2020/11/16 DRAFT

Transit-Oriented District (TOD) Toolkit:

A Case Study involving the Atlantic/Whittier Station

(aka Transit-Oriented District (TOD) Design Guidelines)

Partially funded by SB1 Caltrans Sustainable Transportation Planning Grant Program.

Acknowledgments

This document is made possible by the dedication of the countless individuals, groups, agencies, Cities of Los Angeles, Whittier, and Santa Fe Springs, and County staff with special thanks to the following:

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SECTION I
Introduction

East Los Angeles, LA County UA (Source: Gruen)

01 Introduction

The Los Angeles (LA) County General Plan Transit-Oriented Districts (TOD) Program was developed to update planning of unincorporated communities near existing and new transit facilities to enable transit-supportive uses and infrastructure. The average transit rider considers distances shorter than a half-mile to be "walkable, " which describes someone's comfort level walking some distance in a particular area. As such, a TOD station area is defined as a half-mile radius around an existing or a proposed new transit station. This half-mile area will serve as the preliminary study area boundary for future Specific Plan efforts.

The LA County TOD Toolkit: A Case Study involving the Atlantic/ Whittier Station (aka TOD Design Guidelines) establishes a framework for promoting high quality, affordable housing, increased mobility and accountability, improved and safe infrastructure, increased housing choices, healthy benefits through walking and biking, and reduced greenhouse gas (GHG) emissions. The TOD Toolkit supports the provisions of the General Plan and local zoning, and do not supersede those codes. The TOD Toolkit also provides guidance in developing each new station area's Specific Plan, a process that will offer the community more in-depth community outreach and analysis of each TOD in more detail.

LA County General Plan "TOD" Definition:

"Transit Oriented Districts (TODs) are areas within a 1/2 mile radius from a major transit stop that have development and design standards, and incentives to facilitate transit-oriented development."

The TOD Toolkit will support future TOD development by providing guidance to planners and engineers primarily on the establishment of public right-of-way infrastructure that would support associated higher density development and facilitate active transportation and accessibility to transit, thereby improving public health and safety, encourage more affordable housing, as well as reduce GHG emissions and air pollutants in LA County.

The TOD Toolkit planning process has been summarized below:

- Establishment of TOD guidelines and best practices generally for all station areas through a review of best practices regarding land use, urban design, and transportation.
- Review of existing conditions for pedestrians, motorists, bicyclists and transit users in the selected TOD station areas. Commonalities between these station areas were used to develop six station area typologies on the basis of land use patterns, circulation patterns, and transit services/facilities.
- Use of the Atlantic/Whittier Station Area in East Los Angeles as a case study for the TOD Toolkit to demonstrate how general guidelines may be applied to a TOD or to a TOD Station Area Typology.
- Development and implementation of a community engagement strategy for the Atlantic/Whittier Station Area to solicit feedback from stakeholders including residents, property owners, and business owners regarding the TOD Toolkit. Outreach events included: two stakeholder group interview sessions, a pop-up booth at the local farmers market, and one community workshop. Feedback received at these events was used to develop the final rendition of the TOD Toolkit.
- Formulation of a market and economic development strategy and identification of future needs involving capital improvement opportunities and strategies for the Atlantic/Whittier Station Area.
- Identification and analysis of potential funding sources for recommended improvements to the selected TOD Station Areas including the potential for Tax Increment Financing (TIF) districts (Enhanced Infrastructure Financing Districts, Community Revitalization and Investment Authority, etc.).

02 Goals of the Guidelines

The TOD Toolkit is a tool to implement the LA County General Plan and are intended to guide the design of new development and infill projects for TODs in the unincorporated areas of LA County. The goals of the Toolkit are aligned with those of the County's General Plan Transit-Oriented District Program (Chapter 16 General Plan Implementation Programs), which have been listed below:

1. Increase walking, bicycling, and transit ridership and reduce vehicle miles traveled (VMTs);

2. Facilitate compact, mixed use development;

3. Increase economic activity;

4. Facilitate the public investment of infrastructure improvements;

5. Streamline the environmental review process for future infill development projects.

03 Planned Rail Lines and Station Areas

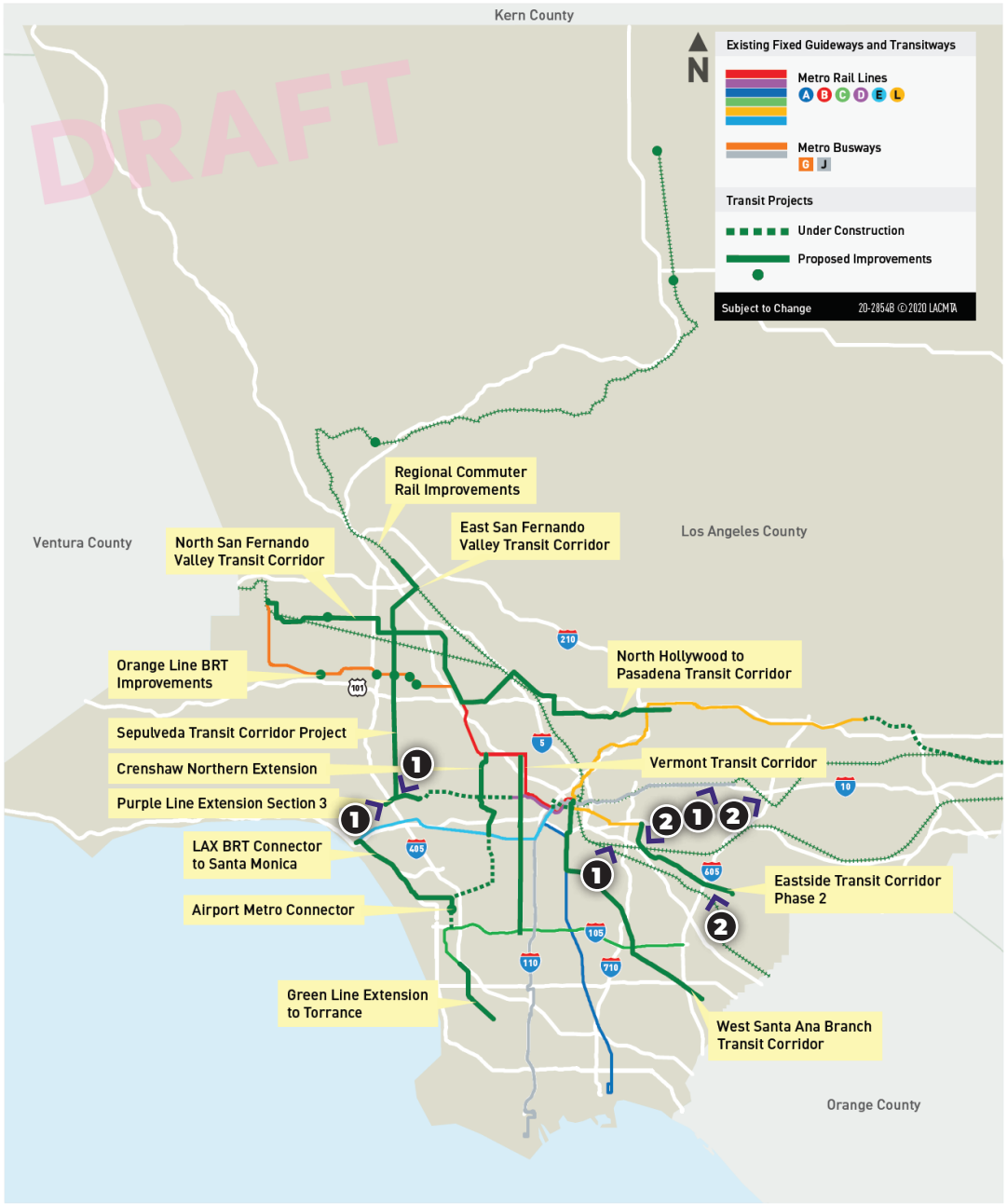
Since 1990, the Los Angeles County Metropolitan Transportation Authority (Metro), responsible for the County rail transportation system, has implemented rail lines throughout the County. These lines currently include the A Line (Blue Line), B Line (Red Line), C Line (Green Line), D Line (Purple Line), E Line (Expo Line), and L Line (Gold Line). In addition to these rail lines, Metro offers two premium bus lines: G Line (Orange Line and J Line (Silver Line).

With the passing of Measure M in 2018, the voter-approved half-cent sales tax, Metro is currently evaluating locations for three transit corridors and extensions of existing transit corridors through unincorporated LA County (see the map on the following page). Along these corridors, there are four additional rail stations in an LA County Unincorporated Area (LA County UA), and another six rail stations located in neighboring jurisdictions that include LA County UAs within a half-mile radius. These corridors and stations include the following:

Transit Corridors	Stations	Station Location
Eastside Transit Corridor Phase 2	Atlantic/Whittier	LA County UA
	Santa Anita	LA County UA
	Peck	*South El Monte*
	The Shops at Montebello	*Montebello*
	Norwalk	LA County UA
	Lambert	*Whittier*
	Commerce	*Commerce*
D Line (Purple Line) Extension	Westwood/VA Hospital	LA County UA
	Westwood/UCLA	*City of Los Angeles*
West Santa Ana Branch	Florence/Salt Lake	*Huntington Park*

The ten station areas listed above are those focused on in later sections of the TOD Toolkit. A summary map of these areas is on the following page, and individual maps of each of these proposed station areas can be found in the Appendix.

These potential new rail stations present the County with an opportunity to enhance and transform communities through public and private investment in all types of housing (including affordable), retail, office, open-space, other community amenities and infrastructure. In addition, the costs of active transportation and first/last-mile projects around new transit stations could be counted towards each jurisdiction's 3% Measure M funding commitment.



One or more proposed TOD Station Area

Source: Our Next LA: Long Range Transportation Plan Draft, 2020

04 Atlantic/Whittier TOD Case Study

The LA County TOD Toolkit applies to all new transit-oriented districts. At the time of the Guidelines' completion, there were ten proposed new TODs, described in **Planned Rail Lines and Station Areas** (see page 8). Of these ten station areas, one station area, the Atlantic/Whittier TOD in East LA, was chosen to be the Guidelines' case study area to gather community feedback regarding the project and to provide a basis for the guidance provided in the Toolkit. The LA County Toolkit is meant to be a reference guide as each community has their own preferences, culture, and identity. More community outreach will be conducted throughout the specific planning process for the future rail stations.

With the emergence of COVID-19, we are faced with the uncertainty in planning future facilities. This includes community outreach approaches and possible impacts to the planning of new facilities and infrastructure as the County navigates this new environment. Although the longevity of social distancing orders and the long-term impacts of COVID-19 are still unknown, the importance of robust and inclusive community engagement practices will continue to be a priority for future planning projects. The County will continue to engage with local community members in order to develop projects and programs with input from all stakeholders for each future station.

Outreach

In order to collect feedback about the LA County TOD Toolkit project, the LA County Department of Public Works and the Project Team conducted a series of community outreach events including:

- Stakeholder interviews with local residents, East LA Chamber, Whittier Merchants Business Association, Maravilla Business Association, and the Maravilla Community Advisory Committee
- A presentation to Health Innovative Community Partnership (HICP)
- A East LA Farmers Market pop-up booth
- Community Workshops

Meeting notices were mailed to residents and businesses located within the half-mile radius surrounding the proposed Atlantic-Whittier transit station to encourage participation in the events. Meeting notices were distributed to 32 locations throughout the half-mile radius as well as at public counters and business locations in East Los Angeles. The locations included public libraries, community centers, elected officials, community organizations including the East Los Angeles Chamber of Commerce, and a wide range of "mom-and-pop" businesses and restaurants. Details can be found in Appendix 02 Community Outreach Summary.

Key Concerns

Through the public outreach events, several key concerns emerged regarding TODs. These themes have been summarized below:

1. **Beautification:** Improve streetscape to encourage walking; maintain sidewalks; respect single-family neighborhood character; improve and maintain plantings; make alleyways more inviting and safe; incorporate murals and public arts; preserve landmarks; manage or eliminate food trucks that cause inaccessible sidewalks; encourage unmaintained/abandoned buildings and vacant lands for mixed use; discourage overly tall buildings and encourage developments that fit the East LA community, like Spanish bungalow styles; improve business facades.
2. **Parklets / Cultural / Memorial Spaces:** Create inviting parklets with shade trees and sitting areas; create cultural spaces including historical information on Chicano Moratorium and indigenous people, and info on local heroes.
3. **Support Local Business:** Preserve local businesses - encourage new businesses but not at the expense of existing local businesses; encourage walkability to help business traffic; encourage mixed use with businesses at street level and housing in upper levels; create more parking for businesses - perhaps public parking structures; improve business facades; encourage small businesses; promote local businesses.
4. **Parking:** Address parking needs without sacrificing aesthetics; use vacant lots for parking spaces; consider parking structures to consolidate parking spaces especially around busy commercial areas; incorporate green infrastructure improvements with parking spaces; do not eliminate existing parking spaces.
5. **Traffic Issues:** Need to reduce congestion caused by fewer motor vehicle lanes resulting from installation of bike lanes and rail lines; need to eliminate underutilized bike lanes and find alternate routes for cyclists.
6. **Lighting:** Improve lighting especially around sidewalks, sitting areas, and alleyways for safety, encourage walkability, and to improve aesthetics.
7. **Active Transportation:** Need more amenities to improve pedestrian and cyclist safety - like protected bike lanes, curb extensions, maintain pedestrian striping; improve safety conditions at right turns that are dangerous for bicyclists; create spaces/stations for bicyclists to fix their bikes away and safe from traffic.
8. **Underground Trains:** Need to have Metro trains and stations underground to avoid eliminating parking spaces for businesses and causing congestion by taking away travel lanes.
9. **Affordable / Senior Housing:** Need more affordable housing; use abandoned, unmaintained buildings and vacant lots for affordable housing for current residents; new housing should be for current residents first to reduce overcrowding as new residents would cause more congestion; avoid squeezing out current residents.

The Project Team used these key concerns to structure the design guidelines and toolkit components presented in the next several sections of the document. The guidelines are meant to be applied generally to all TOD areas such as by **Station Area Typologies** (see page 69). Specific guidance and examples of toolkit applications for the Atlantic/Whittier case study area are provided throughout the document in special callouts identified by a purple border.

05 Existing Plans and Policies

There are several existing regulatory documents in place which affect the development of existing and future TODs in unincorporated LA County. These documents should be used in tandem with the TOD Toolkit. The goals and purpose of these additional relevant plans are summarized briefly below:

Plans and Policies for all Unincorporated LA County Areas

Los Angeles County General Plan (2015)

The 2035 Los Angeles County General Plan, adopted in 2015, provides a policy framework for guiding jobs and housing growth, within the unincorporated areas of Los Angeles County. The Mobility Element includes many policies relating to complete street design.

Housing Element (2014)

The Housing Element of the General Plan determines the existing and projected housing needs of the unincorporated areas, establishes goals, policies and implementation programs that guide decision making on housing needs, and implements actions that encourage the private sector to build housing.

Los Angeles County Code

The Subdivision Ordinance (Title 21 of the Los Angeles County Code) generally regulates the internal design of streets, lots, public utilities and other similar infrastructure in each new subdivision. The Zoning Ordinance (Title 22 of the Los Angeles County Code) regulates single-lot restrictions such as use, height, and requirements for setbacks and parking.

Los Angeles County Bicycle Master Plan (2012)

The County Bicycle Master Plan guides the development and maintenance of a comprehensive bicycle network and set of programs throughout the unincorporated communities of the County of Los Angeles for 20 years (2012 to 2032).

Los Angeles County TOD Access Study (2013)

The purpose of the TOD Access Study is to assess the station access capacity and needs within nine proposed TODs in Los Angeles County. The proposed stations are part of the Green, Blue and Gold Lines.

Metro Complete Streets Policy (2014)

The Complete Streets Policy aims to ensure that streets form a comprehensive and integrated transportation network promoting safe and convenient travel for all users while preserving flexibility, recognizing community context, and using design guidelines and standards that support best practices.

Metro First Last Mile Strategic Plan & Planning Guidelines (2014)

The goal of the First Last Mile Strategic Plan is to better coordinate infrastructure investments in station areas to extend the reach of transit, with the ultimate goal of increasing ridership.

Los Angeles County Model Design Manual for Livable Streets (2011)

The Los Angeles County Model Design Manual is based on complete streets principles that design streets for people of all ages and physical abilities and accommodate all travel modes.

Los Angeles County Vision Zero Action Plan (2019)

The County of Los Angeles has adopted a Vision Zero Action Plan to guide a new traffic safety initiative focused on eliminating traffic-related deaths on unincorporated County roadways by 2035.

Step by Step LA County: Pedestrian Plans for Unincorporated Communities (2020)

The Step by Step plan provides a policy framework for how the County proposes to get more people walking, make walking safer and support healthy active lifestyles and includes Community Pedestrian Plans for the unincorporated communities of Lake Los Angeles, Walnut Park, Westmont/West Athens, Whittier-Los Nietos. The Whittier-Los Nietos community includes the Norwalk Station Area, which is one of the ten station areas covered by the TOD Toolkit.

Parks Needs Assessment (2016)

The Countywide Parks Needs Assessment was designed to quantify the need for parks and recreational resources.

On-Demand Personal Mobility Devices Pilot Program (2019)

The County of Los Angeles will be implementing the On-Demand Personal Mobility Devices (Devices) Pilot Program to support transportation alternatives, reduce greenhouse gases, and connect to transit. Devices will allow on-demand shared personal mobility companies to operate on unincorporated County streets which will assist the County in the management of its transportation network.

OurCounty Los Angeles Countywide Sustainability Plan (2019)

OurCounty is a regional sustainability plan for Los Angeles County which outlines what local governments and stakeholders can do to enhance the well-being of every community in the County while reducing damage to the natural environment and adapting to the changing climate, particularly focusing on those communities that have been disproportionately burdened by environmental pollution.

Plans and Policies for only the Atlantic/Whittier Station Area

East Los Angeles 3rd Street Plan (2014)

The 3rd Street Plan is a vision plan that sets forth a comprehensive set of strategies and design guidelines consistent with the goals, objectives, and policies of the County of Los Angeles General Plan and the East Los Angeles Community Plan.

East Los Angeles 3rd Street Form-Based Code Specific Plan (2014)

This Form-Based Code Specific Plan (Form-Based Code or ordinance) is established as the primary means to implement the East Los Angeles 3rd Street Plan.

East LA Community Plan (1988)

The community plan establishes a framework of goals, policies and programs that is designed to provide guidance to those making decisions affecting the allocation of resources and the pattern, density, and character of development in East Los Angeles.

Other Related Plans

SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS)

The Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) is a long-range visioning plan that integrates land use and transportation, and balances future mobility and housing needs with economic, environmental and public health goals.

National Association of City Transportation Officials (NACTO) Urban Street Design Guide

The Urban Street Design Guide provides the blueprint to NACTO's mission of making streets safer, more livable, and more economically vibrant.

SCAG High Quality Transit Area (HQTA) Toolkit (2019)

Generally, this Toolkit is a tool for guiding the development of Station Area Vision Plans and their implementation. It includes strategies and investments for people who walk, bike, and take public transportation, while balancing considerations for drivers and other modes. Specifically, this document provides a range of physical investments and strategies to construct, and measure the impacts of well-designed TODs.

06 The Need for Regional Collaboration

Regional collaboration is paramount for the success of developing TODs to achieve continuous safe and comfortable connectivity (walking and bicycling) to the transit stations.

Shared Jurisdictions

Each of the proposed station areas include significant land area outside of unincorporated LA County which are subject to the jurisdiction of incorporated cities. The County will consider the plans and existing conditions of adjacent jurisdictions within the half-mile station area when drafting regulations for a TOD during the Specific Plan process.

"Secondary areas" refers to any portion of a TOD's half-mile area which are not in unincorporated LA County and belong to an incorporated city. To ensure continuity, accessibility, and mobility within the TOD, coordination with other jurisdictions in these secondary areas is essential, especially if the station is in a secondary area. The jurisdictions which have land area within a proposed half-mile station area are:

City of South El Monte

The City has land area which comprises a significant portion of the Santa Anita and Peck half-mile station areas. The proposed Santa Anita station is located in unincorporated LA County but the proposed Peck station is located in the City of South El Monte.

