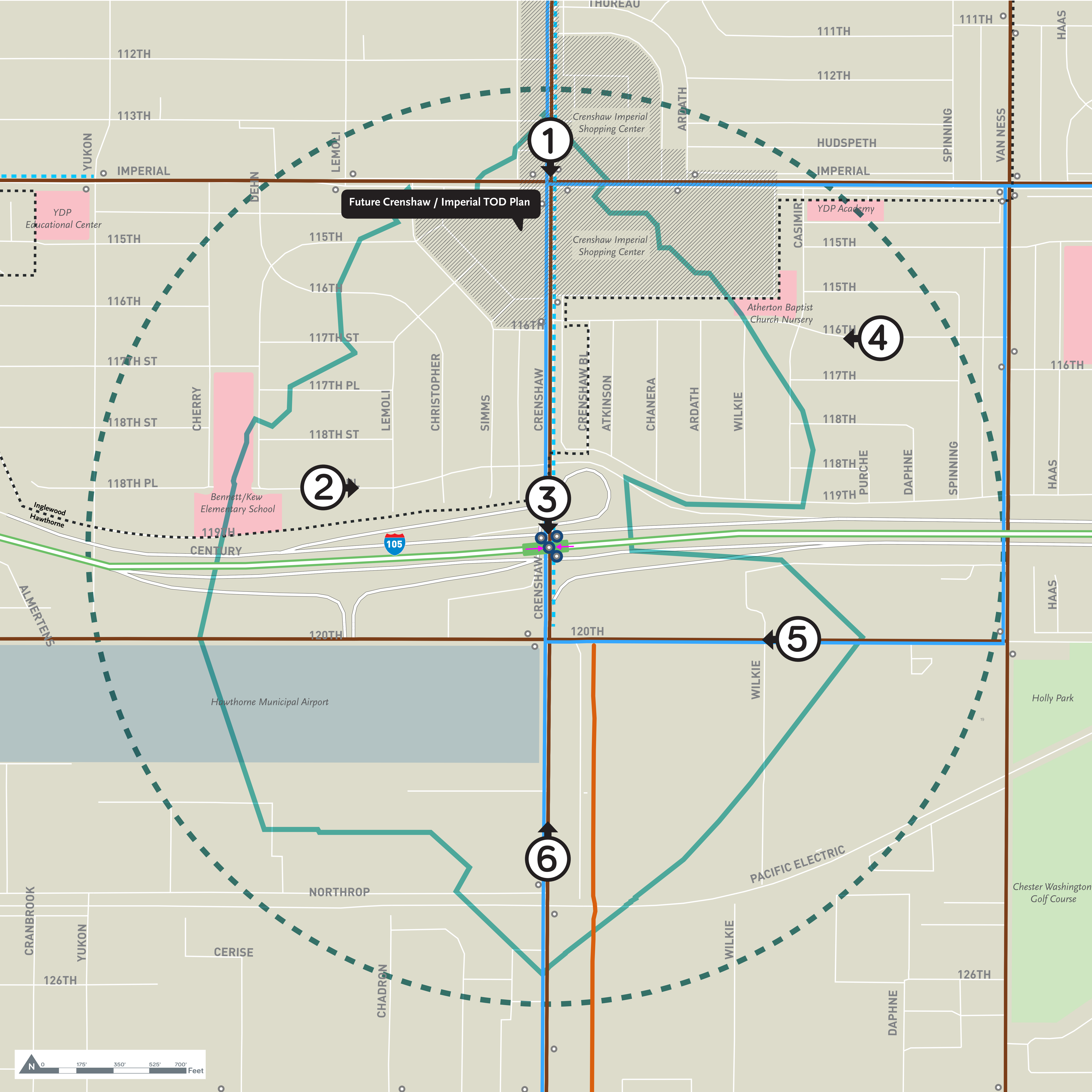
6 Hindry Ave & Hillcrest Ave



- Metro Crenshaw / LAX Line
- Crenshaw Station
- Station Access
- Inglewood City Boundary
- Half Mile Radius From Station
- Station Walkshed
- Parks/Cemetery
- Schools
- Destinations
- Roadway Speed Limit > 35mph
- Metro Non-Local Central Business District Routes
- Bus Stop
- Class II Bike Lane
- Planned TOD Area
- Planned TOD Green Boulevards/Green Space

Inglewood First/Last Mile

Crenshaw Station - Green Line



Station Photo



1 Crenshaw Blvd & Imperial Hwy



2 118th Pl



3 Crenshaw Blvd & 105 Fwy



4 116th St & Casimir



5 120th & Wilkie Ave

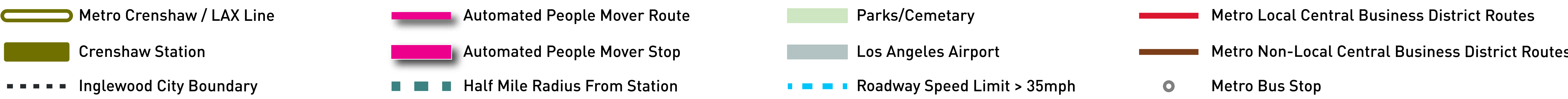
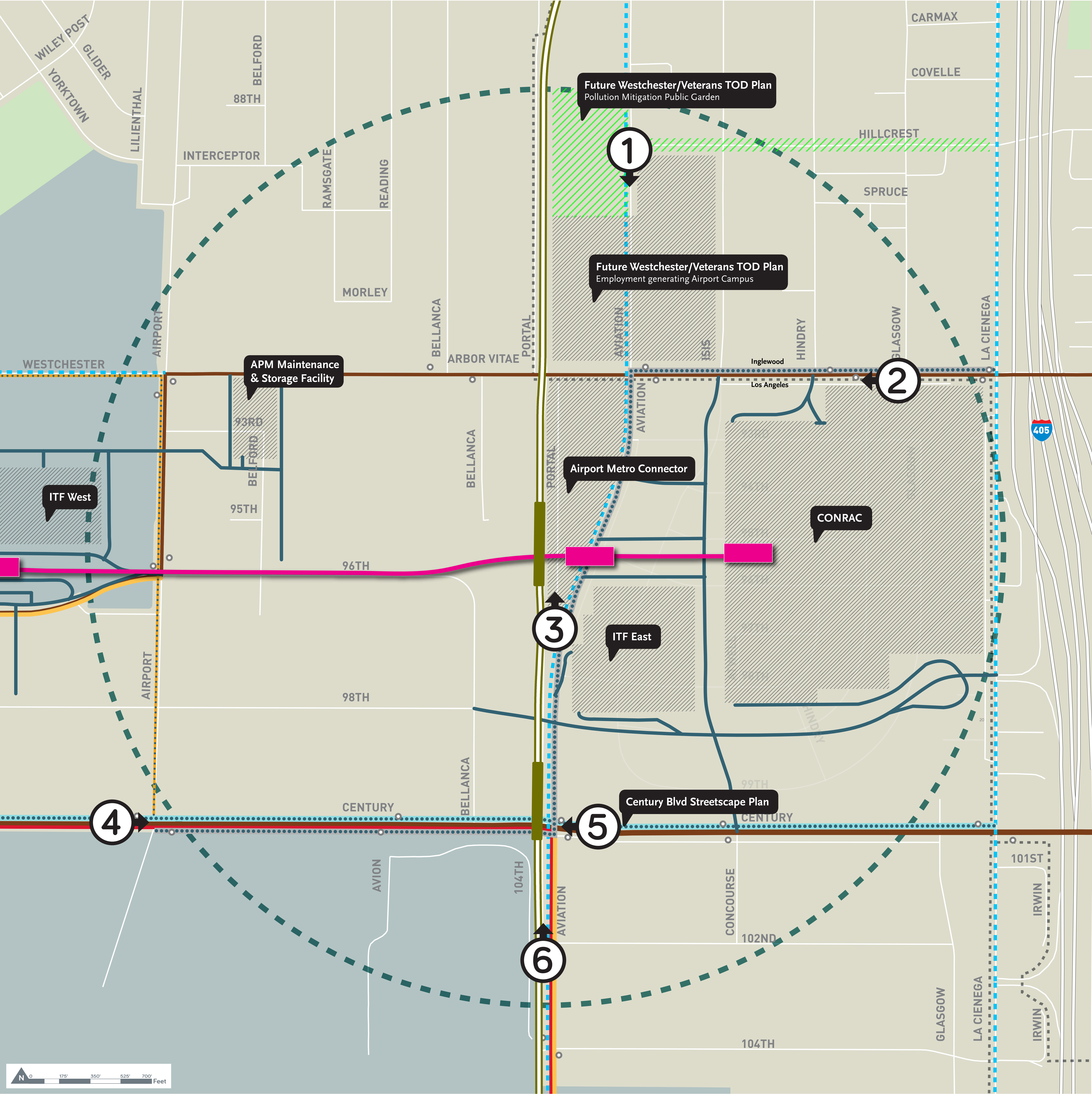