City of Montebello

The City has land area which comprises the majority of the The Shops at Montebello half-mile station area. The proposed station is located in the City of Montebello.

City of Commerce

The City has minimal land area in the Atlantic/Whittier half-mile station area and land area which comprises the vast majority of the Commerce half-mile station area. The proposed Atlantic/Whittier station is located in unincorporated LA County but the proposed Commerce station is located in the City of Commerce.

City of Santa Fe Springs

The City has some land area at the center of the Norwalk half-mile station area and a small portion of land area in the Lambert half-mile station area. The proposed Norwalk station is located in the City of Santa Fe Springs.

City of Whittier

The City has land area which comprises the majority of the Lambert half-mile station area. The proposed Lambert station is located in the City of Santa Fe Springs.

City of Huntington Park

The City has land area which comprises the majority of the Florence/Salt Lake half-mile station area. The proposed station is located in the City of Huntington Park.

City of Los Angeles

The City has minor land area in the Westwood/VA Hospital half-mile station area and a considerable amount of land area in the Westwood/UCLA station area. The proposed VA Hospital station is located in unincorporated LA County but the proposed UCLA station is located in the City of Los Angeles.

Neighboring Cities

In addition, collaboration with cities which border the half-mile station areas in planning and implementing more transit-supportive land uses and infrastructure projects will be necessary for the TOD's success at realizing the benefits of TOD.

For maps of the half-mile areas, please see the Appendix.

07 Benefits of TODs

Transit-oriented development and infrastructure improvements can lead to a wide variety of benefits for TODs. These benefits include safer neighborhoods, cleaner air, increased economic activity, reduced dependence on automobiles, improved traffic flow, and increased housing availability and variety. Additional benefits to implementing TODs are included below:

Greater mobility choices: By creating activity nodes linked by transit, TODs increase mobility options in congested areas. While all residents benefit from having greater choice in transportation modes, young people, the elderly, and those without cars or not wanting to drive see significant improvements to quality of life.

Increased transit ridership: By decreasing driving and creating a walkable environment, TODs will increase transit ridership and may result in less roadway congestion with new development.

Revenue for transit systems: Increased ridership leads to additional revenues for transit service.

Improved air quality and decrease energy consumption: Decreased auto trips lead to lower emissions which results in improved air quality.

Catalyst for economic development: TODs can act as a catalyst for nearby properties to invest in development and take advantage of the higher land use density, customer base and walkable TOD community.

Redevelopment: TODs can be used to encourage the redevelopment vacant or underutilized properties.

Increased property value: TODs can be used to revitalize the area within 1/2 mile of the station resulting in increased property values.

Reduced per capita infrastructure costs: The compact, infill-focused development pattern of TODs help make the infrastructure costs less expensive to service on a per-capita basis relative to neighborhoods which are not compact and thus encourage residents to travel by use of a personal vehicle over transit ridership.

Reduced household spending: By reducing auto, parking and travel costs, TODs contribute to an expansion of household net income, which can instead be invested in the community. According to the American Public Transportation Association, using public transit can save up to $13,000 per year for a 2-person household (SCAG RTP/SCS Performance Measures, 2016).

Conservation of land and open space: TODs are compact developments, and therefore, consume less land than lower-intensity, auto-oriented development.

Expanded housing and employment choices: TODs provide a diversity of housing and employment types in conveniently close proximity to the transit station.

Health benefits: By providing more opportunities for walking and bicycling, TODs areas can lower rates of obesity, heart attacks, and other chronic health conditions.

Enhanced sense of community: Bringing more people and businesses closer in a pedestrian environment creates an activity hub, as TODs enhance community engagement and activity.

Enhanced public safety: Creating more active pedestrian places used throughout the day and evening promotes natural surveillance, which can lead to lower crime rates.

Quality of life: Reducing the driving time for long automobile commutes and enables commuters to re-purpose this time or other activities.

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SECTION II
Design Guidelines Applicable to All Station Areas

Waterside at Marina Del Rey, LA County UA (Source: Gruen)

01 Public Realm Mobility

East Los Angeles, LA County UA (Source: LA County)

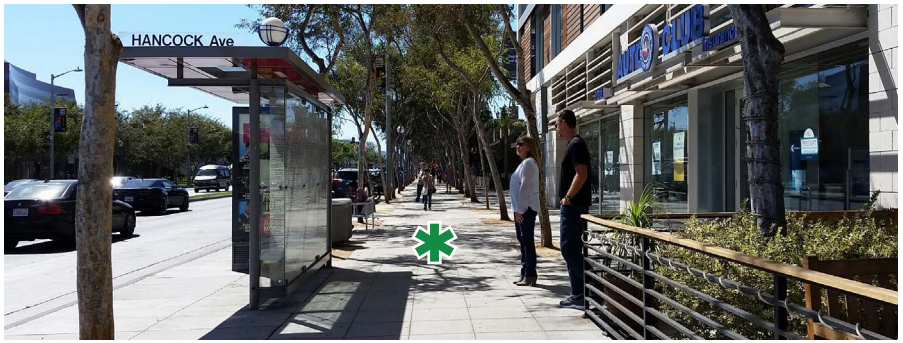
Providing safe, reliable, and accessible routes to and from the transit station is a fundamental component of a successful TOD. As public transit opportunities are added in the station area, certain amenities should be added to ensure pedestrians, cyclists, visitors, and commuters are able to safely and comfortably move around the area and connect to key destinations including the transit station.

First/Last Mile Connections

1. **Continuous Networks:** Provide continuous bus, pedestrian and bicycle networks, and shared mobility options (vehicles, bikes, scooters, etc.) to connect the transit station to local destinations.
2. **Pedestrian Pathways to the Station:** Enhance primary pathways to the station including the existing sidewalk network which connects residential areas within the TOD to the transit station. Along major arterials within this network, provide the pedestrian-scaled wayfinding signage to direct walkers to the transit station.
3. **Pick-up and Drop-off Areas:** Provide pick-up and drop-off space at or near the transit station for buses, shuttles, and shared vehicles. "**Pick-up and Drop-off Zones**" beginning on page 46.
4. **Alternative Mode Parking:** Provide bicycle parking and parking spaces for car-sharing programs along major corridors and in front of civic buildings. Require bicycle parking at new multi-family residential developments. Provide drop-off locations and docking spaces for shared micro-mobility devices (such as scooters) on public sidewalks along major corridors where space permits.
5. **Bicycle Network:** Plan for an integrated bicycle network including protected bike lanes and bike boulevards, and amenities such as bike parking and lockers within the TOD. Provide protected bike lanes or paths along corridors that lead to the transit station.

*** Narrow, cluttered sidewalk inhibits/deters pedestrian movement**

East Los Angeles, LA County UA (Source: Gruen)



*** Wide sidewalk with clear pathway encourages walking**

West Hollywood, CA (Source: Gruen)

Active Transportation

6. **Bicycle & Pedestrian Safety:** For safety pedestrian and bicyclist safety, ensure the following:
    - Increase pedestrian and bicycle activity so that people feel comfortable walking and riding along major corridors at all times of the day.
    - Utilize traffic calming tools such as curb extensions, road reconfiguration, and on-street parking to slow vehicular speeds.
    - Provide attractive, well-lit pedestrian paths along major arterials including over and/or under barriers such as freeways.
    - Analyze bicycle and pedestrian collisions and provide safety enhancements to address areas with a high number of collisions.

7. **Sidewalks and Pedestrian Pathways:** Provide adequate sidewalk widths to accommodate pedestrians and amenities such as canopy street trees within the street right-of-way:
    - Along arterials, provide a combined sidewalk and parkway width of 12' to 15' or more to accommodate two pedestrians walking side by side and space for street trees, street lights and other pedestrian amenities. See "**Sidewalks**" on page 40 for more detail.
    - On all other streets, provide combined sidewalks and parkways not less than 10' with a 5' minimum clear walking area and 5' for amenities.
    - Utilize techniques such as curb extensions to increase sidewalk width and reduce pedestrian crossing lengths at crosswalks.
    - Provide street lighting at regular intervals along all streets; ensure street trees are added such that they do not block or prohibit the addition of street lighting.
    - Along commercial corridors, supplement traditional street lighting with pedestrian lighting to create an attractive sidewalk environment for pedestrians.

*** Dedicated Class II bicycle lanes**

La Crescenta, LA County UA (Source: LA County)

*** Lack of bicycle parking/amenities**

East Los Angeles, LA County UA (Source: Gruen)

*** Bike parking on sidewalk**

Portland, OR (Source: Gruen)

*** Sidewalks next to the curb do not provide pedestrians with protection from vehicles in the street**

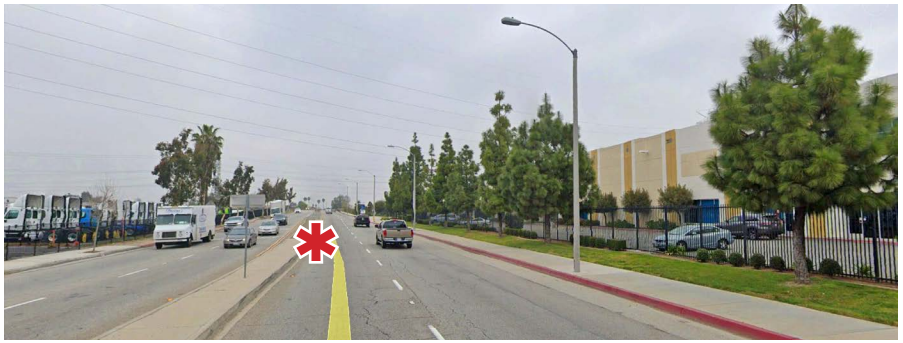
Whittier, CA (Source: StreetView)

*** Parkways, trees, and parked cars next to the curb provide safety and comfort for pedestrians**

Lancaster, CA (Source: Gruen)

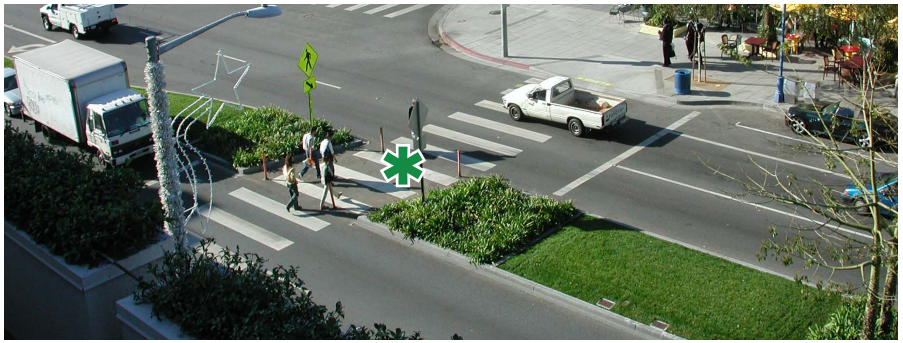
Roadway and Curb Design

8. **Crosswalks:** To alert motorists that pedestrians are present, provide **High Visibility Crosswalks** (see page 41) at all marked crossings, and advance yield lines at uncontrolled crossings.
9. **Traffic Calming:** Use traffic calming techniques such as curb extensions, speed bumps, raised crosswalks, traffic circles, and roundabouts to help slow the speed of traffic and minimize impacts on the community such as cut-through traffic.
10. **Street Layouts:** Provide multiple routes of access to the central transit station from the edges of the TOD by creating a grid network of local through streets with sidewalks. Discourage "superblocks" which span more than 400 feet between intersections and cul-de-sacs. Where possible, encourage attractive street vistas, or street-level viewsheds, terminating at the transit station or other key landmarks such as major civic buildings or public parks.
11. **Street Width:** In order to slow traffic and make wider pedestrian linkages, consider narrower lane widths of streets and an increase in pedestrian sidewalk widths, where appropriate.
12. **Curb Cuts and Driveway Widths:** To minimize traffic conflicts and breaks in the pedestrian realm, avoid multiple vehicle access points along major streets. Joint use or combined driveways are encouraged. The width of driveway area cuts should be minimized.
13. **Pedestrian Countermeasures:** To make an area safer for pedestrians, include devices such as median refuge areas, pedestrian-activated crosswalk signals and beacons, and countdown timers at non-signalized intersections.
14. **Left-turn Signal Phasing:** Provide left-turn signal phasing at major intersections where warranted to reduce conflicts between turning vehicles and pedestrians.
15. **Street Furniture:** At transit stations and along arterials leading to the stations, provide pedestrian and bicycle amenities such as sufficient lighting, benches/seating, bike racks, wayfinding signage, decorative paving, and public art. Establish a minimum level of street furniture to provide at all transit stops, and add more furniture at higher ridership stops.



*** Wide arterial with no mid-block pedestrian crossings**

Los Angeles, CA (Source: StreetView)

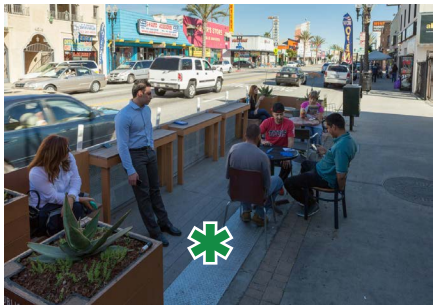


*** Arterial with frequent, visible pedestrian crossings**

West Hollywood, CA (Source: Gruen)

*** Sidewalk blocked by vendors**

East Los Angeles, LA County UA (Source: Gruen)

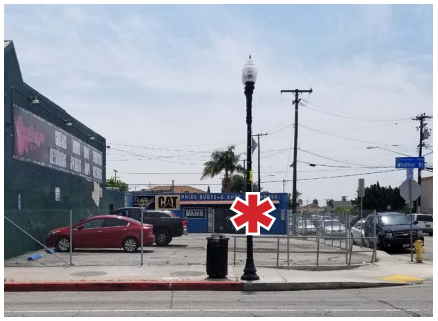


*** Parklet added to free up sidewalk**

East Los Angeles, LA County UA (Source: LA County)

Parking

16. **Amount of Parking:** Consider flexible parking standards to allow required parking spaces to be satisfied by a single parking facility and/or on-street parking. Where parking for an infrequent peak-demand is required, require utilization of shared parking facilities. Where appropriate, include provisions for in-lieu parking fees.
17. **On-Street Parking:** On-street parking, where appropriate, is encouraged to serve as a buffer between pedestrians and travel lanes. See "**On-Street Parking**" on page 46 for more detail.
18. **Surface Parking:** Discourage surface parking adjacent to the sidewalk along major streets and encourage on-site parking located underground, at the rear of the parcels, or buffered from view by transit supportive uses with convenient pedestrian access to the primary building entrance. Where surface parking lots are visible from street view, provide trees and other vegetation as a visual buffer. Require all surface parking lots include landscaping along the perimeter of pedestrian paths and the edges of the lot.
19. **Park and Ride Lots:** Require properties adjacent to high-ridership transit stations provide Park and Ride spaces, or provide at least one public Park and Ride Lot at or near the transit station.
20. **Joint and Shared Parking:** Permit unbundled parking and allow property owners to form agreements to consolidate the parking required for two or more proximate developments on one parcel to maximize parking lot efficiency and reduce the number of curb cuts.
21. **Parking Strategies in Employment Centers:** Encourage shared parking strategies and provide incentives such as reduced rate or reimbursable transit passes in employment centers to consolidate and efficiently provide the necessary amount of employee parking.
22. **"Park Once" Districts:** "Park Once" districts allow visitors to park in one location and reach multiple destinations on foot before returning to their vehicle. Where traffic volumes and commercial activity levels allow, establish a Park Once district which may include any of the following provisions:
    - Adjacent property owners are permitted to share parking lots.
    - On-street parking spaces and public parking lots are to allow a set number of parking for free or for a reduced fee.
    - Docking stations for bikeshare vehicles are to be provided.



*** Parking visible from street**

East Los Angeles, LA County UA (Source: Gruen)

*** Parking provided at rear**

East Los Angeles, LA County UA (Source: Gruen)

*** Public parking provided in a shared parking structure**

Claremont, CA (Source: Gruen)

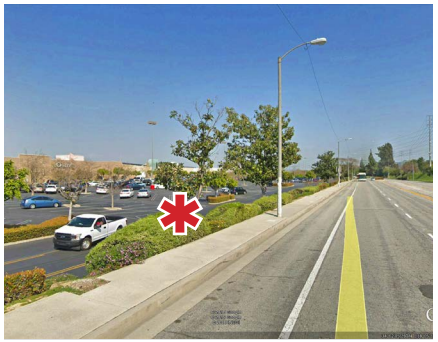
02 Mix of Uses and Densities/Intensities

Pasadena, CA (Source: Gruen)

Compact, higher-density development with a mix of uses near transit stops places more people in walking distance of the station and increases residents' ability to walk to multiple destinations. This concentration fosters walking, bicycling, and shared modes between uses to minimize auto trips and pollution. Introducing transit-supportive uses to a TOD can further support multimodal transportation and an active, vibrant neighborhood. **Transit-supportive uses** include retail, restaurants, outdoor cafes, grocery stores, bookstores, neighborhood services, civic and public uses, parks and plazas, child care, education facilities, multi-family residential, affordable housing, offices, entertainment, hotel, medical clinics, recreational facilities, fitness clubs, regional hospitals, and other uses that cater to the needs of transit users, residents and employers.

Mix of Uses

1. **Transit Supportive Uses:** Provide transit-supportive uses that generate high pedestrian activity, foster an active environment throughout the day, and increase transit ridership. Discourage heavy industrial and non-transit supportive uses such as vehicle-oriented businesses like car washes, drive thrus, and car dealerships in the area directly around the transit station.
2. **Proportion of Uses:** Vary the proportion and mix of uses in a half-mile area depending on the characteristics of an individual area. For example, encourage moderate densification in historically lower-density neighborhoods and more substantial densification in medium- and high-density neighborhoods.
3. **Commercial Uses Activity:** Require commercial uses which generate high pedestrian or vehicle traffic to be located along a major arterial and allow for smaller-scale, community-serving commercial uses along other corridors.
4. **Tailor Designs to Reflect Uniqueness of an Area:** Vary the design character of developments based on the land use and urban design qualities envisioned and the unique characteristics of a specific geographic location.



*** Inactive land use fronting a street**
Los Angeles, CA (Source: StreetView)

*** Pedestrian-friendly active uses**
Los Angeles, CA (Source: Gruen)

Compact Development

5. **Infill Development:** Remove barriers to infill development on small lots and underutilized parcels with limited existing on-site uses by reducing parking, height, setbacks, and other requirements.
6. **Surface Parking Redevelopment:** Permit and encourage properties with surface parking lots, especially street-adjacent lots, to replace a portion or the entirety of the lot with new development with a reduced or waived replacement parking requirement as necessary.
7. **Rehabilitation of Older Buildings:** Encourage the rehabilitation and reuse of older buildings to maintain neighborhood character and to sustainably accommodate new businesses and/or housing units.
8. **Condition and Density of Existing Uses:** Utilize code enforcement and incentives to encourage property owners to maintain their properties as safe and attractive to patrons to prevent abandonment.
9. **Compact Development:** To encourage compact development in TODs:
    - Allow the highest densities and intensities permitted in the area directly around the transit station.
    - Require minimum densities and floor area ratios for new development.
    - Require incentives for additional densities when public benefits are provided such as affordable housing, streetscape improvements, and reduced parking.
    - Provide incentives for consolidation of small lots for the purposes of developing multi-family residential buildings, mixed-use developments, or employment centers.
    - Where appropriate, allow two to four housing units per parcel in lower density residential areas within the TOD area depending on the size of lots, infrastructure, and amenities in the area.
10. **Joint Development:** Encourage participation in the Metro and County Joint Development Programs by establishing an inventory of publicly-owned land available for redevelopment.
11. **Lot Size:** Reduce minimum lot sizes for residential uses to encourage more compact development.