6 Crenshaw Blvd & Northrop Ave

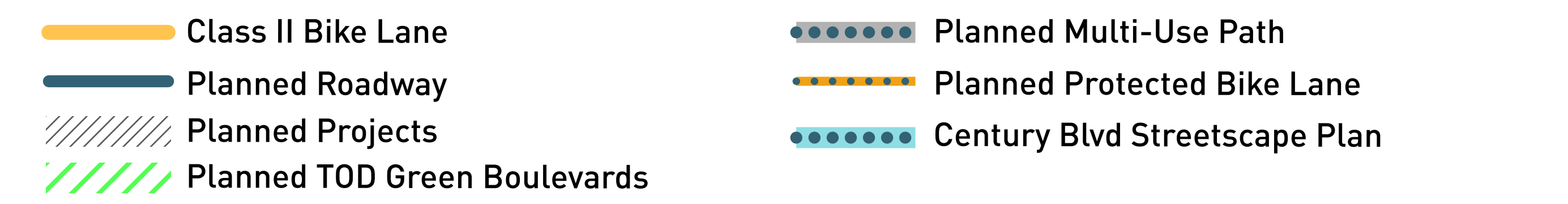
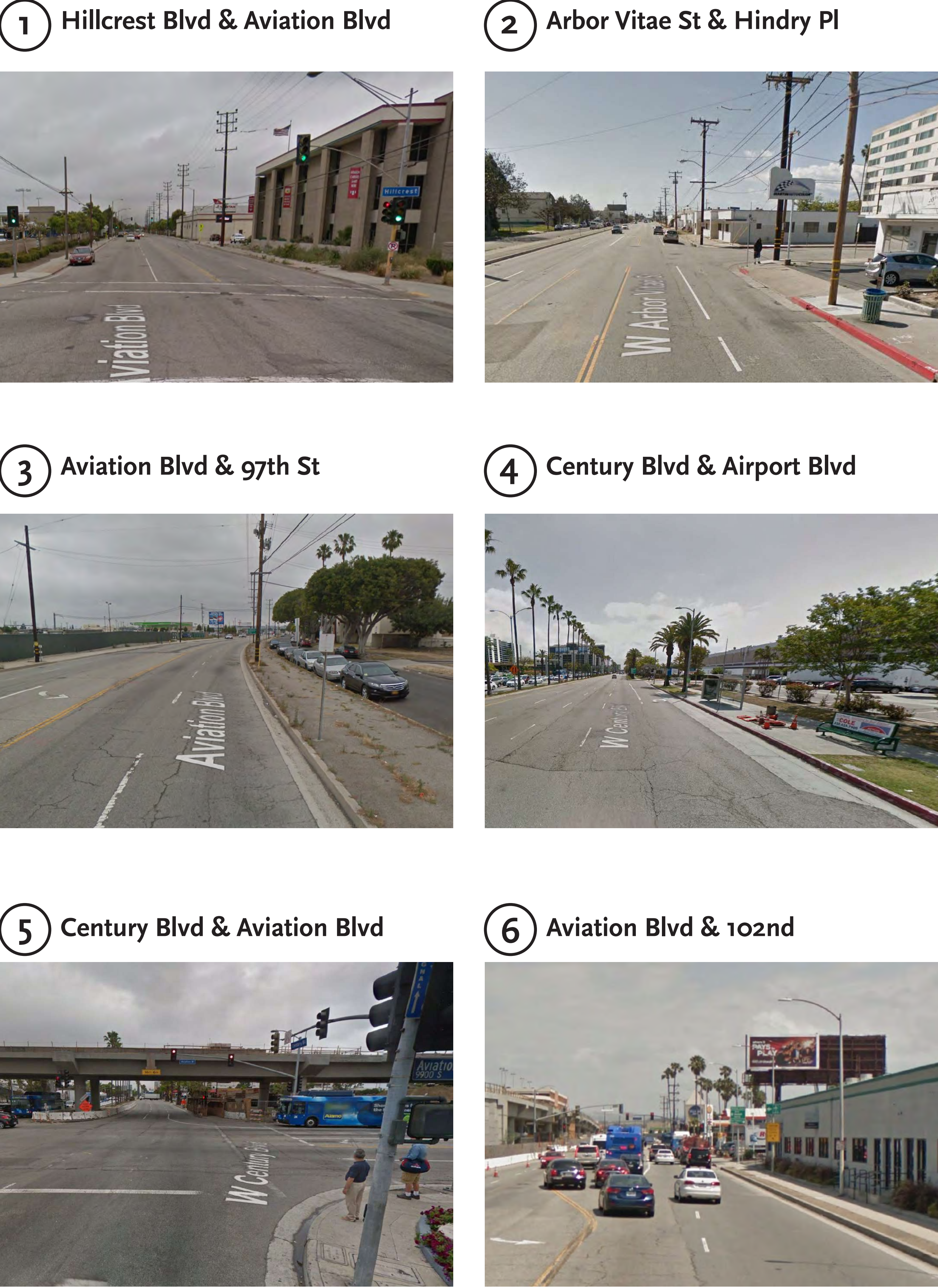