*** Vacant/Underutilized parcel**

East Los Angeles, LA County UA (Source: Gruen)

*** Infill development**

Orenco Station, OR (Source: Gruen)

*** Non-compact single-use development with parking along the sidewalk discourages walking**

Whittier, CA (Source: StreetView)

*** Compact mixed-use development located along the sidewalk fosters a safer and more lively pedestrian environment**

Pasadena, CA (Source: Gruen)

Housing

12. **Market Rate Housing:** Reduce barriers to the construction of market-rate housing such as restrictive development regulations (i.e low maximum density, low building heights, etc.) and lengthy development approval processes.
13. **Affordable Housing:** Develop innovative strategies to introduce affordable housing into a TOD, such as:
    - Remove maximum density and height restrictions for affordable housing projects and affordable housing in mixed-use developments with improved transportation infrastructure and public amenities/benefits.
    - Preserve and increase the amount of affordable housing by techniques such as rent stabilization, inclusionary zoning in the specific plan, and development of County-owned land.
    - Monitor State and County incentives and requirements regarding the production of affordable housing for consistency as they develop.

*** Older medium-density market-rate residential apartments**

East Los Angeles, LA County UA (Source: Gruen)

*** Newer medium-density market-rate residential apartments**

Lancaster, CA (Source: Gruen)

Economic Development

14. **Attract Desirable Businesses:** Ensure land use restrictions and development standards are not prohibitive of the development of desired commercial activity. For instance, in TODs which do not have a grocery store, ensure grocers and markets are permitted with limited restrictions near the transit station.
15. **Tax Increment Financing (TIF) Districts:** Revenues that result from an increase in assessed values above the base year assessed value are called tax increment revenues. Two types of TIF Districts are Enhanced Infrastructure Financing Districts (EIFD) and Community Revitalization and Investment Authority (CRIAs).
16. **Enhanced Infrastructure Financing Districts (EIFD):** Tax increment revenues generated on behalf of other agencies, may be allocated to an EIFD, but only for those agencies that approve an Infrastructure Financing Plan by resolution. School and college districts are not permitted to participate. An EIFD can use tax increment revenues to fund public improvements with a useful life of fifteen (15) years or more for a period of up to forty-five (45) years.
17. **Community Revitalization and Investment Authority (CRIA):** CRIAs focus on the revitalization of impoverished neighborhoods and military bases. CRIAs are required to apply 25% of tax increment revenues to affordable housing. CRIAs provides added benefits compared to an EIFD, including property acquisition, eminent domain, and no vote required to issue bonds.

*** Fast food chain with drive-thru encourages auto-use over the pedestrian**

East Los Angeles, LA County UA (Source: Gruen)

*** Local unique business fosters walking and contributes to community identity**

East Los Angeles, LA County UA (Source: Gruen)

03 Built Form and Design

Camarillo, CA (Source: Gruen)

The design of buildings at or near the transit stop plays a key role in the attractiveness, activity, and safety of the area. In areas designated for mixed-use, buildings are to be designed with pedestrian-friendly architectural features at the ground floor along the streets and walkways. The pedestrian realm is generally a 12'-30' area located between the face of the curb of a street and the face of the building. It includes parkways, sidewalks, and any landscaped areas, and can include public or private areas.

Building and Site Access

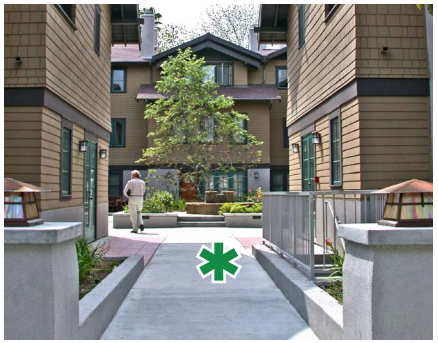
1. **Primary Building Access:** Require primary building access to buildings be oriented to the street.
2. **Secondary Building Access:** Provide secondary access to buildings from internal pathways or adjacent streets or alleys where appropriate.
3. **Visibility:** Design building access points and entryways to be highly visible and well-lit. Incorporate design features such as signage, awnings, and roof details to accentuate the entrance to a building.
4. **Service Entries:** Service entries should be oriented to the side or rear of the building and not be visible from the primary street. Where possible, provide service access from a rear alley as opposed to the primary street.
5. **Lighting for Security:** Place lighting to accent façades at night and provide security and wayfinding for public and private open spaces. Avoid lighting that interferes with residential uses.

*** Clearly visible primary entrance**

Los Angeles, CA (Source: Gruen)

*** Barrier to entry from sidewalk**

El Monte, CA (Source: StreetView)



*** Un-obscured entry from sidewalk**

Pasadena, CA (Source: Gruen)

Ground Floor Uses and Design

6. **Transparency:** Use clear glass rather than dark tinted glass or reflective glass along ground level frontages of retail businesses, restaurants, and other active uses to increase a buildings visual and physical interaction with those on the sidewalk and create a safer and more vibrant pedestrian environment.
7. **Visual Interest at Street Level:** Design the form of buildings and architectural details to create visual interest for pedestrians at the street level using techniques such as:
    - Staggering the frontage of the building;
    - Recessing doors and windows;
    - Providing varied display windows;
    - Providing awnings, louvers, and canopies for weather protection and shade; and
    - Visually extending interior spaces outside through paving and glazing.
8. **Awnings:** Where appropriate, use awnings and other shade structures for sun protection and to give a building a distinctive identity to increase visual interest along a pedestrian corridor:
    - Mount awnings which have a design that is compatible with the architectural style the building.
    - Add awnings over doors to help identify building entrances and above windows. Do not mount awnings above blank walls.
    - Open ended awnings are preferred over closed in awnings.
    - Encourage creative steel, canvas, and glass awnings with signage incorporated over less-durable cloth awnings.
9. **Outdoor Dining:** Outdoor dining on private property and in the frontage zone along a commercial corridor should be encouraged where adequate space exists. Design food establishment buildings with walk-up order windows, bar style seating along the façade to encourage outdoor dining and an active storefront.

*** Blank/opaque facade along major street**

East Los Angeles, LA County UA (Source: Gruen)

*** Active storefront / outdoor dining**

Culver City, CA (Source: Gruen)

*** Poorly maintained cloth awnings**

East Los Angeles, LA County UA (Source: Gruen)

*** Durable awning/shade structure**

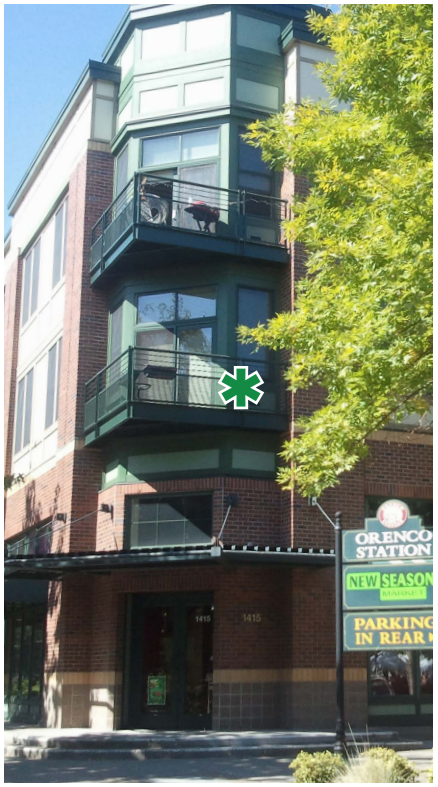
Claremont, CA (Source: Gruen)

Building Form and Façade Design

10. **Building Heights:** Vary building heights within the TOD. Allow for and encourage the placement of relatively taller buildings near the station, along wider streets, and intermittently throughout the station area to serve as focal points.
11. **Contemporary, Pedestrian-Friendly Design:** Design buildings to be visually attractive and to fit with the vision of a pedestrian-friendly, vibrant streetscape. Place unique features to differentiate neighboring businesses at eye-level with pedestrians.
12. **Signage:** Provide storefront signage at multiple levels, such as wall signs above windows and hanging signs from awnings; avoid neon or fluorescent illuminated signage. Limit the size of new signage for pedestrian scale.
13. **Building Shaped at Corners:** When located at the corner of an important pedestrian intersection or a focal point, design buildings to emphasize the corner by using a variety of techniques at the corner such as adding a strong vertical mass or a tower, a diagonal setback, a corner plaza, and/or a recessed building entrance. Treatments should be applied at all corners of an intersection.
14. **Variety in Building Façades and Urban Form:** Vary building form and façades from building to building and from site to site to create interest along the street and a vibrant area.
15. **Articulated Building Façades and Massing:** To create visual interest and to avoid large bulky façades and blank walls, articulate building massing using techniques such as some stepping back of upper floors, stepped terraces, changes in plane, recessed windows, bay windows, balconies, trellises, and varied roof lines.
16. **Equal Design Treatment on Façades:** Where the rear or sides of the building are visible from streets and alleys these façades should receive equal design treatment to the main façade.
17. **Materials and Colors:** Select durable and attractive materials and colors to unify the building appearance. For example, avoid chain link fences, imitation rock/stone veneer and extensive use of wood siding, heavily textured stucco walls, or slump stone masonry.

*** Varied heights along corridor**
Claremont, CA (Source: Gruen)

*** Design treatments on rear facade**
Claremont, CA (Source: Gruen)



*** Architectural detail at the corner**
Lancaster, CA (Source: Gruen)

*** Varied colors and materials on façades to differentiate businesses**
East Los Angeles, LA County UA (Source: Gruen)

Environmental Design

18. **Energy Efficient Designs:** Consider passive solar and ventilation techniques, as well as specification of "green" materials in building design and site planning.
19. **Topography-Appropriate Design:** Design the site and buildings to capitalize on its unique topography where applicable such as terracing when there is considerable shifts in ground slope. Consider site designs which increase accessibility by adding stairs and ramps in heavily sloped environments.
20. **On-site Environmental Features:** Where parcels include on-site creeks, riparian habitat, and other environmental features, require the preservation of the existing feature to the extent feasible such that it may be enjoyed as a publicly-accessible open space.

*** Unique site topography used to create tiered public open space**

Montclair, CA (Source: Westsiderentals.com)

04 Open Space, Parks, and Public Spaces

East Los Angeles, LA County UA (Source: Gruen)

Parks and other forms of open space are critical for an active and healthy TOD. Parks can serve as neighborhood focal points, and provide opportunities for recreation, events, exercise, and more.

Neighborhood Character in Public Spaces

1. **Public Art:** Commission local artists to decorate County infrastructure such as utility boxes, blank walls adjacent to or visible from major arterials, and on pavement as part of temporary installations.
2. **Cultural Preservation and Resiliency:** Preserve cultural institutions, events, public art, and urban design features wherever possible. Examples of cultural events include farmers markets, art walks, festivals, block parties, holiday parties, etc.
3. **Wayfinding Signage:** Provide wayfinding signage at key points throughout the half-mile area to direct travelers to the station. Signs should be clear and use a unified style.
4. **Monument/Signature Trees:** Where appropriate, establish a signature tree for the TOD to be planted at key locations throughout the half-mile area including in parkways as a street tree, in public parks and plazas, and at the transit station. Monument trees for a TOD should be relatively low maintenance, vibrant or colorful, preferably shade-providing, and historically significant to the area is applicable.

*** Art mural**

East Los Angeles, LA County UA (Source: StreetView)

*** Preserved unique historic building**

East Los Angeles, LA County UA (Source: Gruen)

Open Space Network

5. **Transit User Amenities:** Collaborate with public agencies at transit stations to include park or plaza space with amenities for transit users such as benches, water fountains, waste receptacles, lighting, etc.
6. **Enhance Existing Parks:** Existing parks should have enhanced connections to the station.
7. **Publicly-accessible Open Space on Private Property:** Increase the amount of publicly-accessible open space by providing developers with density and intensity incentives in exchange for creating publicly-accessible open space on private property. Encourage participation in established County programs which aim to increase public space, such as the Parklet Program.
8. **Sound Walls:** Where possible, erect a sound wall between new development and an adjacent freeway to help serve as a noise and air pollution barrier.
9. **Vegetation Buffers:** Plant vegetation barriers between the freeway/ high volume roadway and housing developments to help with pollution reduction.
10. **Green Streets and Air Pollution Mitigation:** Plant trees on neighborhood streets with housing development and along commercial corridors to mitigate air pollution and to help reduce temperatures in warmer months.

*** Open space with no amenities**

East Los Angeles, LA County UA (Source: Gruen)

*** Enhanced public open space**

Solana Beach, CA (Source: Gruen)

*** Publicly-accessible open space**

Marina Del Rey, LA County UA (Source: StreetView)

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SECTION III
Public Realm Mobility

East Los Angeles, LA County UA (Source: Gruen)

01 Public Realm Mobility Overview

This section addresses the street circulation system, pedestrian and bicycle system, transit, and other mobility modes such as shared use services in a TOD area including potential multimodal network in the half-mile station area, First/Last Mile improvements, and "Complete Streets" components. Complete streets are designed and constructed to serve all users of streets regardless of age or ability or whether they are driving, walking, bicycling, or taking transit. Transforming major corridors into a more multimodal, transit-supportive streets can result in several benefits to the community:

- **Safety** – Designing streets that consider safe travel for all modes can reduce occurrences and severity of vehicular collisions with pedestrian and bicycles.
- **Health** – Promotes a healthy lifestyle by encouraging physical activity.
- **Greenhouse Gas Emission reduction** – Developing an integrated land use and multi-modal transportation network can reduce VMT and greenhouse gas emissions.
- **Economic Development** – Multimodal transportation networks can improve economic activity of local business and attract new economic development.

Relation to Adopted Plans

General Plan Mobility Element 2025

The LA County General Plan Mobility Element adopted in 2015 was updated to reflect the California Complete Streets Act of 2008. The goals of the Mobility Element which relate to TODs include:

- **Goal M1:** Street Designs that incorporate the needs of all users.
- **Goal M2:** Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.
- **Goal M3:** Streets that incorporate innovative designs.
- **Goal M4:** An efficient multimodal transportation system that serves the needs of all residents.
- **Goal M5:** Land use planning and transportation management that facilitates the use of transit.
- **Goal M6:** The safe and efficient movement of goods.
- **Goal M 7:** Transportation networks that minimizes negative impacts to the environment and communities.

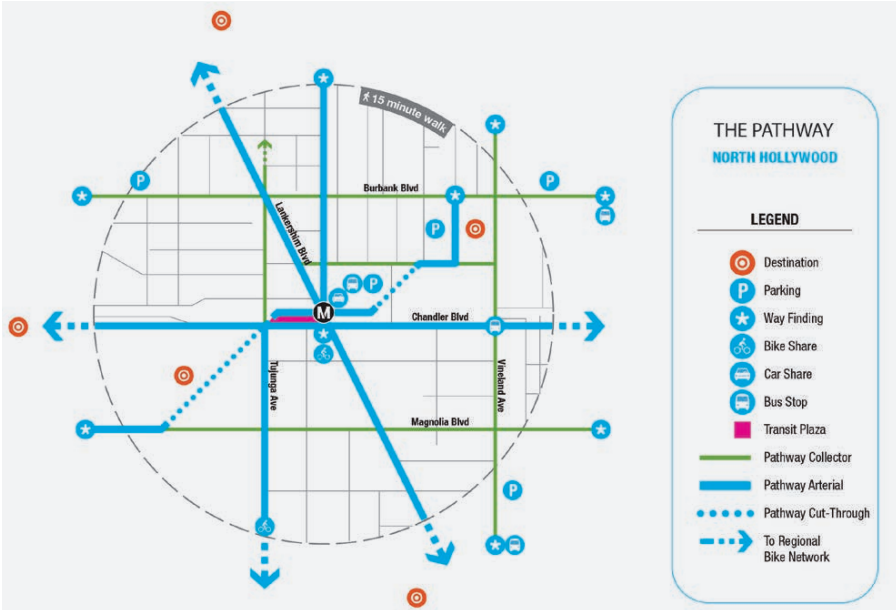
The Mobility Element includes policies for topics such as complete streets, active transportation design, infrastructure design, transit efficiency, multimodal transportation, land use and transportation integration. Refer to the full document for the policies which are relevant to TODs.

Metro's First/Last Mile Strategic Plan

Metro's First/Last Mile Strategic Plan (FLM) planning guidelines outline a pattern for improving user experience by supporting intuitive, safe, and recognizable routes to and from transit stations. This FLM planning process involves conducting an analysis and producing diagrams of a multimodal network within the half-mile station area around a transit station that are essential in preparing a specific plan for an area. Key diagrams that should be prepared to help identify barriers to accessing a station within the TOD area include:

- The station's half-mile area including the street grid
- Land use and points of interest
- High vehicle speed streets
- Walkshed and barriers
- Pedestrian routes to the station
- Existing and planned transit corridors
- Existing and planned bike connections
- Bike and pedestrian collisions with an automobile

From this analysis at a specific plan level, a TOD's multimodal pathway network can then be studied and enhancements to the network can be planned by applying the components detailed in FLM's extensive toolbox of pedestrian and cycling facilities. During future TOD planning efforts the County will utilize the strategies and tools identified in FLM, the General Plan Mobility Element, and the County's Step by Step Pedestrian Plan in conjunction with the components described in the TOD Toolkit.



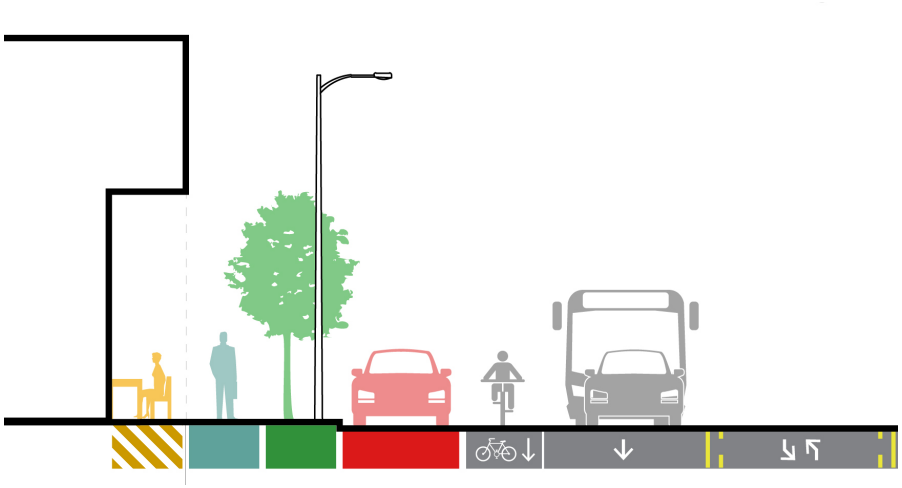
Example Station Pathways Diagram (Source: Metro FLM Plan)

02 Complete Street Design

The County's Model Design Manual For Living Streets identified the different zones which makeup a typical corridor's sidewalk: Frontage, Pedestrian, Furniture, and Curb. The TOD Toolkit uses consistent terminology for the Frontage, Pedestrian, and Furniture streetscape zones, but differs in that "Curb Zone" is used in this document to define portions of the roadway which are not for use by moving vehicles or bicyclists. Additionally, "travel lanes" in this document collectively refers to conventional vehicular travel/turn lanes as well as bicycle and transit lanes for the purpose of providing a multimodal overview of street design.

Each zone has its own function and purpose, which have been summarized at below:

- **Frontage Zone:** The area on private property which abuts the public sidewalk. For high-activity commercial/entertainment uses, frontage zones are ideal for outdoor dining, product displays, etc.
- **Pedestrian Zone:** The portion of the sidewalk which is used for pedestrian passage, and should be kept clear of obstructions.
- **Furniture Zone:** The portion of the sidewalk which contains street lighting, utilities such as fire hydrants, traffic control equipment, and street trees, and may contain other landscaping or street furniture such as benches and waste receptacles. The furniture zone is sometimes referred to as a parkway when landscaped.
- **Curb Zone:** A portion of the paved roadway not used for traffic. Curb zones are often used for on-street restricted parking, pick-up and drop-off zones, or parklets.
- **Travel Lanes:** A lane of traffic which may be vehicular-only, transit-only, or bicycle-only, shared between various modes of travel when dedicated bicycle or transit lanes are not present.

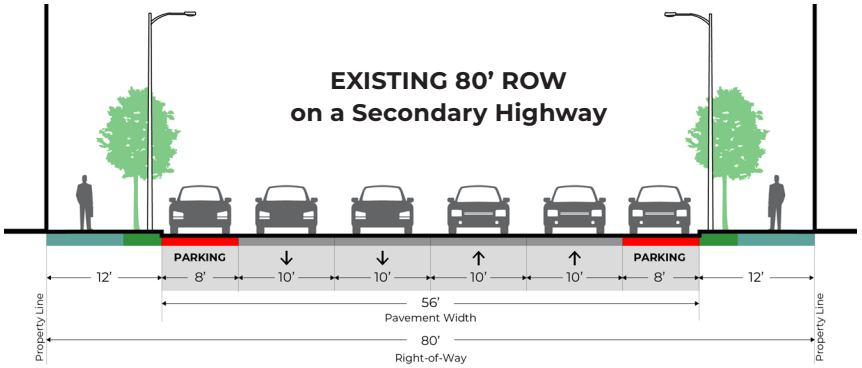


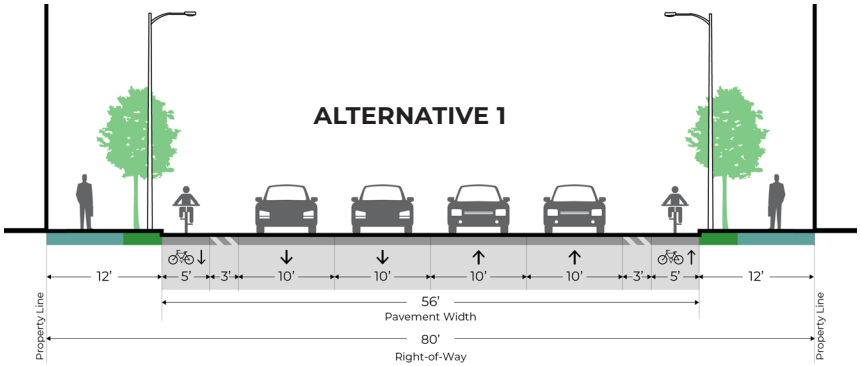
Source: Gruen

Illustrative Examples

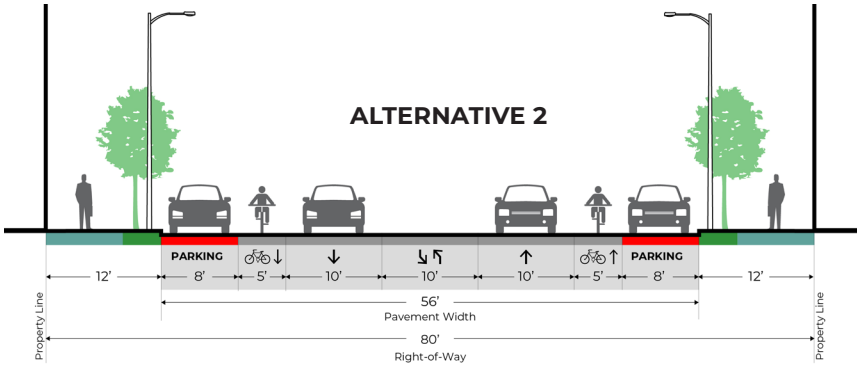
Lane Re-purposing on 80' ROW for Multimodal Mobility

The Mobility Element defines roadways appropriate in most TODs as Major Highways with a right-of-way (ROW) of 100' (urban) to 108' (rural) and Secondary Highways with a ROW of 80'+. It is important to accommodate all modes of transportation in the pathway network, however, in many developed station areas, vehicular travel lanes have been prioritized over other forms of transportation. The alternatives below illustrate common lane re-purposing scenarios to address multimodal mobility in an existing ROW and the positive trade-offs that will need to be considered.

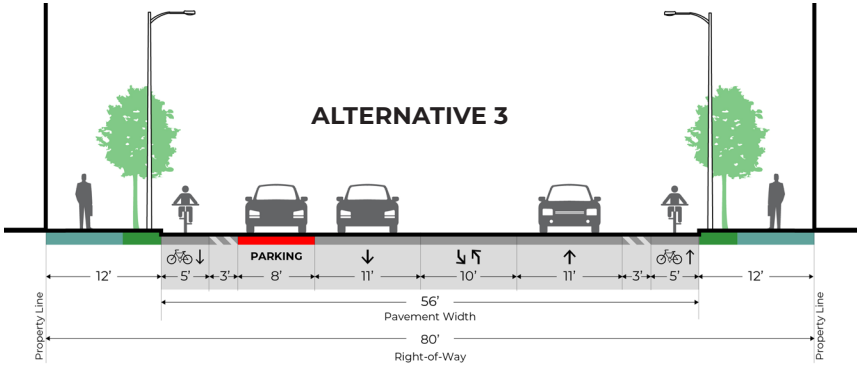




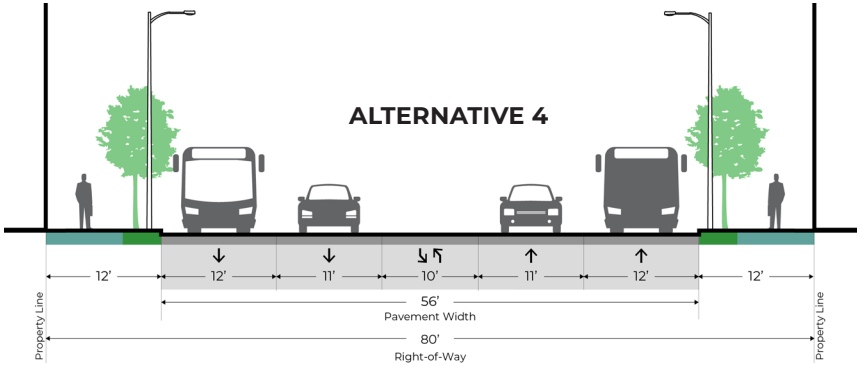
Replace on-street parking with buffered bicycle lanes on both sides.



Reduce travel lanes to three lanes and add bike lanes



Remove on-street parking on one side and add buffered bicycle lanes



Remove on-street parking and convert two travel lanes to transit lanes

Travel Lane Width and Re-purposing

To make a TOD more walkable and multimodal, reduced travel lanes should be considered. In Station Areas with constrained right-of-ways, reduced vehicular travel lane widths allow more space to be devoted to other mobility modes. In addition, narrowing lane widths acts as a traffic calming measure by reducing vehicular speeds which can decrease pedestrian-auto collisions. Illustrative examples of roadway reconfigurations are provided in the **Lane Re-purposing on 80' ROW for Multimodal Mobility** diagram on page 37. When re-purposing travel lanes or reconfiguring the street, factors such as traffic conditions, nearby land uses, and parking availability should also be considered.

Best Design Practices / Guidelines

1. Currently, the County standards require minimum travel lane widths of 11 feet, right turn lane widths of 11', and left or center turn lane widths of 10'. However, the County General Plan Mobility Element has a policy supporting vehicular lane width reductions to 10' or 11' in low speed environments with low volume of heavy vehicles.
2. In constrained conditions, vehicular travel lane widths may be reduced to 10', parking lanes to 7' to 8', exclusive transit lanes to 11' to 13', one way Class II bike lanes to 5' to 7', one way buffered bike lanes to 8' to 10', and two way bike lanes to 12' including shoulders.

Transit Lanes

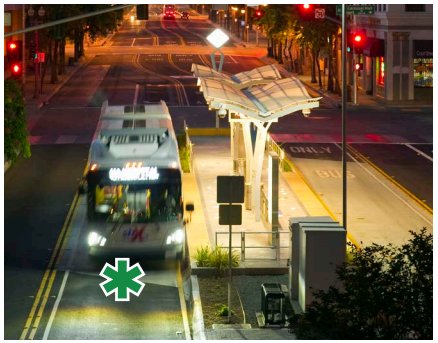
Public transit can be accommodated on a complete street in a variety of ways including: 1) a bus that shares a vehicular travel lane, 2) a peak-period transit lane that prohibits curbside parking in peak period, 3) a transit-only lane (either curbside or in the median), 4) a streetcar, 5) a rail line, or 6) a shuttle. Peak-period transit lanes or exclusive transit-only improve transit efficiency, especially on congested streets. On exclusive transit-only lanes, high ridership buses with transit signal priority at intersections move more quickly than adjoining traffic which allows more people to travel by transit in less time. Mixed traffic is only allowed to enter or cross a transit-only lane to turn at an intersection, enter or exit a driveway, or park at designated parking areas. Transit-only lanes may be used by emergency vehicles, or by bicycles where permitted.

Best Design Practices / Guidelines

1. Exclusive transit lanes width varies from 11' to 13' depending on transit agency requirements and street constraints. These transit lanes may be either curbside or center running in the middle of the street.
2. Exclusive transit lanes require physical barriers to separate bus lanes from mixed flow traffic. Barriers can include a raised curb or median, bollards, delineators, or other devices.
3. Provide well designed and branded transit shelters where space permits. See "**Transit Stops and Shelters**" on page 51 for more detail.

*** Street with turn lane/median**
Long Beach, CA (Source: Gruen)

*** Narrow travel lanes to fit parking**
San Jose, CA (Source: Gruen)



*** Center transit-only lane**
San Bernardino, CA (Source: Gruen)

*** Center transit-only lane**
San Jose, CA (Source: Gruen)

Bicycle Paths, Lanes, and Routes

Bicycle routes, paths, and lanes which connect a transit station to destinations within 3 miles of the TOD are a critical component of first/last mile connections to the transit station and provide an alternative mode of transportation for those in the Station Area. The County's bicycle network is composed of these types of bicycle facilities:

1. Class I - Bicycle Path: a paved right-of-way for exclusive use by bicyclists, pedestrians, and other non-motorized modes of travel.
2. Class II - Bicycle Lane: a portion of a roadway for exclusive use by bicyclists marked by pavement striping and signage.
3. Class III - Bicycle Route: a travel lane for shared use by motorists and bicyclists marked by signage.
4. Class IV - Separated Bikeway: a bikeway for exclusive use by bicyclists with a physical barrier separating it from vehicular traffic.
5. Bicycle Boulevard: streets that have been enhanced with signage, traffic calming, and other treatments to prioritize bicycle travel.

Best Design Practices / Guidelines

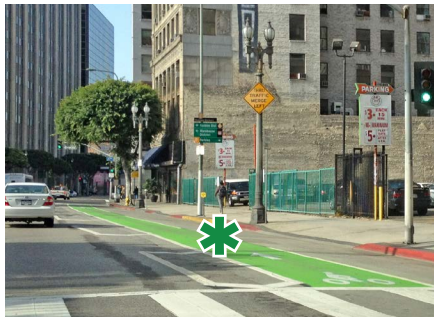
1. Bike lanes should be at least 5' wide; where space permits, 7' wide lanes are desirable.
2. Where space permits, provide a minimum of 3' buffer space between Class II bike lanes and vehicular travel lanes. Buffers could include pavement striping, a raised curb or median, bollards or landscaping.
3. Provide bicycle parking such as bike racks, bicycle lockers, bike corrals, bike bulbs and shared bike stations along all bike routes/lanes.

Curb Space

Corridors wide enough and with sufficient traffic patterns to resize or re-purpose lanes should utilize curb space between travel lanes and the sidewalk to provide additional pedestrian amenities, bicycle and transit infrastructure, **On-Street Parking** (see page 46), and **Pick-up and Drop-off Zones** (see page 46) for shared vehicles. Curb space can be designed to be flexible to accommodate multiple elements, allowing for temporary programming or for multiple installments at a time. The most common use of curb space is on-street parking, and replacing select parking stalls with **Curb Extensions** (see page 47), treelets, or bikeshare stations can further expand the pedestrian experience.

Best Design Practices / Guidelines

1. If traffic patterns allow, re-purpose the outermost vehicular travel lane for on-street parking along residential and commercial streets.
2. Develop a parklet program for commercial corridors with on-street parking to allow adjacent businesses to utilize curb space for outdoor seating and dining.
3. Provide an additional 1' to 3' of buffer space between travel lanes and curb space amenities to increase pedestrian and bicyclist safety.
4. Encourage food trucks to gather at consolidated locations, such as an empty parking lot, so they do not compete with on-street parking demand, particularly along corridors with limited sidewalk width. At least 12' of sidewalk width should be provided for at-curb food truck parking to allow for truck sales and operations, while maintaining adequate pedestrian movement.



*** Buffered Class II bike lanes**
Los Angeles, CA (Source: Gruen)

*** Bike parking along bike route**
Portland, OR (Source: Gruen)

*** Parking and curb extensions**
Montrose, LA County UA (Source: StreetView)

*** Parklet in curb space**
East Los Angeles, LA County UA (Source: LA County)

Sidewalks

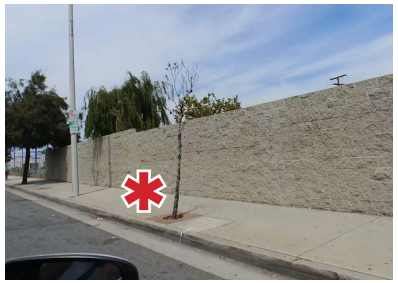
Sidewalks, which collectively describes the Pedestrian and Furniture Streetscape Zones, form the primary pedestrian pathways in a TOD. Adequate sidewalk width where a minimum of two people may walk side-by-side and pedestrian amenities will help create a walkable environment throughout the entire Station Area. In constrained roadway conditions where there is not enough space to add amenities to the furniture zone, devices such as **Curb Extensions** (see page 47) are methods to provide more sidewalk width. These curb extensions may be used for bus stops, additional landscaping, outdoor dining, bike and dockless shared vehicle parking, and other amenities.

Best Design Practices / Guidelines

1. The furniture zone, sometimes occupied by landscaping in a parkway, can otherwise include street lights, street trees, landscaping, signage, bike racks, trash receptacles, local bus stops with transit shelters, seating, and utilities. It could contain storm water treatment, parking meters, public art, and outdoor dining. Items in the furniture zone should be at least 18" from the curb face.
2. The pedestrian zone includes at least enough walking area to meet Americans with Disabilities Act (ADA) requirements and should be kept free of obstructions to pedestrian movement. Tents, obtrusive plastic signs or installations, and flags should be avoided in the pedestrian zone.
3. The frontage zone is adjacent to the property line and its width will vary depending on the adjacent land use. In a retail area it may contain outdoor dining, planter boxes, railings, seating, and other amenities. Frontage zone amenities should be encouraged in constrained roadway conditions where there is not adequate space for furniture zone amenities.
4. Combined sidewalks and parkways of 12' to 15' or more are desirable as they are wide enough for street trees, pedestrian amenities, and allow at least two people to pass one another. A minimum of 5' clear walking area should be provided in the pedestrian zone; this number should be increased depending on pedestrian activity. The width of the sidewalk, which includes both the pedestrian zone and furniture zone, should not be less than 10'.
5. Paving patterns may vary by TOD and could include standard gray concrete, colored concrete, decorative paving, permeable paving, and others.

Atlantic/Whittier TOD Case Study

The Atlantic/Whittier TOD has three major corridors: Whittier Boulevard, Atlantic Boulevard, and Olympic Boulevard. Whittier Boulevard generally has more streetscape improvements than either Atlantic or Olympic Boulevard. Amenities included along Whittier Boulevard include pedestrian-scale lighting, benches, trash receptacles, and street trees. Continuing these streetscape improvements along the other two major corridors and implementing a uniform pattern of shade-providing street trees will provide the station area with a defined sense of place. Additional amenities may be provided in the curb space using curb extensions where sidewalk widths are narrow.



*** Limited pedestrian amenities along Atlantic Boulevard**

East LA, CA (Source: Gruen)

*** Pedestrian amenities such as benches on Whittier Boulevard**

East LA, CA (Source: Gruen)

*** Seating outside pedestrian zone**

Playa Vista, CA (Source: Gruen)

*** Decorative sidewalk paving**

San Gabriel, LA County UA (Source: StreetView)

03 Intersections and other Crossings

High Visibility Crosswalk

Marked crosswalks at controlled intersections and mid-block direct pedestrians to ideal locations at which to cross a street and indicate more clearly to motorists where to yield for pedestrians. Crosswalks should be highly visible to both drivers and pedestrians and can be installed with continental striping or decorative pavers. High visibility crosswalks can also include raised crosswalks or freestanding beacons to increase visibility; these enhancements are particularly important at mid-block crossings where motorists may need additional warnings of the presence of pedestrians. See "**Flashing Beacon / Pedestrian Hybrid Beacon**" on page 43 for more detail.

Best Design Practices / Guidelines

1. A continental crosswalk has wide highly visible longitudinal strips paired with a stop line setback from the crosswalk.
2. Vertical elements such as street trees should set back from intersections and crossing points so as to not block visibility of pedestrians at the crosswalk.

Curb Ramp

Curb ramps allow mobility-impaired persons and persons with strollers convenient access to the sidewalk from the street. The Americans with Disabilities Act (ADA) requires curb ramps to be installed at all locations where pedestrians cross.

Best Design Practices / Guidelines

1. All curb ramps should have ADA-approved ramps with detectable warning surface (min. width 24") in yellow.
2. Curb ramps shall be designed to align with crosswalks and should be provided at each crossing approach as opposed to providing one curb cut per corner.
3. At least 48" of landing should be provided behind the curb ramp.

*** Continental crosswalk**

LA Crescenta, LA County UA (Source: LA County)

*** Yellow continental crosswalk**

East Los Angeles, LA County UA (Source: StreetView)

*** Curb ramp with refuge island**

La Crescenta, LA County UA (Source: LA County)

*** Curb ramps at all crossings**

Whittier-Los Nietos, LA County UA (Source: LA County)

Pedestrian Signal Timing

Leading Pedestrian Intervals allow pedestrians to begin crossing the roadway before the vehicle signal turns green. Semi-exclusive or exclusive pedestrian (i.e. pedestrian scramble) operation involves alterations to traffic signalization which stop vehicular traffic, allowing pedestrians to cross at the intersection uninhibited by vehicular traffic. In exclusive pedestrian operation, also referred to as "scramble intersections" or "scramble crosswalks," all vehicular traffic is stopped to allow pedestrians to cross in all directions including diagonally. Scramble crosswalks are advantageous at major intersections in areas with high pedestrian traffic, as they more efficiently allow pedestrians to cross directly to their desired corner and reduce pedestrian-vehicle conflicts.

Best Design Practices / Guidelines

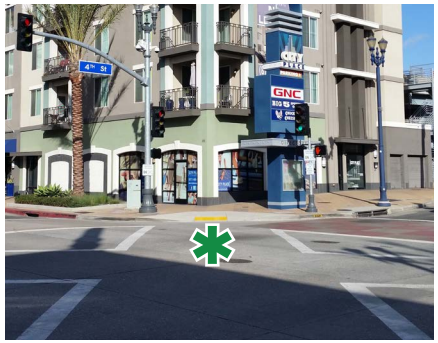
1. Scramble intersections have "pedestrian only" phase in signal light cycles during which vehicles at all approaches are prohibited from entering an intersection including right turns.

Protected Bicycle Intersection

A protected bicycle intersection utilizes a **Curb Extension** (see page 47) at each corner to add a barrier between a bicycle lane and vehicular travel lanes at an intersection to make cyclists more visible to motor vehicles. This arrangement reduces bicycle-vehicle conflicts at intersections by preventing motorists from intersecting with cyclists when making a right turn and providing turning cyclists with an area to queue without interfering with either vehicular traffic or other cyclists continuing straight.

Best Design Practices / Guidelines

1. A protected bicycle intersection can be implemented in configurations with shared travel lanes or bicycle-only lanes. Roads with shared traffic lanes will have dedicated bicycle lanes at intersections to accommodate protected intersections.
2. Well-designed protected bicycle intersections provide sufficient space for at least one cyclist to queue in the protected area. Queuing space can be maximized by widening the inside radius of the corner safety island.
3. A protected bicycle intersection can include low height landscaping in raised corner safety islands.



*** Scramble intersection**
Long Beach, CA (Source: Gruen)

*** Scramble intersection**
Hollywood, CA (Source: Gruen)

*** Bike queuing space at intersection protected by curb extensions**
Chicago, IL (Source: John Greenfield)

Flashing Beacon / Pedestrian Hybrid Beacon

Pedestrian Activated Warning Beacons are flashing yellow lights that provide additional warning to drivers that a pedestrian is crossing the roadway. This unique type of signal is more visible to drivers than traditional crosswalks which makes them ideal for mid-block crossings. Warning beacons often require pedestrians to activate a button, which alerts the signal system of the presence of a pedestrian requesting a "walk" signal.