Inglewood First/Last Mile

Aviation/96th St Station

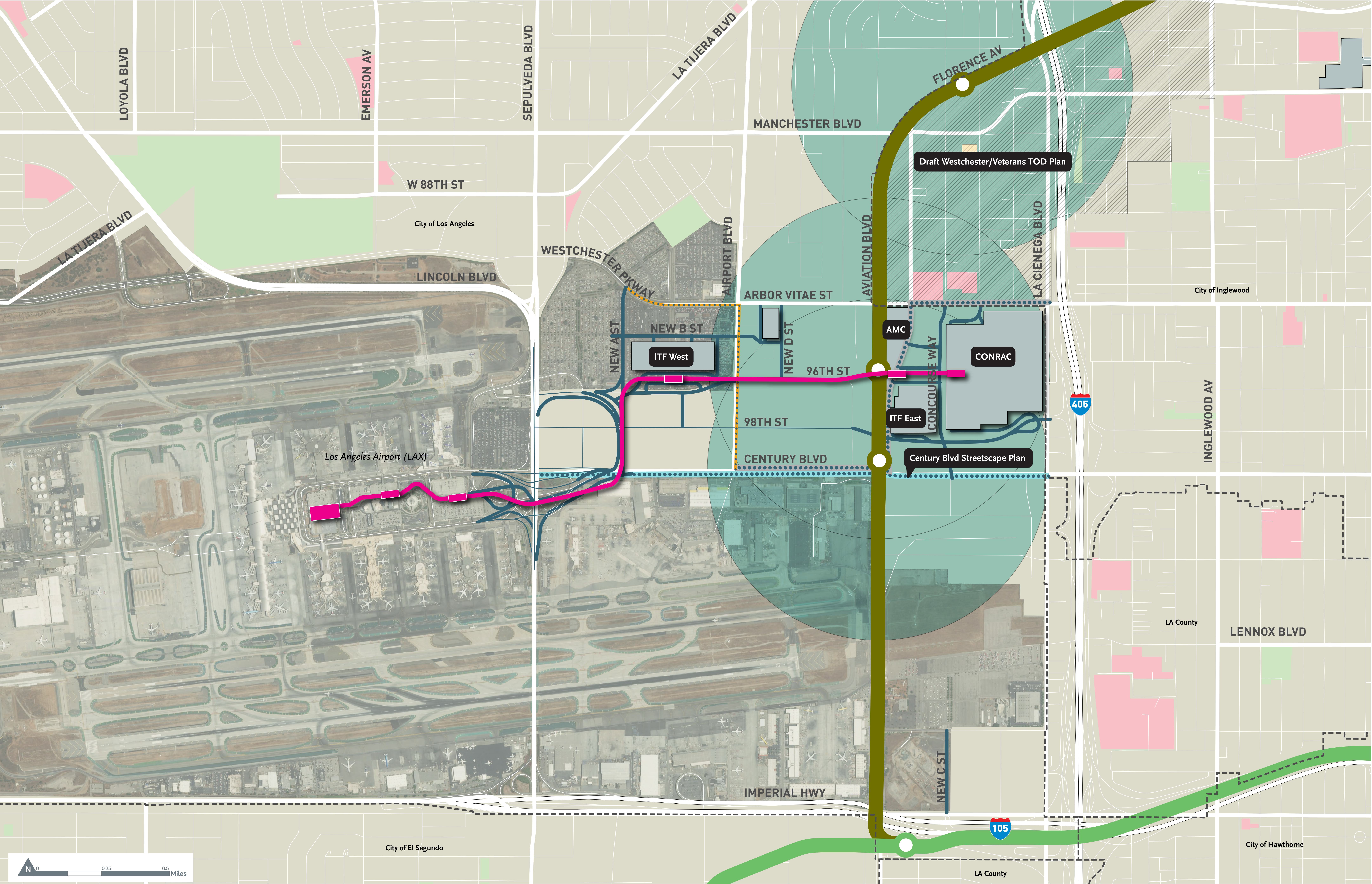







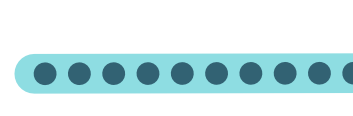






Station Rendering



Inglewood First/Last Mile

Aviation/96th St Station Context Map











-  Metro Green Line
-  Metro Crenshaw / LAX Line
-  Automated People Mover
-  New Roadway
-  Improved/Modified Roadway
-  Century Blvd Streetscape Plan
-  Planned Multi-Use Path
-  Planned Protected Bike Lane
-  City Boundaries
-  1/2 mile radius
-  Parks/Golf Course
-  Schools

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

Appendix C

Pathway Origin Matrix

Aviation/96th St Station: Pathway Origin

Street	Type	Extents	Priority Project	City Plan Correlation	Bike Plan Correlation	Reason For Inclusion
Arbor Vitae St	 Arterial	Jenny Ave - La Cienega Blvd	Yes. Aviation Blvd to Airport Blvd	LAMP: Planned Multi-use Path	Mobility Plan 2035: Bike Blvd/Bike Friendly Street	<ul style="list-style-type: none"> Key E/W corridor through station area Connections to CONRAC and AMC 405 Fwy crossing (east of station area)
Aviation Blvd	 Arterial	104th St - Hillcrest Blvd	-	LAMP: Planned Multi-use Path LAMP/Metro: Streetscape Improvements	Inglewood ATP: Bike Route w/ Greenback Sharrows north of Arbor Vitae Mobility Plan 2035: Bike Blvd/Bike Friendly Street	<ul style="list-style-type: none"> Key N/S corridor centrally located within planned projects: AV96 St Station, AMC, LAMP/CONRAC.
Century Blvd	 Arterial	Airport Blvd - La Cienega	-	Century Blvd Streetscape Plan LAMP: Planned Multi-use Path	Mobility Plan 2035: Bike Blvd/Bike Friendly Street	<ul style="list-style-type: none"> Planned complete street improvements per Century Boulevard Streetscape Plan Key E/W corridor connecting to LAX
98th St	 Collector	Aviation Blvd - Airport Blvd	Yes. Bellanca Ave to Aviation Blvd	LAMP: New connection to Aviation	-	<ul style="list-style-type: none"> Key N/S route adjacent to ITF West
Airport Blvd	 Collector	Century Blvd - Arbor Vitae St	-	LAMP: Planned Multi-use Path	-	<ul style="list-style-type: none"> Key N/S route adjacent to ITF West
Hindry Ave	 Collector	Hillcrest Blvd to Arbor Vitae St	Yes. Hillcrest to Arbor Vitae St	Westchester/Veterans TOD: Neighborhood Connector (with bike lane)	Mobility Plan 2035: Bike Blvd/Bike Friendly Street	<ul style="list-style-type: none"> Key N/S route connecting Westchester/Veterans station and CONRAC
Isis Ave	 Collector	Hillcrest Blvd - Arbor Vitae St	-	Westchester/Veterans TOD: Neighborhood Connector (w/o bike lane)	-	<ul style="list-style-type: none"> Alternative N/S route Connection to CONRAC and Airport Campus
Bellanca Ave	 Collector	98th St - Century Blvd	Yes. 98th St to Century Blvd	-	-	<ul style="list-style-type: none"> Fills gap along Aviation Blvd using Bellanca Ave and 98th St

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

Appendix D

Costing Assumptions / Details

To Shannon Davis
Cc Mary Riemer
From Peter Piet
Date 19 January 2019
Project Inglewood FLM

Memo

Project No. 23205201

Inglewood First / Last Mile Strategic Plan – High level cost estimate

Based only on proposals contained within Inglewood and Aviation / 96th St First / Last Mile Plan prepared by Here LA.

No site investigation undertaken.

No design drawings.

Indicative diagrams and content description only.

Estimate of extrapolated from information in plans and supported by area / distance measurements from using google earth.

Assumes normal contractor working.

High level cost estimate for design and installation only.

No allowance has been made for adding / adapting traffic signals except specifically noted. The City will need to conduct traffic analysis to be able to indicate future locations of new traffic signals or adaptation of existing.

CONSTRUCTION COSTS

Lighting for pedestrians and bicyclists

Typically, a corridor improvement. Shorter lighting column to bring light source closer to pedestrian and bicyclist. The placement and frequency will depend on the existing conditions. To be coordinated with street tree planting. LED light fittings to reduce ongoing costs.

Ped & bike lighting

90 ft centers, typically both sides of street, connected to existing utilities, allow for higher spec luminaires and increased pole height.

Cost - \$7,000 EA

Ped lighting

90 ft centers, typically both sides of street, connected to existing utilities. For certain streets, such as Market Street a closer spacing is proposed to tie in with the existing.

Cost - \$6,000 EA

Special plaza lighting

30 ft centers, higher quality pole and luminaire, connected to existing utilities

Cost - \$10,000 EA

Street trees and greening

Typically, a corridor improvement to provide shade for mainly pedestrians but also where possible for bicyclists. Placed where possible in existing soft landscape areas behind curve. Retain existing trees where possible. Assumed that trees are located at typically 30' centers, noting that driveways, utilities (above and below ground) and other street furniture may limit locations. Also, area landscaped improvements on traffic islands, bulb outs and street enhancements. Allow for medium 10 FT, 15 gallon street tree.

Street trees – in hard paved areas with grate

Street tree planting in hard paved sidewalks, allowance for creation new tree pit with iron grate.

Cost - \$4,000 EA

Street trees - in hard paved areas with planting

Allow 50 SF planting per tree @ \$30 per SF = \$1,500 EA, not including tree grate. Assumes creation of tree pit and planting area within existing hard area.

Cost - \$3,500 EA

Street trees in soft areas

Street tree planting in soft areas – assumes planting in existing grass areas with existing topsoil.

Cost - \$1,500 EA

Street trees with planting in soft areas

Allow 50 SF planting per tree @ \$30 per SF = \$1,500 EA. Assumes planting in existing grass / areas with existing topsoil.

Cost - \$3,000 EA

Greening

Ground preparation \$15 SF, plants \$25 SF

Cost - \$40 SF

Bike facilities

Typically, a corridor improvement to provide enhanced facilities for bicyclists, that includes striping, protection and / or signing.

Sharrow

Markings at 100 FT centers for one direction travel plus supporting signs on sidewalk every 300 FT.

Cost - \$600 EA

Bike lane – striped

Allow for lane markings – linear, stop and symbols.

Cost - \$10 LF

Bike lane – colored

Assume bike lane 6 FT wide, with associated striping / symbols

Cost - \$70 LF

Bike box

Allow for striping. Assume not colored.

Cost - \$5,000 EA

Raised cycle track

Allow for 8' wide raised two way concrete cycle track – new build, signing and stripping. Not include recrowning of street

Cost – \$1,000 LF

Buffered bike lane

Allow for 3' striped buffer \$30 LF, plus bike lane symbols and vertical markers every 3 FT – \$40 LF

Cost - \$70 LF

Greenway road repaving

Allow for grinding and overlay, restriping as required

Cost - \$10 SF

Connections and crossings

Assumption is that no signals are added or amended on the below crossings – to be a separate item if required.

Standard bulb out

Allow for concrete curb extension, 2 curb ramps, for 1 corner of a four-legged intersection. Where a larger bulb out is envisaged the cost estimate has been increased.

Cost \$25,000 EA

Green bulb out

Allow for Curb extension, 2 curb ramps, 1 corner four-legged intersection, planting, paving. Where a larger bulb out is envisaged the cost estimate has been increased.

Cost \$30,000 EA

Curb ramp

Allow for concrete curb ramp upgrade. New ramp to align with crossing. Assumes no extensive reconstruction of drainage / levels.

Cost \$3,000 EA

Signal modifications

Allow for additional signals / modifications at signals junction / crossings. Exact requirements to be confirmed.

Cost \$300,000

Crosswalk marking

Allow for high visibility markings – continental / zebra. Cost per width of street.

Cost \$70 LF

Traffic Calming and Speed Reduction

Physical interventions into existing street to slow traffic speeds. Typically spot interventions.

Traffic circle

Allow for traffic circle with rolled curb and landscape tree and understory planting plus striping and signs etc associated with traffic circle - curb extension / bulb outs measured separately

Cost \$30,000 EA

Traffic calming - speed cushion / bump

Allow for cushion / bump with two warning signs and markings per location @ 250 ft cs

Cost \$3,500 EA

Speed reduction - traffic island diverters

Small islands located in center of street to divert / slow traffic. Can be used to assist pedestrian crossing, typically in. Allow for warning signs / striping. Used in pairs

Cost \$10,000 EA

Transit

Enhancement of bus shelter facilities, typically a spot intervention. High quality bus shelter with selection of street furniture (trash can, seats, bike racks etc to suit location plus provision local area and travel information. Allow for lighting of shelter. No allowance for digital display of real time information.

Bus shelter

Allow shelter \$15,000; street furniture \$5,000, area information / signage \$5,000

Cost \$25,000 EA

Outboard platform including bus shelter

For bus shelter associated with a Platform area – 500 SF @ \$30 = \$15,000; Shelter \$15,000; benches, trash etc \$5,000, Information / signage \$5,000)

Cost \$40,000 EA

Wayfinding

Finger post sign

Allow for post with up to 4 fingers giving local area direction. Spot location.

Cost - \$2,000 EA

Bicycle boulevard sign

Allow for simple metal plate sign on post every 300 FT and each side of street where sharrows used.

Cost - \$500 EA

Streetscape

New sidewalk

Allow for concrete sidewalk extension with concrete curb, not including re-crowning of street.

Cost - \$40 SF

Diverter

Allow for re-built planted diverter across street with gap for bicyclists to pass through, including signs, tree and shrub planting etc.

Cost - \$25,000 EA

Visual enhancements

Allow for visual enhancements of streetscape such as painted murals, art installations etc. Allow for either area improvements or spot enhancements as appropriate.

Cost – EG \$25,000 EA – spot enhancement allowance such as art installation / interactive sculpture, feature lighting

Cost – EG \$25 SF – area enhancement allowance such as mural painting or treatment of boundary walls

Street furniture enhancements

Allow for new street furniture in key locations such as downtown locations. Allow for either area improvements or spot enhancements as appropriate.

Cost – EG \$80,000 EA – lump sum allowance for additional street furniture such as trash cans, bollards, seats, signs, planters, movable furniture, kiosks, streets games etc

Cost – EG \$25 SF – area enhancement allowance for additional street furniture such as trash cans, bollards, seats, and planters.

Pavement enhancements

Allow for surface treatment of selected pavement areas to provide color and interest.

Cost - \$20 SF

Road closure – bollards

Allow for installation of bollards to close street, but with gate / removable bollards to allow service / emergency access. Allow for signs and planting. Approx 80 LF / 300 SF.

Cost - \$25,000 EA

Artful utility boxes

Allow for painting of upstanding utility boxes by community groups / artists.

Cost - \$500 EA

ADDITIONAL COSTS

Miscellaneous Items (5% of Estimated Cost Subtotal)

Allowance for unmeasured incidental items at this high-level cost estimate stage

Mobilization (10% of Estimated Cost Subtotal)

Allowance for contractors start up

Utility Allowance (10% of Estimated Construction Cost Subtotal)

Contingency to cover potential utility relocation costs

Contingencies (35% of Estimated Construction Cost Subtotal)

Contingency to cover unforeseen costs as study progresses

Planning (3% of Estimated Construction Cost Total)

Allowance to cover planning costs

Preliminary Engineering (5% of Estimated Construction Cost Total)

Allowance to cover preliminary engineering design costs

Final Design Services (10% of Estimated Construction Cost Total)

Allowance to cover final engineering design costs

PM for Design & Construction (10% of Estimated Construction Cost Total)

Allowance to cover project management of design and construction

CM (5% of Estimated Construction Cost Total)

Allowance to cover construction management services

R/W Allowance (20% of Estimated Construction Cost Subtotal)

Contingency to cover potential rights of way / easement costs

AVIATION/96TH STREET FIRST/LAST MILE PLAN APPENDIX

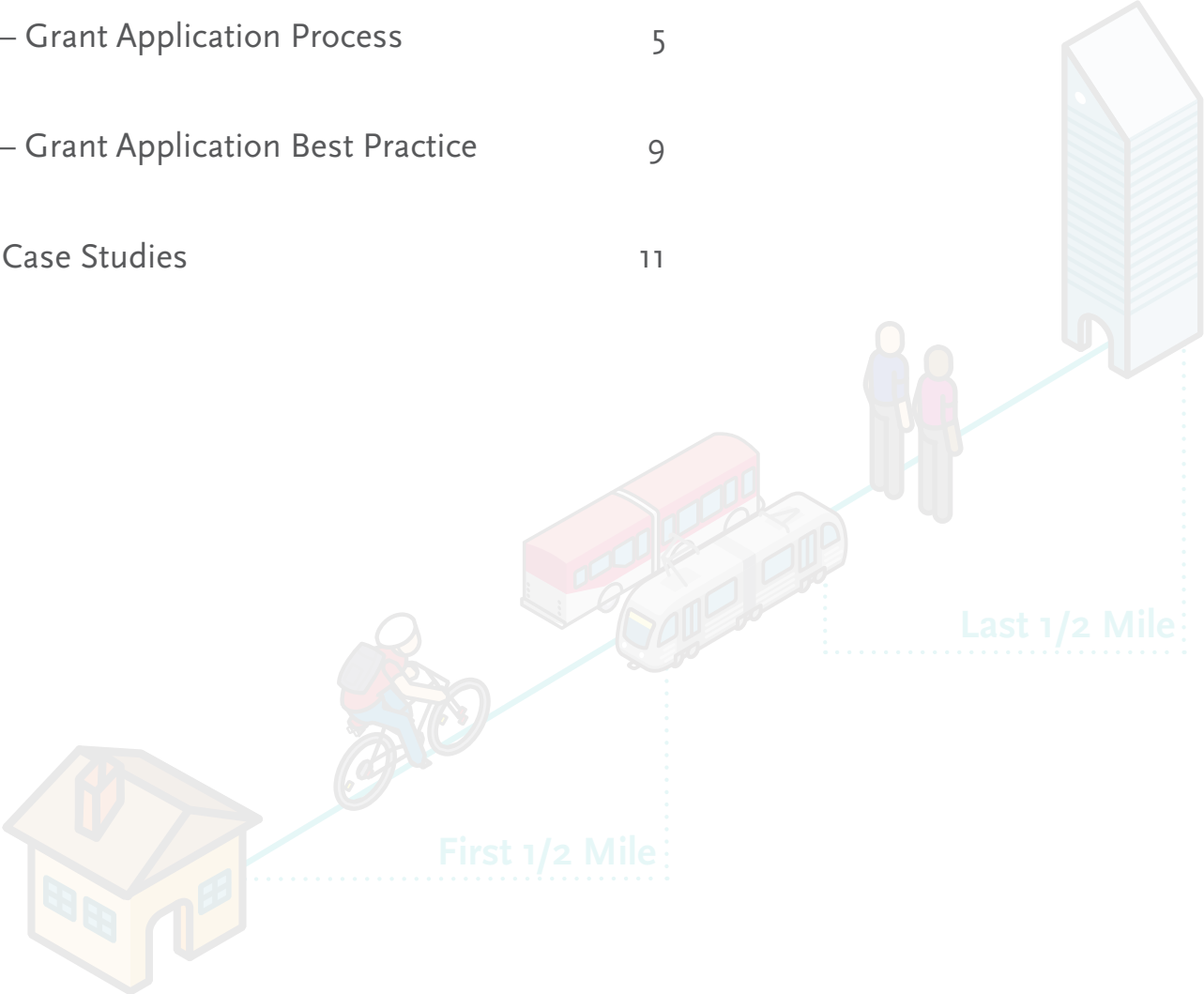
Appendix E

Funding Strategies & Funding Sources

Table of Contents

Funding Strategies & Funding Sources

Introduction	1
1A – Summary of Project Packages	2
1B – Federal, State, Regional and Local Other Sources	3
1C – Recommendations & Next Steps	5
2A – Grant Application Process	5
2B – Grant Application Best Practice	9
3 – Case Studies	11



Funding Plan Introduction

This chapter presents federal, state, regional, and other funding opportunities for the Aviation/96th St. Station First/Last Mile Plan, which is made up of four recommended projects that aim to improve multimodal station access and connect to key infrastructure investments underway in the area. This chapter is broken out into the several sections.