Best Design Practices / Guidelines

1. Push buttons should incorporate sound for the visually impaired.
2. Push buttons should be installed at all marked pedestrian crossings.

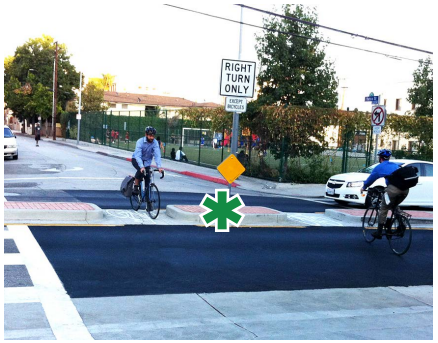
Diverter

A traffic diverter is a roadway design feature which uses temporary low cost materials such as striping and planters or more permanent installations such as raised curbs to prohibit vehicular traffic from entering into, or from, a street. Diverters may be combined with a **Median Refuge Island** (see page 44) to make the crossing much easier and safer for pedestrians. Diverters may include landscaping or signage that can integrate them into the feel and fabric of the surrounding neighborhood.

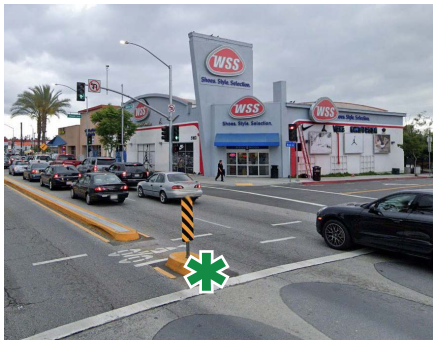
Best Design Practices / Guidelines

1. Use signs within the diverter and reflective point on the curb to improve diverter visibility.
2. Use permeable materials and low water landscaping within the diverter for storm water management and aesthetics based on the Los Angeles County Public Works' Low Impact Development (LID) Standards Manual.
3. Bicycles can freely pass through the diverter. Utilize enhanced crosswalks and a "Z" pedestrian crossing to improve pedestrian safety.

*** Pedestrian-activated warning beacon at a continental crosswalk**
East Los Angeles, LA County UA (Source: StreetView)



*** Diverter with bike pass-through**
Los Angeles, CA (Source: LA DOT)



*** Diverter with bike pass-through**
East LA, CA (Source: StreetView)

Median Refuge Island

Median refuge islands provide a protected space for pedestrians or bicyclists crossing the street at intersections or mid-block crosswalks on roads where a raised median exists. They are especially recommended for major and secondary highways or other wide streets that are unsignalized.

Best Design Practices / Guidelines

1. Median refuges should accommodate pedestrians with disabilities and provide all pedestrians with a clear path of travel.
2. The minimum width of a median refuge island is 6', with a preferred width of 10'. The minimum length of the island is 13' or the length of the crosswalk whichever is wider, with a typical range between 13-20'.
3. Signage and reflective material should identify the refuge island.
4. Provide detectable paving for visually impaired uses to indicate the presence of a pedestrian refuge.

Speed Hump / Speed Cushion / Raised Crossing

Speed humps (also referred to as speed bumps) are mid-block vertical traffic calming devices that raise the pavement several inches to reduce traffic speed. A raised crossing may be designed to raise an entire intersection to the curb level facilitating easier pedestrian crossing and slower vehicle speeds.

Best Design Practices / Guidelines

1. Raised crossings have a flat surface with sloped ramps for vehicles.
2. To shorten the distance of crossing a street and improve recognition of pedestrians, raised crossings are typically located in conjunction with a curb extension and with the flat surface at the level of the curb.

*** Highly visible pedestrian/bicycle refuge with ADA warning strips**
Hayward, CA (Source: Gruen)

*** Residential street speed hump**
Altadena, LA County UA (Source: StreetView)

Traffic Circle / Roundabout

Traffic circles are intersections with a circular island in the center that control the flow of traffic. Drivers that enter the traffic circle must travel in a counter-clockwise direction around the island to get to the other side. Traffic circle intersections can be stop-controlled or yield-controlled. The center island slows the flow of vehicular traffic into intersections and reduces collision potential, which creates a more safe and comfortable environment for bicyclists and pedestrians. Studies have shown traffic circles improve air quality and roadway circulation by eliminating the stop-and-start movements associated with a four-way stop.

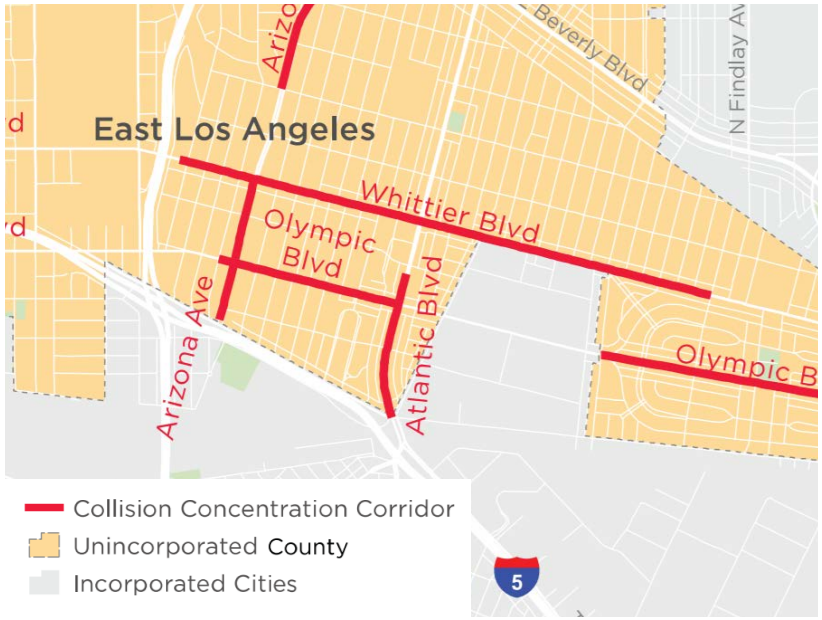
Best Design Practices / Guidelines

1. Use permeable materials and low water landscaping within the traffic circle center island for storm water management and create an attractive image.
2. Use signs and reflective paint on the curb to improve visibility.
3. Design speeds for vehicular movement at the traffic circle should be 10 to 15 mph.
4. Include red curb at the edges of the center circle to allow for fire engine access.
5. To reduce idling, traffic build-up, and associated emissions, roundabouts should be considered at intersections near the transit station.

*** Landscaped traffic circle with signage for pedestrian crossing**
Long Beach, CA (Source: Center for Health Journalism)

Atlantic/Whittier TOD Case Study

The map below shows the LA County Vision Zero Collision Concentration Corridors (half-mile roadway segments that contained three or more fatal or severe injury collisions between January 1, 2013 and December 31, 2017) in and around the Atlantic/Whittier TOD.



Source: Vision Zero Los Angeles County: A Plan for Safer Roadways, 2019

Based on this information, road crossing improvements including traffic calming devices and high visibility crosswalks should be prioritized along the following corridors:

- Whittier Blvd from Burger Ave to Hendricks Ave
- Atlantic Blvd from Olympic Blvd to Telegraph Rd

Future improvements should also utilize the Los Angeles County Vision Zero Action Plan as a reference for priority corridors.

04 Curb Zone Amenities

On-Street Parking

Transit-oriented areas often encourage reduced off-street parking requirements, and the provision of on-street parking ensures that adequate parking for a TOD is maintained. Curbside on-street parking serves as a buffer for pedestrians from travel lanes. On-street parking is also desirable for streets with high commercial activity and allows patrons to retailers to park in one spot and visit multiple adjacent businesses.

Best Design Practices / Guidelines

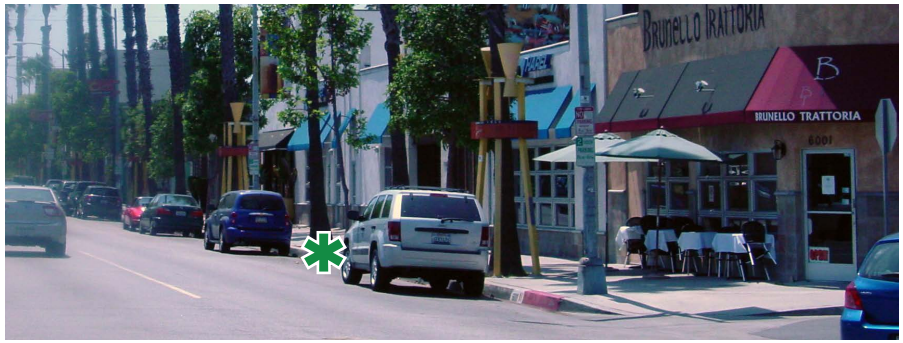
1. Along commercial corridors, establish an on-street parking strategy to enable short-term parking next to retailers, restaurants, and other businesses.
2. For residential areas adjacent to high-activity commercial corridors, consider the implementation of a residents-only permit parking district to ensure the preservation of street parking for local residents.

Pick-up and Drop-off Zones

Pick-up and drop-off zones are marked areas in the curb zone which permit passenger loading or temporary parking, usually for an interval of less than 15 minutes, to facilitate carpooling to and from key locations. Transit stations, hotels, community buildings, schools, and businesses which include valet service are land uses which typically include pick-up and drop-off zones at the curb.

Best Design Practices / Guidelines

1. Ensure the curb in front of the transit station has a dedicated pick-up and drop-off zone area.
2. Require all curbside pick-up and drop-off zones be adequately marked along the curb and ensure appropriate signage is clearly visible from the sidewalk to indicate the area is only available for the loading of passengers.



*** On-street parking provided along a commercial corridor**
Culver City, CA (Source: Gruen)

*** Clear pick-up zone signage**
Van Nuys, CA (Source: Gruen)

*** White curb passenger loading**
El Monte, CA (Source: StreetView)

Curb Extension

A curb extension is a portion of the sidewalk that is extended into the curb zone. Curb extensions are typically located at intersections and other crossing points. Curb extensions are used to improve pedestrian safety by reducing the necessary crossing distance and to provide additional space for landscaping and any of the amenities listed in "**Furniture Zone Amenities**" beginning on page 51 where space in the furniture zone is limited. Curb extensions allow pedestrians and drivers to see each other when parked vehicles would otherwise block visibility, and cause drivers to reduce speeds by narrowing the roadway. Curb extensions must be installed with curb ramps that comply with ADA standards.

Best Design Practices / Guidelines

1. A curb extension should not obstruct sight lines and allow motorist to clearly see pedestrians and bicyclists. Well designed curb extensions could include low height landscaping, bioswale planting, bike parking, or seating.
2. To avoid conflict with bike lanes, curb extensions often occupy a portion of a curbside parking lane.
3. A curb extension could modify the storm water flow and the street may need to be redesigned by providing curb breaks into a bioswale, relocating catch basins or an ADA compliant grated channel to re-divert stormwater to existing catch basins.

Bus Bulb

A bus bulb is a curb extension that allows buses to stop in a vehicular travel lane increasing transit efficiency as the bus stopped at the bus bulb does not need to wait to pull into moving traffic. Bus bulbs create more space adjacent to the sidewalk for pedestrian and transit amenities.

Best Design Practices / Guidelines

1. Bus bulbs are typically located on multi-lane arterials with curbside parking allowing for an extension of the sidewalk at intersections and for vehicles to pass stopped buses in adjoining lanes.
2. Bus bulbs are used in constrained sidewalk conditions where there is limited space for a transit shelter and other amenities.
3. Bus bulbs may be used in high bus ridership corridors for premium service such as Rapid or Bus Rapid Transit.
4. Far side bus bulbs are preferred over near side bus bulbs to avoid right turn interference.
5. The length of bus bulbs vary depending on the type of transit vehicle (local or articulated) and the number of buses at a stop. The length of the bus bulb is often constrained by driveways and other physical conditions. For conceptual design guidance a minimum length of 60' to 140' and a width of 8' should be considered and longer if more than one bus will be stopping at the same time.

*** Landscaped curb extension**

Long Beach, CA (Source: Gruen)

*** Landscaped mid-block extension**

Montrose, LA County UA (Source: StreetView)

*** Curbside bus bulb with seating, curb ramps, and bollards**

Los Angeles, CA (Source: StreetView)

Treelet

A treelet is a curbed tree well that is extended into the curb zone, often between on-street parking spaces. Treelets are typically used along constrained roadways with significant commercial or mixed-use frontage where there is not adequate space in the furniture zone for landscaping. A street may be able to maintain the same number of on-street parking stalls even with the addition of treelets as they are typically placed between existing stalls. A tree pit requires a saw-cut section of the street outside the gutter dimensions to prevent conflicts with existing drainage infrastructure.

Best Design Practices / Guidelines

1. Treelet island length and widths vary with on-street parking conditions and existing utilities.
2. Treelets should not obstruct sight lines of drivers viewing pedestrians. Parallel parking lengths should meet County standards.

Chicane

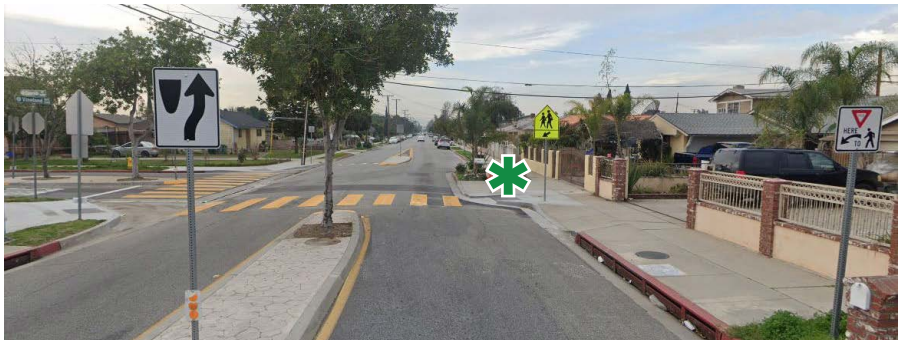
Chicanes are a type of **Curb Extension** (see page 47) that act as traffic calming devices to reduce vehicle speeds by narrowing the roadway and altering travel lanes from a straight orientation to a curved or “S”-shaped orientation. Chicanes be placed in an alternating pattern from one side of the street to the other. Like other curb extensions, chicanes can be used to provide additional landscaping or furniture zone amenities such as seating and signage to create a more pleasant walking environment and to create a buffer between the sidewalk and the street.

Best Design Practices / Guidelines

1. A chicane may require special striping of the street and signage reflective paint on the curb to ensure drivers are aware of the serpentine roadway.
2. Landscaping and storm water infiltration in the chicane contributes to a pleasant walking environment and can aid in wayfinding for drivers.

*** Shady treelet between car stalls**
San Jose, CA (Source: Gruen)

*** Treelet between angled car stalls**
La Mesa, CA (Source: Gruen)



*** Chicane placed at pedestrian crossing to slow traffic**
Baldwin Park, CA (Source: StreetView)

05 Streetscape/Landscape Infrastructure

Street Trees and Vegetation/Landscaping

Street trees and other types of street vegetation will enhance the walkability, comfort and attractiveness of the Station Area streets. Street trees provide visual interest, unity and shade protection from the hot sun. Landscaping of parkways and tree wells compliment and support street trees and assist in storm water management. Street trees reduce the heat island effect, reduce storm water runoff, improve air quality by absorbing greenhouse gases, and can provide wild life habitat and food.

Best Design Practices / Guidelines

1. Street trees and landscaping in the amenity zone should be specified to achieve a strong visual image that fits in the neighborhood, to respond to the area's climate, for low water requirements, for resistance to disease, for compatibility with soil and drainage conditions, and to avoid invasive roots that will uplift sidewalks.
2. If streets are wide, tall canopy trees should be selected to create a strong visual impact and smaller trees may be selected for local small scaled street.
3. Typical street trees should be spaced 25' - 30' apart while avoiding interference with street lighting, utilities and visibility of approaches to intersections and driveways.
4. Plant vegetation barriers between the freeway/high volume roadway and the housing site to help with pollution reduction.
5. Plant additional trees on neighborhood streets surrounding the housing development to further mitigate air pollution.

Parkway Planter/Bioswale

Parkway planters/bioswales meet an increasing demand to mitigate storm water pollution from our streets and impermeable surfaces in our urban areas. Bioswale parkways between the street and sidewalk collect and filter stormwater run off from streets. Curb cut-outs direct street runoff into the permeable soils and native plants or grasses to help reduce the flow of water and to filter out pollutants such as sediment, trash, and heavy metals. If infiltration is not feasible due to soil conditions, drainage pipes may be installed beneath the soil to carry the filtered water to the storm drain system.

Best Design Practices / Guidelines

1. Parkway planters or bioswales may be designed in many ways. The illustration is one example of a parkway planter where the curb is broken to allow storm water in the gutter to flow into a bioswale planter in the sidewalk area.
2. If there is not curbside parking, place the parkway planter next to the curb. If there is curbside parking, place an accessible area between the curb and the parkway planter.
3. Allow for accessible breaks in the parkway planters periodically.

*** Sidewalk with tree canopy**

San Diego, CA (Source: Gruen)

*** Shade trees**

Arcadia, LA County UA (Source: LA County)

*** Parkway planters with trees**

Montrose, LA County UA (Source: StreetView)

*** Parkway bioswale**

Los Angeles, CA (Source: LA Times)

Roadway Median

Medians are areas that divide the roadway. They may be painted, paved, elevated, landscaped. Roadways may include a raised landscaped center median to allow for additional street landscaping, monument signage, and pedestrian refuge islands to facilitate safer crossings. The introduction of a raised median may help to slow travel speeds and reduce the number of vehicle-pedestrian collisions. In constrained conditions, a landscaped median may replace a portion of an existing dedicated left-turn lane.

Best Design Practices / Guidelines

1. Raised medians should be no less than 6' wide with a preferred width of 8'.
2. If the raised landscaped median includes trees, they should be no less than 10' wide.

Permeable Paving

Permeable pavement allows stormwater runoff to seep through and into the soil below where the water is filtered and eventually directs to the existing aquifer. Permeable pavement is an alternative to typical concrete and asphalt paving and offers a range of utility, strength and sustainable properties. These materials include permeable concrete, asphalt, clay brick interlocking unit pavers, open grid pavers, gravel pavers or decomposed granite. Joints usually include aggregate.

Best Design Practices / Guidelines

1. Permeable paving may be used in the street, in parking lots and in sidewalks, especially in the amenity zone. Soil tests are needed to establish soil characteristics and to determine proper aggregate materials so water filters properly through the system. Maintenance is required to keep debris from clogging joints.

*** Median with monument signage**

Long Beach, CA (Source: Gruen)

*** Median with vegetation**

Marina Del Rey, LA County UA (Source: StreetView)

*** Permeable intersection/crosswalk paving**

Arcadia, LA County UA (Source: StreetView)

06 Furniture Zone Amenities

Transit Stops and Shelters

Transit stops and shelters should be designed for a positive passenger experience and for safety and security by providing adequate lighting, equipment such as emergency telephones, and visibility from the surrounding area and streets. Shelters should be established in the furniture zone and not in the pedestrian zone to ensure adequate space for pedestrian passage and with sufficient room for bus wheelchair lifts to load and unload passengers.

Best Design Practices / Guidelines

1. A shelter should be provided at all transit stops and stations where space permits to protect commuters from sun and from inclement weather. If the design of the transit shelters within the TOD deviate from County standards, the shelter should be designed to provide adequate lighting, seating, a 5'x8' passenger loading area at the front door of the bus, accessibility to the bus and the sidewalk, and information signage.
2. Benches or seats should be provided at all transit stops and stations for commuters to rest while waiting for the bus or train for those who have difficulty standing for long periods. Additional seating should be installed within close proximity of transit stops and stations and under shelter if feasible.
3. At a minimum, all transit stops and stations should provide signage displaying the route number, timetables, and maps to benefit patrons with transfers and those that are less familiar with the network. For major transit stations and terminals, displaying real time information on arriving transit vehicles should be considered.