Section 1A outlines funding strategies for each of the recommended projects, seeking to leverage partnerships with other jurisdictions to attain funding for related project packages.

Section 1B reviews 11 federal, state, regional, and local funding sources and their applicability for these projects and potential project packages.

Section 1C provides recommendations and next steps for how local jurisdictions should proceed with grant applications.

Section 2 provides a high-level overview of the grant-application approval process and best practices.

Finally, Section 3 outlines case studies which demonstrate similar successes in first/last mile planning.

1A – Summary of Project Recommendations

Project	Proposed Facilities	Related Projects & Jurisdictions	Infrastructure Impacts (Right-Of-Way)	Planning Level Cost Estimate
Arbor Vitae St. Segment A	Bike lane, bike and pedestrian lighting, street trees, and enhanced crosswalk/curb ramps.	LAMP Bicycle Plan (LAWA), Arbor Vitae Street Widening (LAWA), City of Los Angeles, City of Inglewood	Reduction in lane widths, restriping	\$574,000
Arbor Vitae St. Segment B	Bike lane with vertical buffer, sharrows, street trees, striping, enhanced crosswalks and wayfinding.	LAMP Bicycle Plan (LAWA), Arbor Vitae Street Widening (LAWA), City of Los Angeles, City of Inglewood	Removal of parking lane along Arbor Vitae St.	\$2,724,000
New 98th St.	Bike sharrows, bike and pedestrian lighting, and street trees.	West 98th Street Road Improvements – LAMP (LAWA), Westchester Community Plan Overlay Century Blvd/98th St Corridor, City of Los Angeles	Not Applicable	\$668,000
Bellanca Ave.	New sidewalks, enhanced crossings, street trees, sharrows, wayfinding, and bike and pedestrian lighting.	Westchester Community Plan Overlay (Century Blvd/98th St Corridor)/City of Los Angeles G Shuttle Project and Wayfinding	Not Applicable	\$728,000
Hindry Ave.	Sharrows, striping, street trees, lighting, enhanced crosswalks, and wayfinding.	City of Inglewood	Not Applicable	\$898,000

1B – Federal, State, Regional and Local Other Sources

This section provides a summary of potential funding sources available at the federal, state, regional and local levels. We have restricted our focus to grant sources that cover implementation phase activities including engineering design and construction. The Funding Matrix provides details about each source's purpose, eligibility requirements, grant cycles, and suitability for the specific projects included in Section 1A.

Federal Funding Opportunities Congestion Mitigation and Air Quality (CMAQ)

The Federal Highway Administration (FHWA) is authorized under the 2015 FAST Act to award roughly \$2.3 billion annually for transportation projects related projects that “contribute to the attainment or maintenance of a national ambient air quality standard, with a high level of effectiveness in reducing air pollution”. The agency requires that these projects are added to the regional metropolitan planning organization's (MPO's) current transportation plan and transportation improvement program (TIP).

CMAQ funds may be used for bicycle and pedestrian activities, including bicycle lanes on roads, separated bicycle lanes, sidewalk,

and improved crossings, and signed bicycle/pedestrian routes. The CMAQ toolkit features a Bicycle and Pedestrian Improvement Tool that assists applicants in calculating emissions reductions.

Urbanized Area Formula Grants /5307

The FTA provides funding for transit capital, operating assistance, and transportation related planning in urbanized areas through the Urbanized Area Formula Funding program (49 U.S.C. 5307). Under this program, an urbanized area with a population of 50,000 or more (per Census Bureau) may receive up to 80 to 90 percent of net project costs for capital expenditures. Landscaping activities, pedestrian access and walkways; bicycle storage and facilities, and signage are also eligible as transit enhancements.

State Funding Opportunities Active Transportation Program

The California Department of Transportation (Caltrans) funding encourages use of active modes of transportation (Cycle 5 Call for Projects anticipated 2019) from federal and state SB1 and other sources. The program invests in infrastructure and non-infrastructure projects and programs that increase proportion of walking/biking trips, increase safety for nonmotorized users, advance efforts of regional agencies, enhance public health, and ensure that disadvantaged communities benefit from these investments. The California

Transportation Commission (CTC) recently awarded projects under the Cycle 4 Call for Projects. This year, a smaller number of projects won bigger grants (up to \$10 million); therefore, while competition may be high, there is potential to group all recommended projects in this plan into one first/last mile gap closure project.

Highway Safety Improvement Program (HSIP) Cycle 8

The HSP grant program is a federally funded program managed through Caltrans. HSIP funds projects that improve safety for users, whether on public roads or bicycle and pedestrian pathways. Related streetscape/beautification elements may be included in the project but are considered tangential. The HSIP program is intended for projects that can be quickly implemented through engineering and construction.

Regional Funding Opportunities AB 2766 Subvention Fund Program

The Air Quality Management District (AQMD) administers the AB 2766 Subvention Fund Program to reduce air pollution associated with motor vehicles. The projects listed in Section 1A may be eligible for funding through a few different categories:

- > Land use strategies that make it easier to walk, bicycle or use public transit, including the construction of pedestrian and mixed-use facilities (Category 3).
- > Bicycle lanes, trails and bridges that reduce commute and non-recreational auto trips (Category 8).

Sustainable Communities Program

The Southern California Association of Governments (SCAG) funds an annual call for projects under the Sustainable Communities Program to support planning and implementation of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). There are nine project types available to applicants related to Active Transportation, Integrated Land Use, and Green Region Initiatives.

Implementation projects are only eligible through this program as Infrastructure Demonstration Projects (Quick Builds) allowing jurisdictions to temporarily alter the street with pedestrian or bicycle facilities for the purpose of collecting community feedback.

Local/Other Funding Opportunities Transportation Development Act,

Article 3

Los Angeles Metro (Metro) funds planning and construction of bicycle and pedestrian facilities through the Transportation Development Act, Article 3 ordinance. These funds are allocated annually to local agencies on a per capita basis.

Funds may be used for engineering expenses, right-of-way acquisition, retrofit of existing facilities to comply with the Americans with Disabilities Act (ADA), route improvements, and purchase and installation of related facilities/amenities. Local agencies must submit claims to Metro at the end of the fiscal year to access their funds.

Measure W: Los Angeles County Safe, Clean Water Program

The Los Angeles County Bond Measure W passed in 2018 and established a special partial tax to raise money for projects that increase water supply and quality. The LA County Flood Control District implements a regional, municipal and district program. Three additional committees, the Watershed Area Steering Committee, the Regional Oversight Committee and Scoring Committee also oversee project selection. The process for soliciting regional projects is already underway; the request for projects is anticipated in March 2019. Municipal and district-level programs will likely be initiated in April 2019.

Coastal Transportation Corridor Specific Plan (TCSP)

The City of Los Angeles' Coastal TCSP (Ord. No. 168,999) is currently being updated by the City of Los Angeles Planning Department. Passed in 1983, the ordinance established a one-time Transportation Impact Assessment (TIA) on new commercial and industrial development projects to fund transportation projects and mitigate traffic impacts. Appendix A of the revised ordinance lists transportation improvements that TIA funds may be used for including: transit improvements, streetscape improvements, sidewalks, and bicycle facilities among others. Projects are selected by the Los Angeles Department of Transportation (LADOT). These funds typically serve as local match money when applying for federal,

state, and regional grant funding sources. The city leverages these locally sourced funds to make their grant applications more competitive.

Enhanced Infrastructure Financing Districts (EIFD)

Enhanced Infrastructure Financing Districts (EIFD) a joint-powers authority (JPA) formed by cooperating local jurisdictions with the legal authority to use tax increment financing (TIF) to repay bond debt or fund various projects. Through this process, cooperating governments may collect additional tax revenue as property values appreciate. TIF funds are typically paired with other sources to completely fund projects. Assembly Bill 313 is the most recent state legislation authorizing EIFDs to use TIF for a variety of infrastructure projects, including: projects that implement a sustainable communities strategy, water collection and treatment facilities, sewage treatment, and arterial streets and transit facilities, among others.

Transient Occupancy Tax (TOT)

The City of Los Angeles Office of Finance administers the Transient Occupancy Tax (TOT), which is a 14% tax levied on lodging businesses that rent to transient occupants (residing for 30 days or less). These businesses include hotels, motels, short-term rentals, recreational vehicle parks and campgrounds, among others. In fiscal year 2018-2019, the City estimates roughly \$320 million in TOT revenue, to be added to the City's General Fund and used for a variety of projects and services.

1C – Recommendations and Next Steps

This section provides a series of suggested next steps for stakeholder jurisdictions to move forward with implementing project recommendations from the Aviation/96th St. First/Last Mile Plan.

Develop Partnerships

A point of contact from each stakeholder jurisdiction (LAWA, City of Inglewood, and City of Los Angeles) should be chosen, and decision makers from each group should convene to discuss project packages, understand complementary goals and ongoing projects or programs, and brainstorm strategies, such as:

- > Should projects that close gaps in the LAWA bicycle plan be paired with those for grant pursuits?
- > Could all four of the projects be consolidated into one first/last mile application for the Caltrans Active Transportation Program?
- > Are there stormwater upgrade or retrofit activities in the near term that could be paired with recommended street improvements to make additional funding sources available?

Confirm Funding Strategies

Stakeholder jurisdictions should review the matrix of funding options and decide which opportunity/opportunities are worth pursuing and which ones they are eligible for. Ensure that the team reviews the full list of eligibility requirements before pursuing a grant. Once select funding sources have been identified, producing a funding strategy would include:

- > Identifying a lead jurisdiction
- > Assigning roles and responsibilities to supporting jurisdictions
- > Allocating staff resources and/or consultant needs
- > Collecting existing documentation to support the grant application
- > Identifying any potential gaps and conducting research or outreach to solicit further community or political support, such as:
 - » Community meetings
 - » Letters of support
 - » Photos
 - » A demonstration project

Draft a Narrative

Decide the story that you want your grant application to tell. It is important to strategize this at the outset and to be consistent throughout your application. Will the implementation of the Aviation/96th St. first/last mile projects:

- > Improve countywide mobility?
- > Improve local mobility?
- > Contribute to closing gaps in the bicycle or pedestrian network ?
- > Create access to jobs for residents?
- > Reduce GHG emissions?

Consider the source of the grant and the grant awarding agencies wider goals. Think about how the application help the stakeholder jurisdictions accomplish their goals and also fulfill the mandate of the grant. Grant writing teams should initiate the planning process before the announcement of the grant cycle by focusing on the story they want to tell. Identify what information and details will help convey the need for and importance of these projects.

Submit the Application

Regularly check for any updates to timelines for submission and ensure that all required documentation, eligibility requirements, and sign-offs are met. Keep the community and supporters apprised of any updates and be ready to start implementation at the award of the grant. Ensure you have the right staff allocation to fulfill requirements on grant reporting and use through to the end of the project.

2A – Grant Application Process

This section serves as a baseline reference for the grant process and best practices. To develop a successful grant application, applicants should review the funding authority's website and application materials thoroughly. Each grant will vary in requirements. In addition, Grants.gov is a helpful online resource with detailed information about each phase of the grant life cycle.

Grant Lifecycle

Every grant will have a unique life cycle; however, they generally follow a four-phase process.

- > (1) The Pre-Announcement Phase
- > (2) The Pre-Award Phase
 - » (A): Funding Opportunity Announcement and Application and
 - » (B): Grant Making Authority Review of Applications,
 - » (3) Award Phase, and finally
 - » (4) Post-Award Phase.

For more information, refer to Table 3 -The Grant Lifecycle.

Matrix of Funding Opportunities

Administrator	Opportunity	Purpose	Eligible Activities	Eligible Applicants	Funding Range	Funding Cycle	Link	Notes	Project
Federal									
USDOT	Congestion Mitigation and Air Quality (CMAQ)	PLANNING/ IMPLEMENTATION: To fund transportation projects and programs likely to contribute to the attainment or maintenance of national ambient air quality standard and reduce air pollution and help meet the requirements of the Clean Air Act.	Sixteen categories of projects including transportation control measures, congestion reduction and traffic flow measures, transit improvements, bicycle and pedestrian facilities and programs, travel demand management.	Public and private entities.	Varies by state, typically 80% of project cost paired with local match.	TBD/Pre-Announcement Phase	https://www.fhwa.dot.gov/fastact/factsheets/cmaqfs.cfm		ALL PROJECTS that encourage use of alternative modes. Coordinate with trip reduction efforts for employees and customers at LAWA.
FTA	Urbanized Area Formula Grants/5307	PLANNING/ DEVELOPMENT: To fund public transportation capital projects, operating assistance, job access and reverse commute projects, and for transportation-related planning.	Planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; as well as associated transportation projects (includes pedestrian and bicycle projects).	Urbanized areas (for populations over 200,000) or states (population under 200,000)	Max 80% of net project cost for most projects; 90% of net cost for bicycle facilities and bicycle enhancement projects. Match can come from other federal (non-DOT) funds.	TBD/Pre-Announcement Phase	https://www.transit.dot.gov/funding/grants/urbanized-area-formula-grants-5307	Formula Based: For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles as well as population and population density.	ARBOR VITAE SEG A ARBOR VITAE SEG B NEW 98TH ST. Projects paired with LAMP or other larger transportation projects.
State									
Caltrans	Active Transportation Program Cycle 5	DEVELOPMENT: To encourage increased use of active modes of transportation, consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S).	Capital infrastructure that furthers the goals of the program; the development of a community wide bicycle, pedestrian, safe routes to school, or active transportation plan in a disadvantaged community; education, encouragement, and enforcement activities that further the goals of this program.	Metropolitan planning organizations or regional transportation agencies, local governments, transit agencies, tribes	\$50,000 - \$500,000	Starts May 2019	http://www.dot.ca.gov/hq/LocalPrograms/atp/		ALL PROJECTS – could be packaged into one First/Last Mile project to address gaps in infrastructure.
Caltrans	Highway Safety Improvement Program (HSIP)	DEVELOPMENT: HSIP funds are eligible for work on any public road or publicly owned bicycle or pedestrian pathway or trail, or on tribal lands for general use of tribal members, that improves the safety for its users.	For a project to be eligible for HSIP funding, a specific safety problem must be identified, and the proposed countermeasure(s) must substantially address the condition. All projects must lead to and complete the construction of safety improvements. The project must be consistent with California's Strategic Highway Safety Plan (SHSP).	City, county, or a tribal government federally recognized	\$100,000 - \$10 Million No maximum	Cycle 9 closed in August 2018	http://www.dot.ca.gov/hq/LocalPrograms/HSIP/apply_now.htm		ALL PROJECTS Emphasis on safety need.