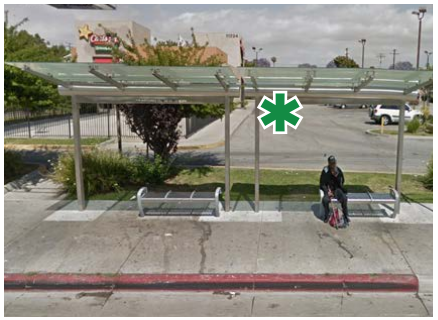
Street Furniture

Street furniture on sidewalks acts as a buffer between pedestrians and vehicular traffic and contributes to an active vital, walkable environment. Benches, trash receptacles, and bicycle racks are recommended types of street furniture because they address needs that a pedestrian may have, such as a place to rest. Street furniture should be placed outside of the walking zone as to not create a hazard to pedestrians.

Best Design Practices / Guidelines

1. Except at bus shelters and when space allows, benches should face or be perpendicular to the sidewalk creating a seating node.
2. Waste receptacles should be placed near nodes of activity and spaced frequently along the streetscape. Considerations should be given to providing waste receptacles for recycling.
3. Bicycle racks should be located near transit stops, major destinations and bike paths.

*** Bus shelter with bike amenities**
Temple City, CA (Source: Gruen)



*** Bus shelter with seating**
Athens-Westmont, County UA (Source: StreetView)

*** Bench and waste receptacle**
Playa Vista, CA (Source: Gruen)

*** Bike parking on curb extension**
Los Angeles, CA (Source: Gruen)

Wayfinding

Including wayfinding signage in the furniture zone can help visitors navigate to major destinations, public facilities, and transit connections. Pedestrian wayfinding signage may be vertical signage or paved markings, and can have digital displays to show time to the station. Wayfinding can be used to help create an identity for an area and can contribute to placemaking in the TOD. Generally, wayfinding signage comes in three types: 1) Identification signs that mark key destinations and activity centers, 2) Informational signage that provide contextual information on a point of interest, and 3) Directional signage that show the optimal route between key destinations. A successful TOD will make use of all three types of signage with an emphasis on directional signage pointing to the transit station and informational signage for major destinations.

Best Design Practices / Guidelines

1. The County currently follows Caltrans standards. In the future, the County may consider developing a uniform signage system for TODs that is clear and concise for each of the type of signage. Signs need to be coordinated with Metro's signage standards.
2. Directional and informative signage should use a consistent color palette, fonts, materials and graphics and be scaled for its purpose.

Lighting

Streetlights shall be installed in conformance with County street lighting guidelines and may be accompanied by shorter, pedestrian scale lighting at more frequent intervals to create a more aesthetically pleasing, comfortable, and safe environment for pedestrians. Decorative pedestrian-scaled lighting can add to the identity of TOD's commercial corridor. However, the County does not currently have a process for requesting pedestrian lighting. Any costs associated with pedestrian lighting will need to be made available by others.

Best Design Practices / Guidelines

1. Lighting should have energy efficient fixtures such as LED which provides even, uniform distribution of light enhancing visibility and safety while conforming to County Street Lighting Design Guidelines.
2. Streetlights can only be installed if the adjacent property owners are willing to pay for their installation and recurring costs through a petition process to annex territory to the County Lighting Maintenance District (CLMD) to collect revenues from the property owners.
3. The County is in the process of acquiring the streetlights from Southern California Edison. All new streetlights in the County will be County-owned and -maintained.
4. As per the California Streets and Highways Code, CLMD funds can only be used to fund the operation and maintenance of roadway lighting within the CLMDs and not pedestrian lighting. The design, construction, operation, and maintenance for pedestrian lighting costs will need to made available by others.

*** Major activity center wayfinding**

Whittier, LA County UA (Source: LA County)

*** Wayfinding signs for nearby areas**

East Los Angels, LA County UA (Source: StreetView)

*** Pedestrian lighting in parkway**

West Los Angeles, LA County UA (Source: County)

*** Pedestrian lighting**

East Los Angeles, LA County UA (Source: StreetView)

07 Rail Station Interface with Other Modes

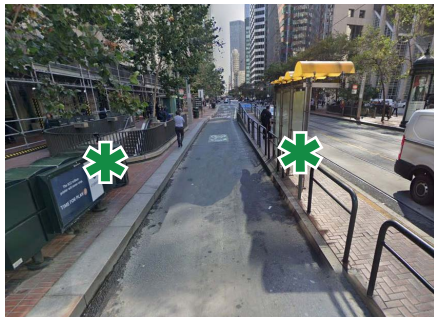
An attractive, functional, and accessible rail transit station with easy inter-modal transfers from other modes should be the focus of the half-mile station area.

Best Design Practices / Guidelines

1. Design transfer between modes (bus, shuttle, shared vehicles, etc.) at the rail station to be safe and to save patrons time improving the overall passenger experience, increasing ridership, and helping to reduce congestion around the station and in the half-mile area.
2. Locate the transit site and portal(s) to facilitate pedestrian access and capitalize on development potential.
3. Enhance the Metro systemwide design program for the station and plaza with additional art, placemaking amenities, and wayfinding signage that addresses the individual station area neighborhoods.
4. Using the components listed in the toolkit, provide comfortable and safe pedestrian and bicycle pathways linking the station to the surrounding neighborhoods and businesses and safe crossings on streets. Pathways should be along the major and secondary corridors, local neighborhood streets, and on paseos that pass through adjacent private properties when blocks are long.
5. Stations located in a TOD's secondary area will need to plan connections with other jurisdictions

*** Plaza and escalators leading to subway station at an intersection**

Hollywood, CA (Source: Gruen)



*** Bus shelters adjacent to subway station portal**

San Francisco, CA (Source: StreetView)

Atlantic/Whittier TOD Case Study

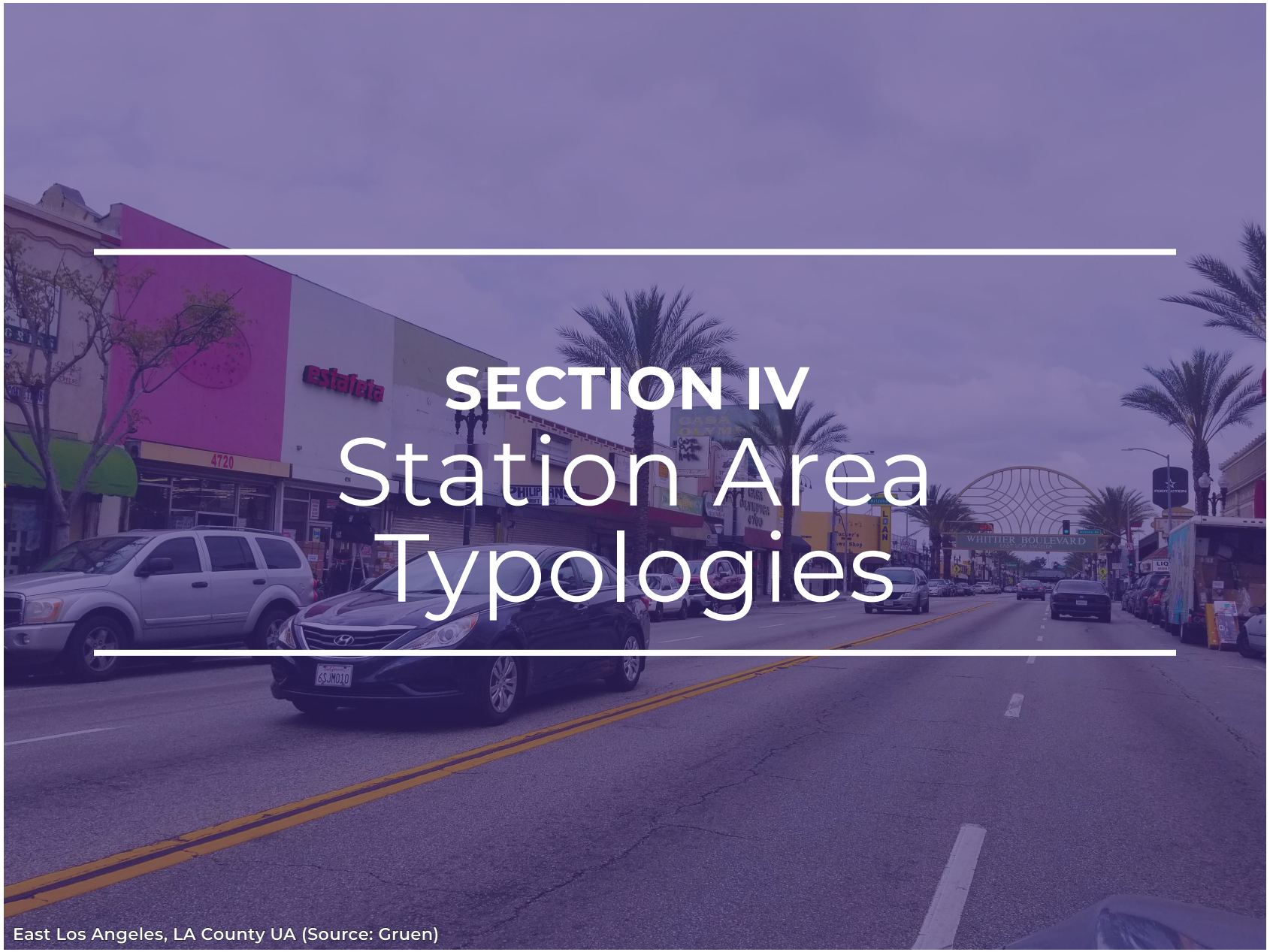
The Metro rail station is currently planned to be currently located underground at the intersection of two major roadways, Atlantic and Whittier Boulevards. Bus service exists today on both streets providing a connection to the Metro rail station within the half-mile station area and neighboring areas. Design guidelines to consider for this station and its interface with other mobility modes include:

- Redesigning the intersection for ease of pedestrian crossing using items from the toolkit such as a scramble intersection, curb extensions at the curbs, a raised crossing, improved signals, and wayfinding, pus an additional transit portal on both sides of the street.
- Provide traffic calming toolkit components along major/ secondary streets near the station to slow traffic through the intersection.
- Facilitate the flow of buses and other transit to the station by investigating the utility of transit-only lanes with stops near the station portal.
- Plan for a pick-up and drop-off zone in the curb zone on both sides of Whittier and Atlantic.
- Work with Metro to incorporate key placemaking elements and amenities such as public art, shade structures, and street/vendor furniture to aid in establishing a sense of place and identity for the neighborhood in the plaza area.
- During the Specific Plan process, explore alternatives for bike lanes along neighborhood streets which run parallel to Atlantic and Whittier with direct connections to the station. Provide bicycle amenities at the station such as a bike hub, bike lockers, and shared bike and scooter parking.

08 Summary Table

This table should serve as a guide to identify the roadway zones where it may be appropriate to add a street component to an existing roadway.

Potential Improvements for Major and Secondary Highways	Travel Lanes	Center Median	Curb Zone	Furniture Zone
Transit Lane	●	●		
Transit Shelter		●		●
Left Turn Lane	●	●		
Bike Lane	●			
Sidewalk				●
Enhanced/High Visibility Crosswalk	●	●	●	
Curb Ramp			●	●
Scramble Crosswalk	●		●	●
Protected Bicycle Intersection	●		●	●
Flashing Beacon / Pedestrian Hybrid Beacon		●		●
Diverter		●		
Median Refuge Island		●		
Speed Table / Speed Hump	●			
Traffic Circle / Roundabout	●			
On-Street Parking		●	●	
Pick-Up/Drop-Off Area			●	
Curb Extension			●	
Bus Bulb			●	
Parklet/Treelet			●	
Chicane	●		●	
Street Vegetation/Landscaping		●		●
Parkway Planter / Bioswale		●		●
Permeable Paving		●	●	●
Benches/Seating				●
Trash Receptacle				●
Bicycle Parking			●	●
Wayfinding Signage		●		●
Pedestrian Lighting				●



SECTION IV
Station Area Typologies

East Los Angeles, LA County UA (Source: Gruen)

01 Station Area Typologies Overview

Process

The Project Team analyzed 10 potential station areas and has identified six TOD Station Area typologies which generally describe these areas. The shared characteristics amongst stations in a typology form the basis of recommendations shared in this section.

Characteristics

The six typologies, presented at right, factor both existing conditions shown in as well as potential transit-supportive land-use, urban design, and infrastructure changes that may be feasible to implement as the station area develops.

Typologies Summarized

☐ Urban Mixed-Use

Dense residential development supported by a mix of non-residential uses.

Stations:

- Atlantic Blvd/Whittier Blvd Station

☐ Urban Residential

A half-mile area dominated by single-family or medium-density residential uses.

Stations:

- Florence Ave/Salt Lake Ave Station
- Norwalk Blvd/Washington Blvd Station

☐ Mixed-Use Job Center

A significant presence of local-serving retail and/or a significant mix of non-residential uses.

Stations:

- Lambert Rd/Washington Blvd Station

☐ Institutional

One major institution, or a cluster of institutions, which anchors the half-mile area.

Stations:

- Westwood/VA Hospital Station
- Westwood/UCLA Station

☐ Regional Retail Center

One large regional-serving retail center which accounts for the majority of through traffic for the TOD.

Stations:

- Commerce/The Citadel Station
- The Shops at Montebello/60 Fwy

☐ Open Space-Dominated

A significant presence of agricultural land, parkland, river, cliffs, or other natural open space amenity.

Stations:

- Santa Anita Ave/60 Fwy Station
- Peck Rd/60 Fwy Station

Table IV 1: Existing Station Area Characteristics

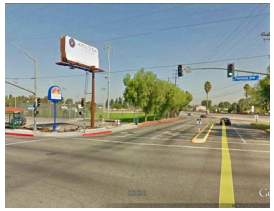
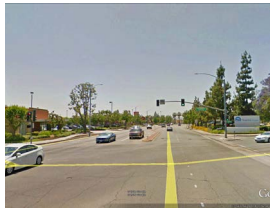
		Potential TOD Station Areas		Existing Characteristics: Mix of Uses and Densities/ Intensities	Built Form and Design	Open Space, Parks, and Public Spaces	Public Realm Mobility
Station Area TOD Typologies	Urban Mixed-Use	Atlantic Blvd/ Whittier Blvd Station		The majority of land uses within the half-mile area are medium-density residential. **Atlantic/Whittier:** Multiple major corridors are lined with single-story commercial single-family to medium-density residential. There is a big-box and large industrial center as well.	Buildings in the half-mile area are primarily 2-4 stories. Parcels are typically less than 125ft in depth. Residential lots have short front yards, stoops, fences or lawn walls.	Public park space is limited in the half-mile area. The half-mile area experiences exposure to air pollution from nearby high-volume roadways or freeways.	The half-mile area has a street layout which forms a regular street grid with alleys. The half-mile area has 3 major corridors with some streetscape improvements, though they are not equally applied. There is high demand for on-street parking.
	Urban Residential	Florence Ave/ Salt Lake Ave Station		The majority of land uses in unincorporated County are single-family residential. **Norwalk:** Most uses in the half-mile area, including secondary areas, are residential. **Florence/Salt Lake:** Most uses in the half-mile area, including secondary areas, are single- to medium-residential.	Most buildings in the half-mile area, including secondary areas, are around 2-3 stories. Both residential and commercial parcel are roughly average in size.	Public park space is limited in the half-mile area.	The half-mile area has a street layout pattern which forms a consistent street grid but includes superblocks. There are no alleys. A major highway acts as a barrier in the half-mile area and pedestrian amenities are lacking along major corridors.
		Norwalk Blvd/ Washington Blvd Station					
	Mixed-Use Job Center	Lambert Rd/ Washington Blvd Station		The majority of land uses in unincorporated County are single-family residential. Most uses in the half-mile area, including secondary areas, are residential.	Most buildings in the half-mile area, including secondary areas, are around 2-3 stories. Both residential and commercial parcel are roughly average in size.	Public park space is limited in the half-mile area.	The half-mile area has a street layout pattern which forms a consistent street grid but includes superblocks. There are no alleys. A major highway acts as a barrier in the half-mile area and pedestrian amenities are lacking along major corridors.

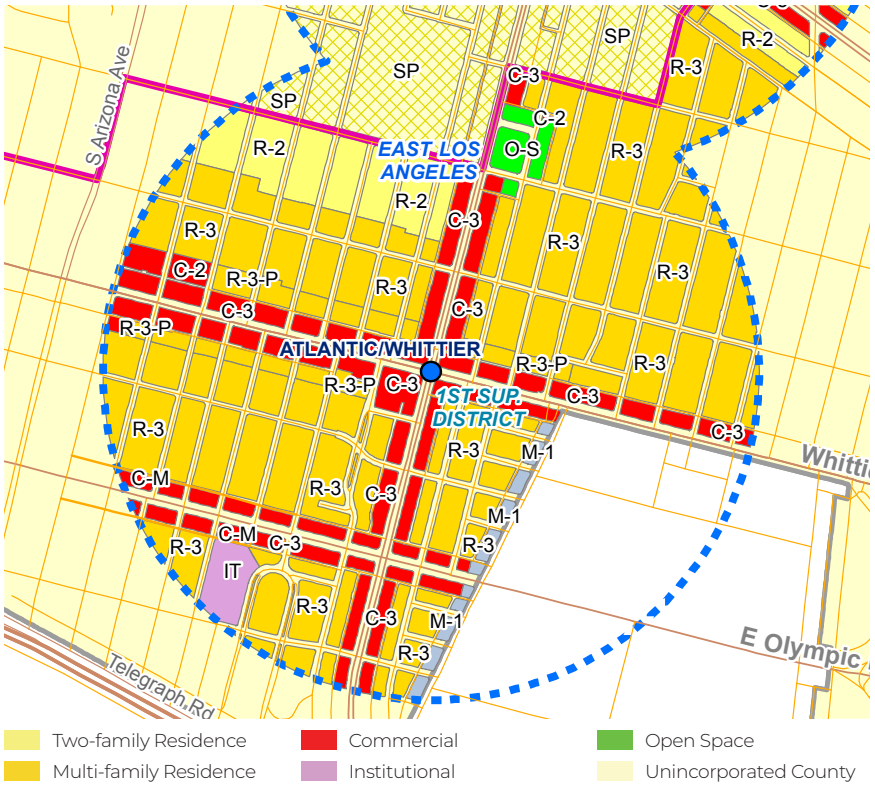
Table IV 1: Existing Station Area Characteristics (cont.)

		Potential TOD Station Areas		Existing Characteristics: Mix of Uses and Densities/ Intensities	Built Form and Design	Open Space, Parks, and Public Spaces	Public Realm Mobility
Station Area TOD Typologies	Institutional	Westwood/ VA Hospital Station		The majority of land uses within half-mile area, including secondary areas, are medium- to high-density residential but are anchored by a large employment activity center (VA Hospital or UCLA). The VA Hospital and VA Cemetery are both within unincorporated LA County, but are federal jurisdiction.	Most buildings in the half-mile area are around 4-stories. Some buildings in and directly adjacent to the institution are 10+ stories. Parcels directly adjacent to or containing the institution facilities are larger than average.	The half-mile area contains large publicly-accessible parks within or near the institution.	The street layout pattern does not form a consistent street grid and the major institution breaks the regularity of street grid. Alleys are present in select blocks.
		Westwood/ UCLA Station					
	Regional Retail Center	Commerce/ The Citadel Station		The half-mile area has one development which acts as a regional destination or commercial activity center. **Montebello**: Aside from the mall, most uses in the half-mile area are open-space or single-residential. **Commerce**: Most uses in half-mile area are a regional mall, industrial complexes, and medium-residential.	Most buildings in the half-mile area, including secondary areas, are around 2 stories. Parcels containing the regional retail center are larger than average.	Public park space is limited in the half-mile area.	The major activity center is isolated and is difficult to walk to. Pedestrian amenities are lacking along major corridors.
		The Shops at Montebello/ 60 Fwy					
	Open Space-Dominated	Santa Anita Ave/60 Fwy Station		A significant portion of land within the half-mile area, including secondary areas, is designated as open space or agriculture. **Santa Anita**: There is a somewhat even mix in the half-mile area of industrial, open space, and single-family residential. **Peck**: Most land uses in the half-mile area are open space or single-family residential.	Most buildings in the half-mile area, including secondary areas, are around 1-2 stories. Parcels within the half-mile area are larger on average than other, more compact TOD typologies.	The half-mile area includes a significant portion of a natural park, large regional park, cliffs, hills, stream, river, or other natural open space amenity. The half-mile area experiences exposure to air pollution from nearby high-volume roadways or freeways.	The street layout pattern consists of cul-de-sacs and superblocks which make the half-mile area difficult to navigate on-foot. There are no alleys.
		Peck Rd/60 Fwy Station					

Table IV 2: Future Station Area Characteristics

			Future Characteristics			
			Mix of Uses and Densities/Intensities	Built Form and Design	Open Space, Parks, and Public Spaces	Public Realm Mobility
Station Area TOD Typologies	Urban Mixed-Use		• Office or residential above retail, restaurants, and other pedestrian-friendly uses • Multi-family residential	• Larger parcel patterns & infill developments	• Infill neighborhood parks • Publicly-accessible private open space	• Well connected street network • Shared parking strategies
	Urban Residential		• Residential above retail, restaurants, and other pedestrian-friendly uses • Multi-family and single-family residential	• Smaller parcel patterns & infill developments	• Playgrounds and other neighborhood amenities	• Well connected street network • Secondary pathways for pedestrian and cyclist circulation to neighborhood centers
	Mixed-Use Job Center		• Office above retail, restaurants, and other pedestrian-friendly uses • Multi-family residential	• Larger parcel patterns & infill developments	• Parks and recreational space adjacent to major job centers	• Well connected street network • Pedestrian- and cyclist-friendly major roadways
	Institutional TOD		• Institutional offices/ facilities above retail, restaurants, and other pedestrian-friendly uses • Limited residential (high density)	• Larger parcel patterns & infill developments	• Parks and recreational space adjacent to or within major institution • Publicly-accessible private open space	• Well connected street network • Safe, attractive internal pathways leading from major roadways to institutional centers
	Regional Retail Center TOD		• Anchored by regional commercial uses • Limited residential (high density)	• Infill and adaptive re-use developments	• Recreation areas to break up larger developments • Publicly-accessible private open space	• Well connected street network • Pedestrian and cyclist circulation from residential areas to commercial core
	Open Space-Dominated TOD		• Anchored by regional open space • Limited residential (low density)	• Limited development	• Region-serving open space amenities	• Limited street network • Pedestrian trails with clear access from major roadways

02 Urban Mixed-Use TOD



Source: Los Angeles County Department of Regional Planning

(Source: Gruen)

Profile Station: Atlantic/ Whittier

The Atlantic/Whittier station area is largely residential, but has three major commercial corridors. Whittier Boulevard has some streetscape improvements already, but additional improvements are encouraged along other corridors. See Part III for a for a full case study of this station area.

The Urban Mixed-Use TOD typology is characterized by dense residential development supported by a mix of non-residential uses. Urban Mixed-Use TODs may have one or more major commercial corridors.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: Atlantic/Whittier.

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Concentrate development of new commercial uses and mixed-use buildings along major corridors on vacant or underutilized parcels.
- Preserve and foster infill development of medium-density residential throughout.
- Encourage development of key neighborhood resources such as grocery stores and daycare facilities near the transit station.

Built Form and Design

- Encourage the use of awnings on retail and restaurant storefronts along major commercial corridors to provide architectural character and shade for pedestrians to improve walkability.

Open Space, Parks, and Public Spaces

- Encourage residential uses to include porches or stoops on lots with shorter depths to ensure usable private open space.
- Where possible enhance existing alleyways to create green alleys or pedestrian malls to counteract the limited presence of traditional parks.
- Utilize parklets along commercial corridors where traffic patterns permit to reduce crowding from sidewalk dining and commercial displays.

Public Realm Mobility

- Implement traffic calming measures along high-traffic corridors to reduce vehicle/pedestrian collisions.
- Utilize shared parking strategies along major commercial corridors.
- Where possible utilize existing alleyways as bicycle corridors where roadway widths do not permit the addition of dedicated bike lanes.

Atlantic/Whittier TOD Case Study

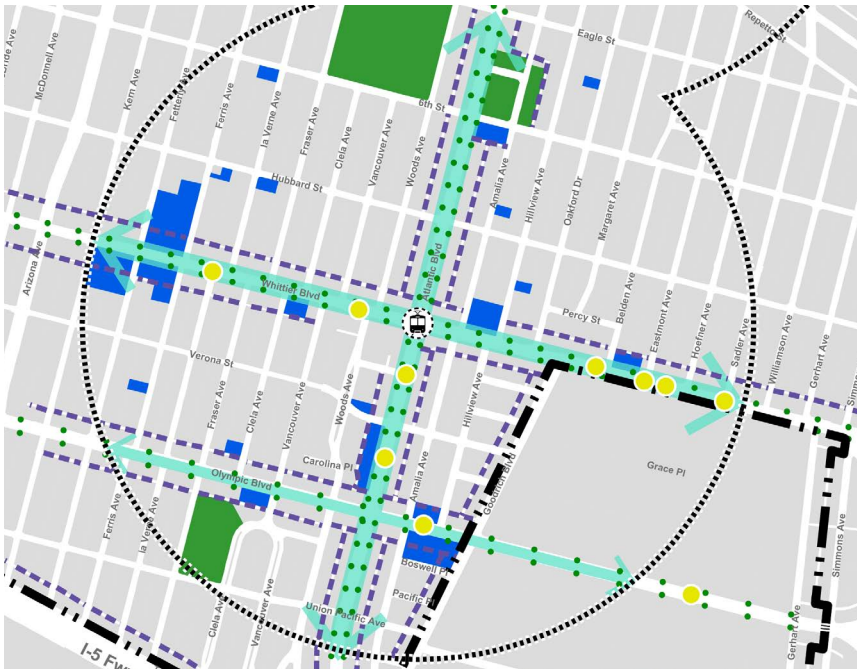
The map at right shows an illustrative view of improvements which may be considered for the Atlantic/Whittier TOD based on its Urban Mixed-Use TOD Typology. Currently vacant and underutilized parcels (i.e. parcels with considerable street frontage devoted to surface parking) may be reconfigured or redeveloped to provide the neighborhood with more public open space, public/shared parking lots or structures, or critical neighborhood resources which are currently unavailable in the half-mile area. Existing streetscape improvements may be improved and supplemented with additional future pedestrian amenities. To maintain vehicular flows and to reduce collisions, the existing north-south and east-west alleys throughout the TOD may be used to provide alternative routes for bicyclists with connection points near the proposed transit station.

*** Fenced-off auto-oriented business with street-adjacent parking**

East Los Angles, LA County UA (Source: Gruen)

*** Zero lot line development along major commercial corridor**

East Los Angles, LA County UA (Source: Gruen)



½ Mile Radius from a Potential Transit Station

Potential Atlantic/Whittier Station

Commerce / Unincorporated County Boundary

Potential Street Trees, illustrative

Existing Alley

Potential Streetscape Improvements (i.e. improved bus shelters, seating, lighting, signage, etc.)

Existing Public Park/Facility

Primary Redevelopment Opportunity Sites

Potential Roadway Improvements (i.e. enhanced crossings)

03 Urban Residential TOD

Source: Los Angeles County Department of Regional Planning

(Source: StreetView)

Profiled Station: Florence/Salt Lake

Only portions of a few unincorporated area parcels are within the half-mile station area. These parcels are on the edge of the station area; the station itself is n Huntington Park. The station area parcels within the unincorporated area are designated as single-family residential.

The Urban Residential TOD typology is characterized by a half-mile area dominated by single-family or medium-density residential uses. This TOD typology often lacks a major commercial corridor or an employment hub to anchor the neighborhood.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: Florence/Salt Lake.

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Encourage development of accessory dwelling units on existing residential parcels.
- Encourage development of key neighborhood resources such as grocery stores and daycare facilities near the transit station.

Built Form and Design

- Encourage more compact housing design to allow for greater amounts of private yard space for lower-density residential parcels.

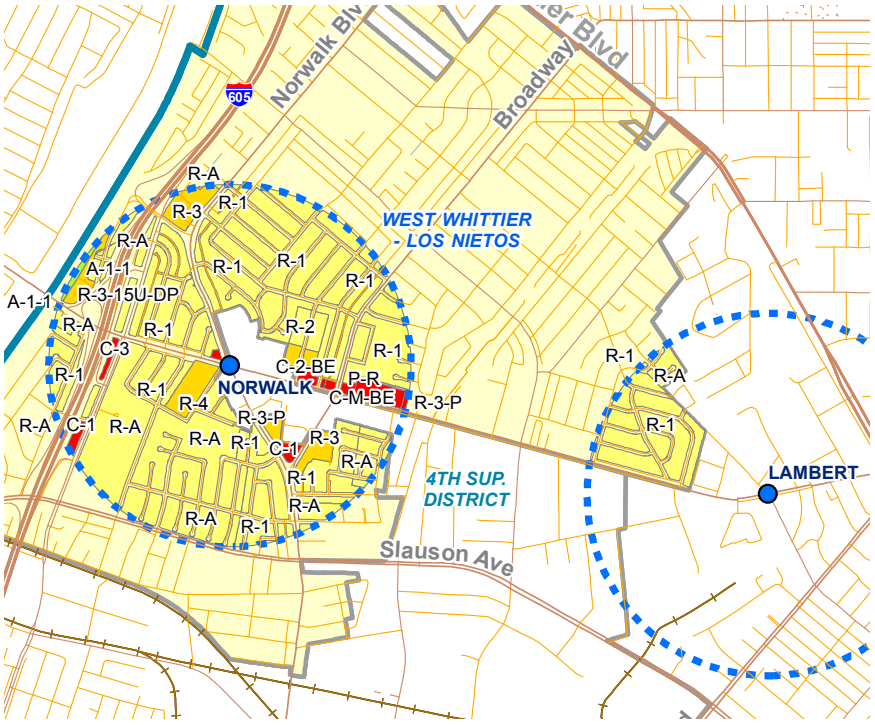
Open Space, Parks, and Public Spaces

- Convert lawns and open spaces at public institutions such as schools and civic buildings to neighborhood-serving public open spaces

Public Realm Mobility

- Implement traffic-calming measures on corridors with out-bound traffic to adjacent areas with employment opportunities
- Prioritize enhanced connections to the transit station along main throughways

04 Mixed-Use Job Center TOD



Source: Los Angeles County Department of Regional Planning

(Source: StreetView)

Profiled Station: Norwalk

Only a small portion of the half-mile station area is not unincorporated County land. Though the Norwalk Station is under the jurisdiction of Santa Fe Springs, there is a potential for a coordinated development approach between the two jurisdictions. There are also a few parcels in the area that are zoned for commercial or multi-family development.

The Mixed-Use Job Center TOD typology is characterized by a significant presence of local-serving retail and/or a significant mix of non-residential uses.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: Norwalk, Lambert

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Preserve and expand the commercial or office core anchoring the station area.
- Permit a variety of residential typologies to support the job center and to fit multiple household types.

Built Form and Design

- Target building heights of 2-5 stories throughout the station area.

Open Space, Parks, and Public Spaces

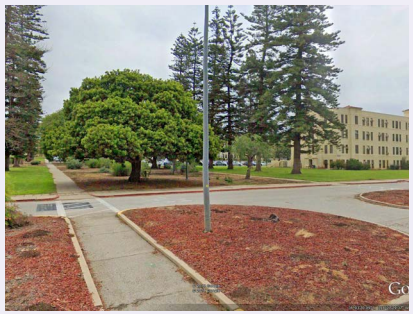
- Provide publicly accessible private open spaces in the central employment core which are visible from the street.

Public Realm Mobility

- Utilize parking strategies such as shared parking and Park Once Districts in and around the employment core.
- Preserve on-street parking along major commercial corridors and implement other traffic calming solutions to make the employment core pedestrian-friendly.

05 Institutional TOD

Source: Los Angeles County Department of Regional Planning



(Source: StreetView)

Profiled Station: Westwood/VA Hospital

The majority of the half-mile station area is within unincorporated Los Angeles County area. The majority of the unincorporated area parcels are designated as institutional (IT) and open space (O-S). A very small portion of this area is designated as medium density multi-family residence (R-4).

The Institutional TOD typology is characterized by one major institution, or a cluster of institutions, which anchors the half-mile area around a transit stop. Most uses are complimentary to the anchoring institution, and traffic congestion is highest at the entry and exit points to the institution. Institutions may be schools, hospitals, major employment centers, etc. Larger blocks typically comprise the institution and may break up a regular street grid from the surrounding area.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: Westwood/VA Hospital, Westwood/ UCLA.

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Permit land uses which are complimentary to the institution, such as hotels and other hospitality uses, restaurants, and medium- to high-density housing.

Built Form and Design

- Ensure building massing for institutional buildings do not create “street walls” and include pass-throughs and paseos where necessary to improve internal site circulation.

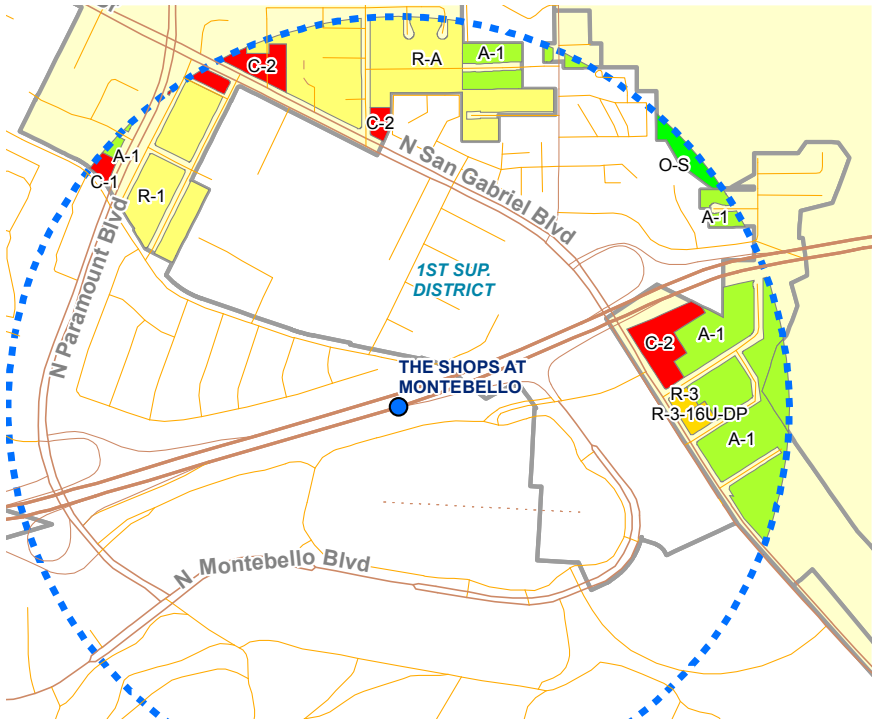
Open Space, Parks, and Public Spaces

- Ensure and maintain presence of publicly-accessible private open space in and around the institution.
- Utilize wayfinding signage throughout the half-mile area, especially at the transit station, directing visitors to the major institution.

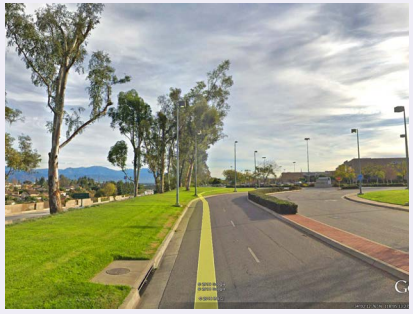
Public Realm Mobility

- Implement pedestrian amenities which improve crossing conditions on all major roadways leading to the institution.
- Utilize parking strategies such as shared parking and Park Once Districts in and around the institution.

06 Regional Retail Center TOD



Source: Los Angeles County Department of Regional Planning



(Source: StreetView)

Profiled Station: The Shops at Montebello

Less than 20% of the half-mile station area is in unincorporated LA County, plus the future transit station adjacent to the Shops at Montebello is outside the unincorporated County area. Land within the incorporated area is scattered on the perimeter of the half-mile station area cut off from the station by the 60 Freeway and major roadways.

The Regional Retail Center TOD typology is characterized by one large regional-serving retail center which accounts for the majority of through traffic for the TOD. Surrounding uses may be supplementary to the retail center, or may be isolated from the center.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: The Shops at Montebello, Commerce.

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Concentrate development in the area directly adjacent to the retail center to prevent isolation.
- Encourage complementary land uses in the area directly adjacent to the retail center, including entertainment and dining options.

Built Form and Design

- Encourage flexible site plans and designs for retail and office buildings in the half-mile area which may be converted to another use if demand requires.

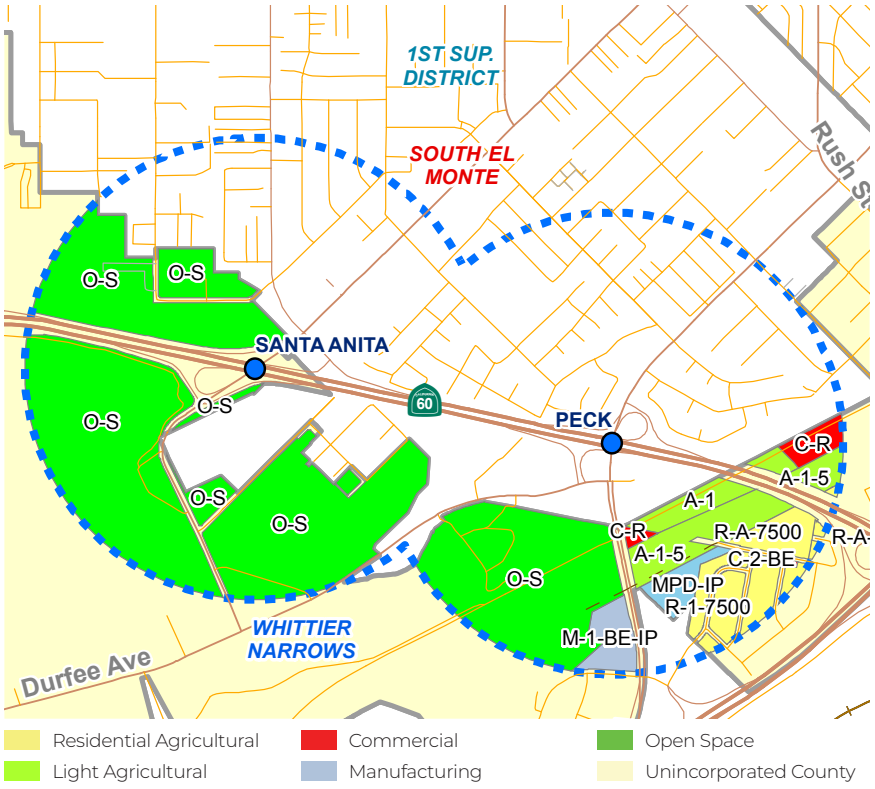
Open Space, Parks, and Public Spaces

- Potential for significant publicly-accessible private open space in the form of plazas and paths through the shopping center.

Public Realm Mobility

- Limited connectivity from regional shopping center to surrounding uses due to adjacent freeways and major roadways acting as barriers.

07 Open Space-Dominated TOD



Source: Los Angeles County Department of Regional Planning

(Source: StreetView)

Profiled Station: Santa Anita

Less than 50% of the half-mile station areas is within unincorporated Los Angeles County, plus the future transit stations are outside the County unincorporated area. Aside from the area designated as open space, a small portion of the County area is designated for agriculture related uses and manufacturing.

The Open Space-Dominated TOD typology is characterized by a significant presence of agricultural land, parkland, river, cliffs, or other natural open space amenity. Land use densities and intensities tend to be lower and more spread out in relation to those present in other TOD typologies. Open Space-Dominated TODs tend not to have major activity centers and have limited expansion potential.

As of 2020, the following proposed transit stations have half-mile TOD areas which match this typology: Santa Anita, Peck.

TOD Typology Considerations

Mix of Uses and Densities/Intensities

- Maintain lower- and medium-density development in the areas directly adjacent to the natural amenity or major open space.