Matrix of Funding Opportunities

Administrator	Opportunity	Purpose	Eligible Activities	Eligible Applicants	Funding Range	Funding Cycle	Link	Notes	Project
Regional									
AQMD	AB 2766 Subvention Fund Program	IMPLEMENTATION: To fund projects that reduce air pollution associated with motor vehicles.	Ten implementation categories: Alternative Fuels/Electric Vehicles, Vehicle Emissions Abatement, Land Use, Public Transportation, Traffic Management and Signal Coordination, Transportation Demand Management, Market Based Strategies, Bicycles, PM Reductions, Public Education and Other.	Local governments	TBD	TBD/Pre-Announcement Phase	http://www.aqmd.gov/home/programs/local-government/local-government-detail?title=ab2766-motor-vehicle-subvention-program		ARBOR VITAE SEG A ARBOR VITAE SEG B NEW 98TH ST. HINDRY AVE.
SCAG	Sustainable Communities Program	PLANNING/IMPLEMENTATION [LIMITED]: To support local planning and implementation of the Regional Transportation Plan (RTP).	Several project types grouped under three categories: Active Transportation, Integrated Land Use, and Green Region Initiative.	Local or regional agencies, transit agencies, public schools, school districts, tribal governments	Max award of \$500,000 for demonstration infrastructure projects.	September to March (Due in December) 2019	http://sustain.scag.ca.gov/Pages/DemoProjApplication.aspxDemoProjApplication.aspx	Pedestrian and bicycle capital projects funded as infrastructure demonstration projects only (temporary) for purpose of community outreach and feedback.	ALL PROJECTS Demonstration could be used to conduct community outreach and better position projects for another grant.
Local									
LA Metro	Transportation Development Act, Article 3	PLANNING/IMPLEMENTATION: To fund planning and construction of bicycle and pedestrian facilities in LA County.	Engineering expenses leading to construction; ROW acquisition, construction/reconstruction, retrofit to comply with ADA, route improvements (signals, loop detectors, etc.), purchase and installation of amenities (bike parking, benches, etc.).	Cities in Los Angeles County, County of Los Angeles	Allocated annually on a per capita basis; cities may draw down or place on reserve.	End of fiscal year.	https://www.metro.net/projects/tda/		ALL PROJECTS
LA County DPW	Measure W: Safe, Clean Water Program	PLANNING/IMPLEMENTATION: To fund projects that improve water quality and supply.	Regional, municipal and district-level programs to increase water supply, improve water quality and provide community enhancements. Modification, upgrade, retrofit or expansion of existing projects.	Local municipalities, school districts, public agencies within Los Angeles County watersheds	Varies by program.	Request for projects anticipated for March 2019	https://safecleanwaterla.org/wp-content/uploads/2018/07/Final-SCW-Program-Elements-7.11.18.pdf	Stormwater-related upgrades and retrofit may overlap with streetscape and restriping activities.	ALL PROJECTS Suitable for projects that can be paired with stormwater upgrades/retrofits.

Matrix of Funding Opportunities

Administrator	Opportunity	Purpose	Eligible Activities	Eligible Applicants	Funding Range	Funding Cycle	Link	Notes	Project
Local (Continued)									
LADOT	Transportation Impact Assessment (TIA)/Coastal Transportation Corridor Specific Plan (TCSP)	PLANNING/IMPLEMENTATION: To fund transportation improvements to address/mitigate traffic impacts generated by new development within the Specific Plan area.	Specific plan update identifies a comprehensive set of transportation improvements that are funded in part by the fee revenue that include: Citywide Bicycle Plan, Bicycle Enhanced Pedestrian Access to Major Transit Stations, Sidewalk Network and Pedestrian Enhancements, Access Improvements to LAX, and other pertinent projects.	City of Los Angeles departments, agencies and bureaus	Varies, based on developer fees.	Not Applicable	http://www.westside-mobilityplan.com/coastal-transportation-corridor/		ARBOR VITAE SEG. A ARBOR VITAE SEG. B BELLANCA AVE Projects within the Los Angeles ROW.
Joint-Powers Authority (JPA)	Enhanced Infrastructure Financing District	PLANNING/IMPLEMENTATION: To fund infrastructure projects.	Infrastructure (roads, bridges), transit-oriented development, light rail, parks and open space, libraries, child care facilities, brownfields remediation and other projects.	Local governments/agencies must form their own Joint-Powers Authority (JPA)	Varies, based on property tax revenue.	Not Applicable.	https://www.cacities.org/Resources/Documents/Policy-Advocacy-Section/Hot-Issues/New-Tax-Increment-Tools/EIFD-Law-Comprehensive-Summary-02-16-16-final.aspx		ALL PROJECTS
City of Los Angeles Office of Finance	Transient Occupancy Tax (TOT) Revenue	Subject to City of Los Angeles Office of Finance discretion.	Projects and services paid for by the City's General Fund.	City of Los Angeles	Varies annually, based on tax revenue.	Not Applicable.	https://finance.lacity.org/transient-occupancy-tax-requirements		ARBOR VITAE SEG. A ARBOR VITAE SEG. B BELLANCA AVE Projects within the Los Angeles ROW.

(1) The Pre-Announcement Phase

This is arguably the most important phase. Grant application windows are typically between 30-45 days, so it is important to plan and begin developing a compelling application beforehand. Use this time to ensure you are registered to apply for grants and compile documentation that will help support your application. Supplemental and complementary plans, policies, outreach efforts and establishing relationships with jurisdictions you may want to partner with on a grant should be done during this phase.

(2) Pre-Award Phase (A): Funding Opportunity Announcement and Application

Once the funding opportunity has been announced, the grant application process has begun. This funding announcement should contain all the pertinent details including eligibility requirements and deadlines.

It is important to carefully consider each funding opportunity as they will have different requirements. For example, federally funded projects will often require National Environmental Policy Act processes, while state funded projects will require California Environmental Quality Act processes. As well, it is important to understand and consider if match funding is required, and if you have the internal capacity to implement the grant, should it be awarded.

(3) Pre-Award Phase (B): Grant Making Authority Application Review

Every grant will have a different review of applications timeline; however, they follow a typical four steps to determine eligibility and eventual award of the grant:

- > **Initial screening.** Basic minimum requirements will be reviewed for grant qualification. Commonly, eligibility for the grant, program narrative and budget. This stage reviews only the presence of these items and not their quality.
- > **Programmatic review and assessment of the content of application.** At this stage, a more thorough review of the application will evaluate technical quality, programmatic storyline, and demonstrated competency. This can include a panel of independent expert reviewers, overseen by staff, to ensure a fair process.
- > **Financial review.** Having a sound budget is key to a successful grant. At this stage, reviewers will look at cost items on a line by line basis and will look for compliance to financial regulations.
- > **Decision and announcement.** Following the above review, the agency will announce successful grant applicants.

(4) The Award Phase

Following the final decision, a notice of award will be issued to those chosen for funding. This notice is a legally binding issuance of the award. By signing the grant agreement or drawing funds, the grantee will be legally obligated to meet the full terms of the grant, including oversight and progress reporting. If the award is

a federal grant, this places further federal statutory and regulatory requirements and policies. Once the notice of award is signed, the grantee can begin to implement the project.

2B – Grant Application Best Practice

Funding through grants are a competitive process and developing a strategy to submit a compelling application is fundamental to success. The following best practice elements should be taken into consideration when pursuing grant funding.

Leadership

Establishing a leader is a critical component to the success of not only the grant application but the project implementation and delivery. A project leader is a necessity, and political leadership is also important to help gather public project support. Political leadership can be Elected Officials, any public facing executives, or other well-known community figures.

Relationships

To strengthen your application, leverage relationships with local agencies, community groups, and associations. Exhibit these relationships through letters of support and evidence of previous relationship building (for example, technical advisory or other various committee involvement). Multi-jurisdictional and multi-disciplinary projects are also known to score

The Grant Lifecycle

Project	Proposed Facilities	Related Projects & Jurisdictions
Pre-Announcement	Prior to the official announcement of the grant funding opportunity.	Prepare to apply for a grant by registering to apply, developing goals for your grant, establish a project timeline, and ensure that supporting plans and policies are in place.
Pre-Award	During Part A, applicants prepare and submit their applications. During Part B, the grant-making authority reviews grant applications.	Review grant application and determine its suitability for your project. Do your project goals support those of the grant? Write a concise, compelling story about your project and use visuals. Check and doublecheck that you have met all the application requirements.
Award	Grant making authority makes an award decision and notifies applicants.	Applicants receive Notice of Award (NOA) and sign a legally binding contract.
Post-Award	Implementation, reporting, and closeout.	Awardees implement their project and submit project progress and accounting reports per grant specifications.

well with reviewers. Promoting alignment across agency goals, plans, and jurisdictional boundaries is particularly effective.

as well as ongoing ways for the community to stay involved and updated, such as a social media presence.

Public Support

Creating a foundation of public support for projects is two-fold. Public buy-in not only makes political leadership more likely, but helps to paint a portrait of a smooth project implementation roll out with a lower likelihood of missing target dates or failing to meet grant expectations. Public outreach and support should be documented – efforts during the planning process are an excellent source to leverage,

3 – Case Studies

Case Study 1: Atlantic Ave., Cudahy, CA

Project	Atlantic Avenue Bicycle and Pedestrian Enhancement Project
Applicant	City of Cudahy
Partners	n/a
Project Cost	\$5,068,000
Award	\$1,784,000
Funder	Active Transportation Program Cycle 3 (Caltrans)
Year Awarded	2017
Project Phases	Engineering Design and Construction

Summary

Atlantic Avenue is a major north-south thoroughfare currently lacking bicycle infrastructure. The project will install bicycle and pedestrian facilities along Atlantic Avenue in Cudahy, CA between Florence Avenue and Patata Street. The project addresses a current deficiency in bicycle and pedestrian infrastructure on a busy corridor that provides access to major employment centers, shopping areas, and schools.

The City’s application also highlights poor health indicators in the community and emphasized that active transportation networks encourage physical activity in residents, combating heart disease and diabetes.

Key Outcomes

- > Safety and accessibility improvements for bicyclists and pedestrians.
- > Installation of a one-way protected cycle track at street level with a raised curbed buffer separating the adjacent travel lane.
- > Installation of pedestrian countdown boxes, ADA compliant curb ramps, median, and crosswalk improvements.

Application Highlights

- > Project provides 100% of gap closure in bicycle and pedestrian facilities and addresses current deficiency along a significant regional corridor.
- > Project serves disadvantaged communities.
- > Project falls 100% within the applicants right-of-way.
- > City partnered with local advocacy group Los Angeles Bicycle Coalition to host group bicycle rides to engage the community in addition to more traditional approaches (community meetings).
- > City secured support from array of stakeholders and elected officials (Senators, Assembly members, Sheriff, LA County Supervisors).

Case Study 2: Orange Line/Sherman Way, Los Angeles, CA

Project	Orange Line/Sherman Way Pedestrian Improvements Project
Applicant	City of Los Angeles
Partners	n/a
Project Cost	\$1,441,000
Award	\$1,153,000
Funder	Active Transportation Program Cycle 2 (Caltrans)
Year Awarded	2015
Project Phases	Project Approval and Environmental Document, Construction

Summary

The City of Los Angeles planned pedestrian and bike improvements to link the Metro Orange Line Sherman Way station with nearby destinations and encourage use of active transportation. The project is consistent with the LA Metro's Long-Range Transportation Plan (LRTP) and the SCAG Regional Transportation and Sustainable Communities Strategy (RTP/SCS). Street improvements such as pedestrian lighting, wayfinding, curb extensions, benches, and ADA curb cutouts are expected to increase rates of walking by roughly 13% in the project area.

The project grew out of the Canoga Connect study, conducted in 2010 by the City's Planning Department, Council District 3, and the Community Redevelopment Agency to identify key pedestrian and bicycling opportunities in the area. The study involved extensive stakeholder and community engagement, including walk audits and public workshops.

Key Outcomes

- > Upgrade non-compliant curb cuts into compliance with ADA standards.
- > Reduce bicyclist and pedestrian injuries by establishing a pedestrian refuge in the median of busy Sherman Way, with a buffer of trees separating pedestrians and motor vehicles.
- > Add continental crosswalks, pedestrian lighting, and curb extensions.
- > Install wayfinding signage at critical locations.
- > Install amenities such as benches and bicycle racks.

Application Highlights

- > Project serves disadvantaged communities.
- > Project falls 100% within the applicants right-of-way.
- > Project is consistent with regional long-range transportation plans.
- > Targets adult, senior, and child populations in Canoga Park with poor health outcomes (relative to LA County).

Case Study 3: Slauson Blue Line Station, Los Angeles County, CA

Project	Slauson Blue Line Station Intersection Improvement
Applicant	Los Angeles County Department of Public Works
Partners	n/a
Project Cost	\$1,465,000
Award	\$1,465,000
Funder	Active Transportation Program Cycle 3 (Caltrans)
Year Awarded	2017
Project Phases	Project Approval and Environment Documents, Engineering Design, and Construction

Summary

Pedestrian safety and access improvements were proposed for the Slauson Blue Line Station to address deficiencies in infrastructure and improve connectivity between the station, adjacent residential areas, and various community destinations. The Slauson Blue Line Station is located in the unincorporated community of Florence-Firestone (Los Angeles County). Presently, the station is underutilized despite being situated in a low-income and transit-dependent neighborhood. The County proposed these enhancements to increase pedestrian activity to/from the station.

In addition, the project provides residents with better access to the planned Metro “Rail to Rail” Active Transportation Corridor (partially funded under ATP Cycle 2), a future multi-use pedestrian/bike path on the north side of Slauson Avenue, which will terminate at the Slauson Blue Line Station.

Key Outcomes

- > Installation of curb extensions (bulb-outs), curb ramps, countdown signal heads, enhanced crosswalks, and advanced stop bars at five intersections.
- > Improvement of four intersections along Slauson Avenue between Hooper and Holmes Avenues; at the intersection of 60th St and Compton Ave in southeast Los Angeles County.

Application Highlights

- > Project falls 100% within the applicant’s right-of-way.
- > Project serves a disadvantaged community.
- > Project aligns with and closes gaps in other active transportation planning projects in the area.

Case Study 4: Expo Station 4th Street, Santa Monica, CA

Project	Expo Station 4th Street Linkages to Downtown and Civic Center
Applicant	City of Santa Monica
Partners	n/a
Project Cost	\$2,016,000
Award	\$1,613,000
Funder	Active Transportation Program Cycle 2
Year Awarded	2015
Project Phases	Project Approval and Environment Documents, ROW Acquisition, Engineering Design, and Construction

Summary

The Expo Station 4th Street Linkages Project made first/last mile improvements to an approximately quarter-mile segment of 4th Street between Colorado and Olympic Drive that extends to the Downtown Santa Monica Expo Line terminus. It was identified as a high priority project to increase accessibility and connectivity before the opening of the Downtown Santa Monica Expo Line terminus station in 2016. The project improves bicycle and pedestrian safety and connectivity between the station and the central business district, Civic Center and nearby destinations. The project was expected to serve a high volume of bicyclists and pedestrians and a diverse population of students, seniors, low-income residents and commuters, and visitors.

Key Outcomes

- > Adds sidewalks, crossings and bike boxes along 4th street to improve access, connectivity and safety.
- > Remedies safety hazards by reducing vehicle speeds, improving visibility, and minimizing motorized and non-motorized conflict points.

Application Highlights

- > Project serves a disadvantaged community.
- > Project supports city bicycle plan and Safe Routes to School Plan, as well as the regional transportation plan.
- > Application features quality photos that illustrate existing conditions.
- > Project documents extensive public outreach efforts that include presentations to community, stakeholders, planning commission, landmarks commission, artists and disabilities commission.
- > Includes letters of support from the conversation corps, local advocacy groups, and other agencies.

Case Study 5: Willowbrook/Rosa Parks Pedestrian Promenade, Los Angeles County

Project	Willowbrook/Rosa Parks Pedestrian Promenade & Bike Mobility Hub
Applicant	Metro
Partners	n/a
Project Cost	\$3,662,000
Award	\$2,909,000
Funder	Active Transportation Program Cycle 2
Year Awarded	2015
Project Phases	Engineering Design, Construction and Non-Infrastructure

Summary

The project features a new pedestrian promenade and bike mobility hub at the Willowbrook/Rosa Parks Blue and Green Line Station, which is a major transit hub in an unincorporated area of Los Angeles County. The bike mobility hub includes both infrastructure like bicycle parking as well as a community specific program designed to increase access to bicycles. The project was part of a larger station improvement project and serves to close a circulation gap by providing a direct link from Wilmington and Willowbrook Avenues.

This station is Metro's fourth busiest in terms of daily boardings and falls in a disadvantaged community with a high percentage of zero-vehicle households.

Key Outcomes

- > Installs new pedestrian promenade (sidewalks).
- > Creates a bike mobility hub, with self-storage lockers and bikes available for long or short-term usage.
- > Implements a community-driven Mobility Hub program to improve access to non-motorized transportation.

Application Highlights

- > Project serves a disadvantaged community disproportionately impacted by pollution (CalEnviroscreen).
- > Project aligns with Metro's Bicycle Transportation Strategic Plan, 2009 Long Range Transportation Plan and 2014 First/Last Mile Strategic Plan.
- > Extensive community engagement was carried out as part of the Rosa Parks Station Improvement Project and the Non-Motorized Access Plan (interviews, workshops, community meetings, surveys).
- > Application includes future station designs and photos to demonstrate existing conditions/need.
- > Application includes letters of support from community stakeholders and agencies.

This page is intentionally left blank.