Built Form and Design

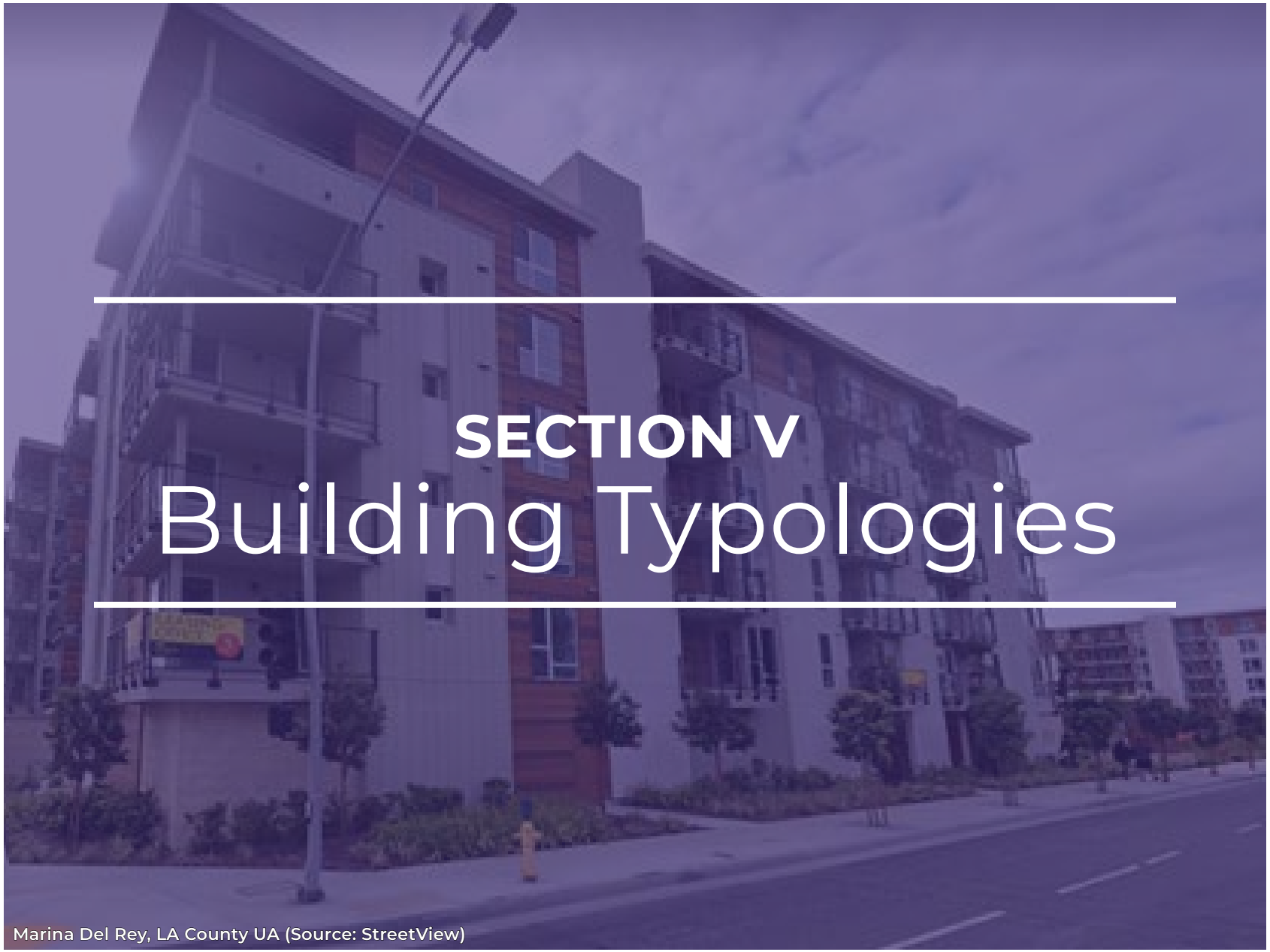
- Implement design requirements which prevent disruptions of viewsheds to the natural amenity or major open space.

Open Space, Parks, and Public Spaces

- Where appropriate, plan for trails and other passive recreational uses of the natural amenity or major open space.

Public Realm Mobility

- Integrate the publicly-accessible portions of the natural amenity or major open space with the roadway system with highly visible entrances and clearly visible signage.



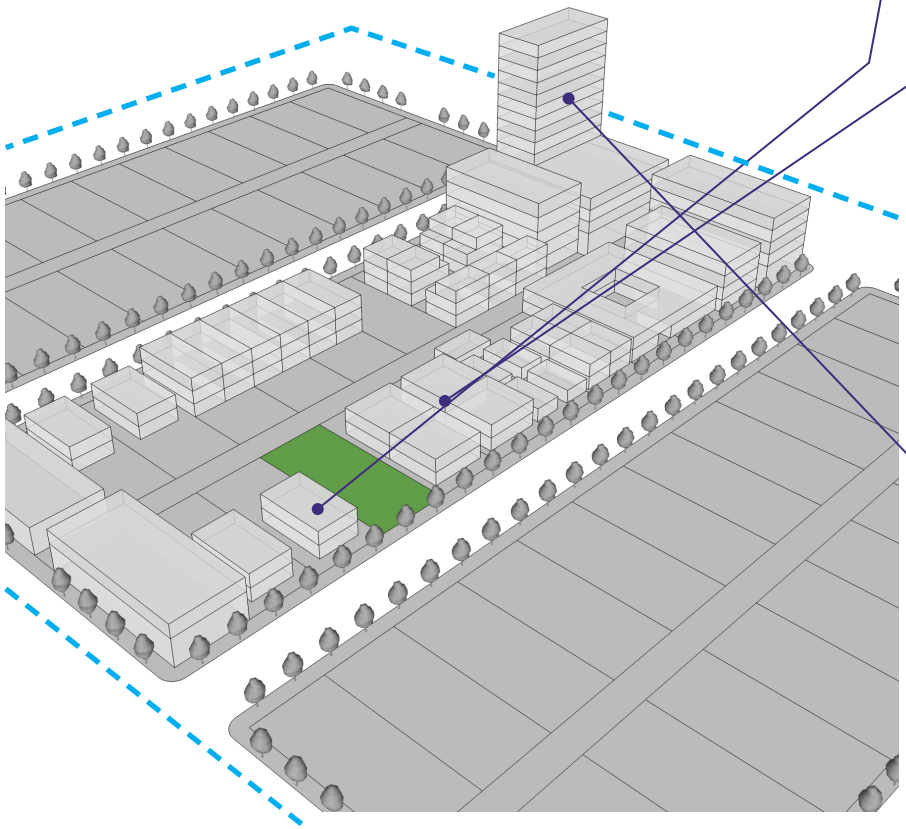
SECTION V
Building Typologies

Marina Del Rey, LA County UA (Source: StreetView)

01 Building Typologies Overview

Meeting residential and job density targets that support transit ridership and walkable communities can be achieved through a wide variety of building types. The TOD Toolkit recognizes the diversity of building stock throughout Los Angeles County by organizing building types into the three categories listed to the right (see the table on the following page for more detail). Each identified building typology will be defined and analyzed in the following sections. The typologies are informed by the following considerations:

- **Primary means of access:** external; internal from streets; blocks
- **Orientation to the street:** primary; secondary corridors and alleys
- **Construction type:** wood-frame; concrete block
- **Parking configuration:** surface; structure; podium; on-street



Lower Density Buildings

- Accessory Dwelling Unit
- Shopfront House
- Bungalow Courtyard
- Rosewalk

Medium Density Buildings

- Duplex
- Triplex/Fourplex
- Attached Townhouse
- Compact Lot Subdivision
- Live/Work
- Courtyard
- Hybrid Courtyard

Higher Density Buildings

- Hybrid Podium
- Flex Apartment/Mixed-Use
- Liner Structure/Commercial Block
- Mid-Rise Tower
- High-Rise Tower

Building Typology / Station Area Typology Matrix

	Building Typologies	Station Area Typologies					
		Urban Mixed-Use TOD	Urban Residential TOD	Mixed-Use Job Center TOD	Institutional TOD	Regional Retail Center TOD	Open Space-Dominated TOD
Lower Density	Accessory Dwelling Unit (ADU)	●	●	●	●	●	●
	Shopfront House	●	●	●	●	●	●
	Bungalow Courtyard	●	●	●	●	●	●
	Rosewalk	●	●				●
Medium Density	Duplex	●	●	●	●	●	●
	Triplex/Fourplex	●	●	●	●	●	●
	Attached Townhouse	●	●	●	●	●	●
	Compact Lot Subdivisions	●	●	●	●	●	●
	Live/Work	●	●	●	●	●	
	Courtyard	●	●	●	●	●	
	Hybrid Courtyard	●	●	●	●	●	
Higher Density	Hybrid Podium	●	●	●	●	●	
	Flex Apartment/Mixed-Use	●	●	●	●	●	
	Liner Structure/Commercial Block	●	●	●	●	●	
	Mid-Rise Tower	●			●	●	
	High-Rise Tower				●	●	

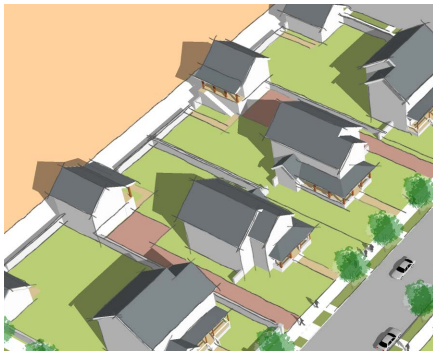
02 Lower Density Buildings

Accessory Dwelling Unit (ADU)

Accessory dwelling units (ADU) are permitted statewide in California since the passage of SB 229 and AB 494 in 2017 and 2018. The bills and followup state legislation allow owners of single or multi-family residences to build a secondary residential unit on their property with minimal restrictions from local zoning ordinances. Units can be free-standing or located above a garage or other structure. Provisions allow for the addition of a studio or 1-bedroom unit of up to 1, 200 square feet with bathroom and kitchen facilities, among other conditions.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | **< 12**
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | **< 1.0**
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Owners are encouraged to provide convenient storage for bicycles, scooters, or other non-motorized forms of transport. Pedestrian access to ADUs can be shared with an existing driveway or provided from the alley.
   - **Vehicle Access:** Garages may be accessed from the driveway or from a rear alley or using the primary residences' driveway.
4. **Parking:** No additional parking is required per recent California legislation.



Illustrative Model

Piedmont, CA (Source: Gruen)

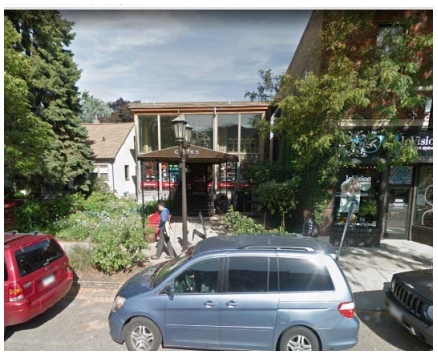
Shopfront House

Shopfront houses are commercial structures that can be added to existing single-family homes. They are typically found along arterials and lower-density commercial corridors that include a mix of single-family homes and retail. The shopfront house can be an effective way to enliven the street scene while providing neighborhood-serving retail, new stores and boutiques, and coffee shops, among other uses.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | **< 12**
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | **< 1.0**
2. **Land Uses**
   - **Ground Floor:** **Residential** | **Commercial** | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians and cyclists access shopfronts from the sidewalk.
   - **Vehicle Access:** Vehicles typically access shopfronts from an alley.
4. **Parking:** If alley access is provided, conventional spaces for customers and tandem spaces for employees can be provided. On-street parking is encouraged.

Minneapolis, MN (Source: Gruen)



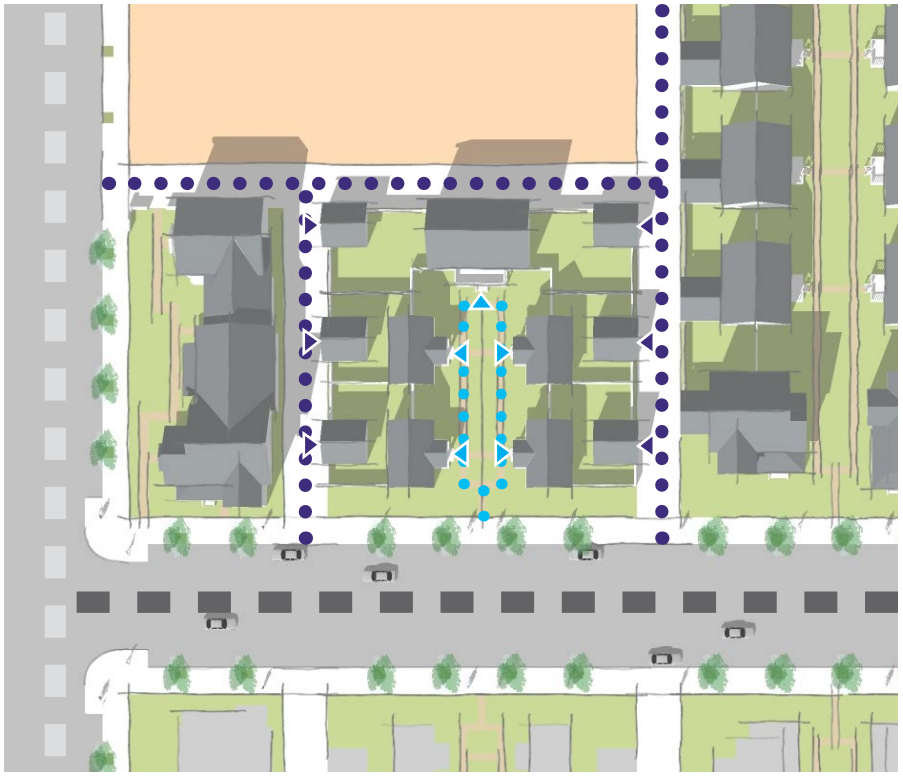
Saint Paul, MN (Source: Gruen)

Bungalow Courtyard

Bungalow courtyards emerged in Pasadena in the early 20th century as a way to provide amenities typically offered in a single family home in a more affordable complex. As its name implies, units are organized around a common courtyard and designed in the low-density (1-2 story) bungalow design. Multiple units can be clustered together (duplex, triplex, etc.) to achieve even higher densities.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | **< 12**
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | **< 1.0**
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians access units from the courtyard. Secure bicycle storage should be provided in each garage stall.
   - **Vehicle Access:** Vehicles can access units from driveways along the side lot line or alley.
4. **Parking:** Parking can be provided in a common suite of garages or carports in the rear of the complex. Alternatively, each unit may include its own single-stall garage.



Illustrative Model

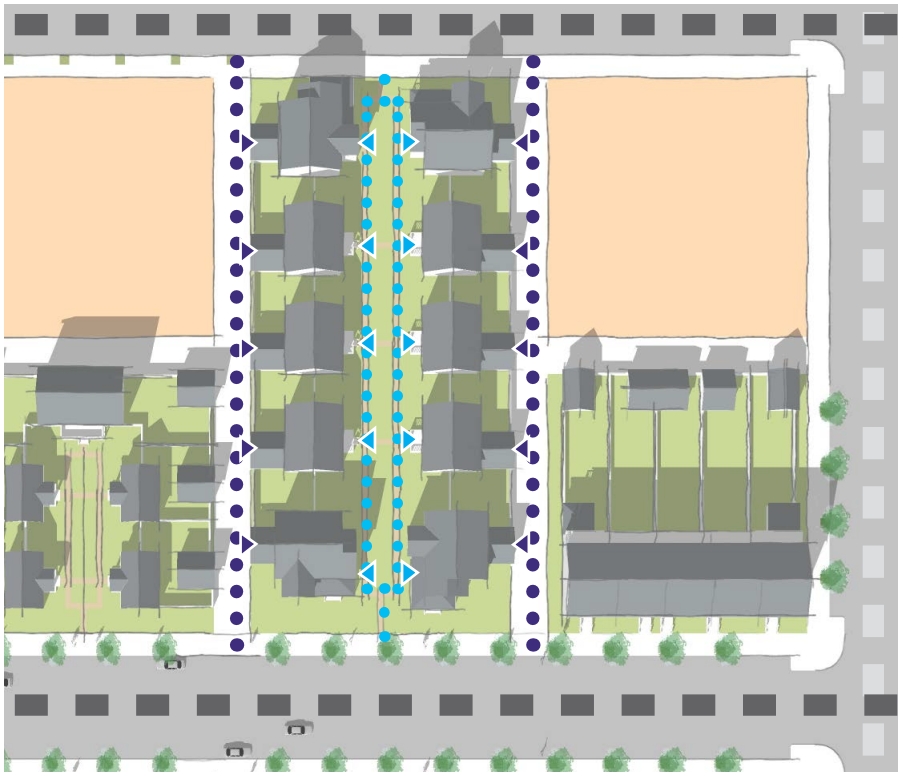
Pasadena, CA (Source: Gruen)

Rosewalk

Rosewalks are similar to bungalow courtyards, but the common amenity space takes the form of a narrow mall. Additionally, the mall typically extends across the whole block in a linear arrangement (from street to street). Given space constraints, garages are typically attached to the rear of each unit. Rosewalks achieve slightly higher densities than bungalow courtyards and provide for public pedestrian access and excellent circulation throughout the neighborhood.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | **< 12**
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | **< 1.0**
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Units are accessed from the mall, while bike storage should be provided at the rear of each unit.
   - **Vehicle Access:** Driveways are provided along the side lot line.
4. **Parking:** Parking garages are typically attached to the rear of each unit.



Illustrative Model

East Los Angeles, LA County UA (Source: Zill)

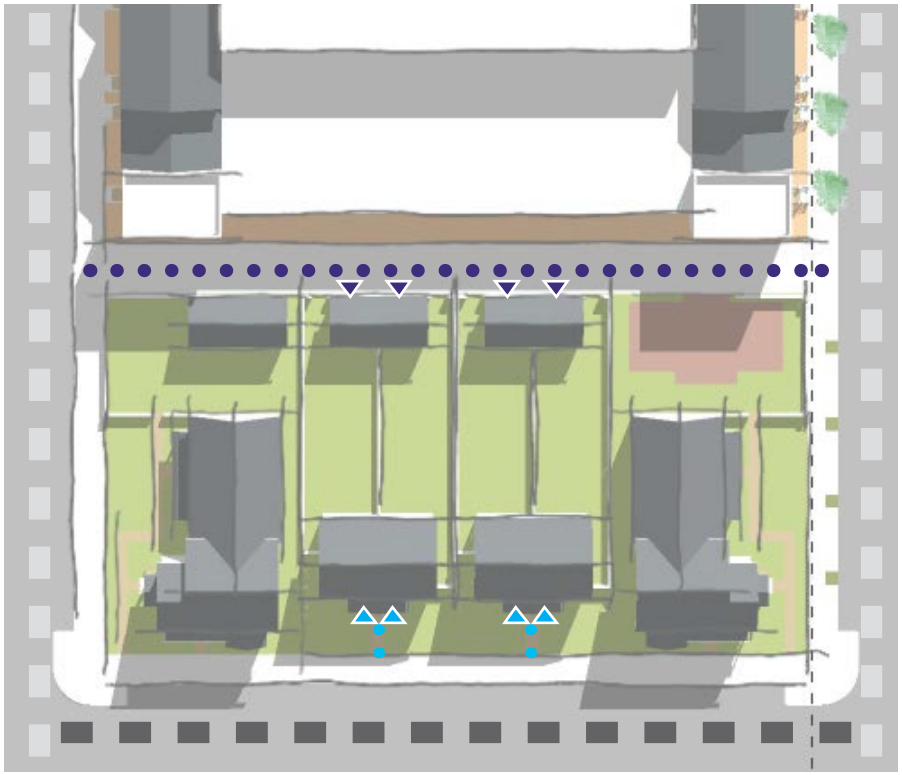
03 Medium Density Buildings

Duplex

A structure that consists of two side-by-side or stacked dwelling units, both facing the street and within a single building; with the appearance of a single-family home, it is appropriately scaled to it within primarily single-family neighborhoods or medium-density neighborhoods.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrian access can be from the front of the building, or from the side driveway. Side yard duplex should have entrances fronting both streets.
   - **Vehicle Access:** Vehicle access is preferred from an alley. If no alley is present, a driveway for single car width along one edge of the lot is acceptable.
4. **Parking:** Surface parking is located behind the building, or located along an alley, and should be hidden from the street. On-street parking should also be utilized to reduce amount of on-site parking.



Illustrative Model

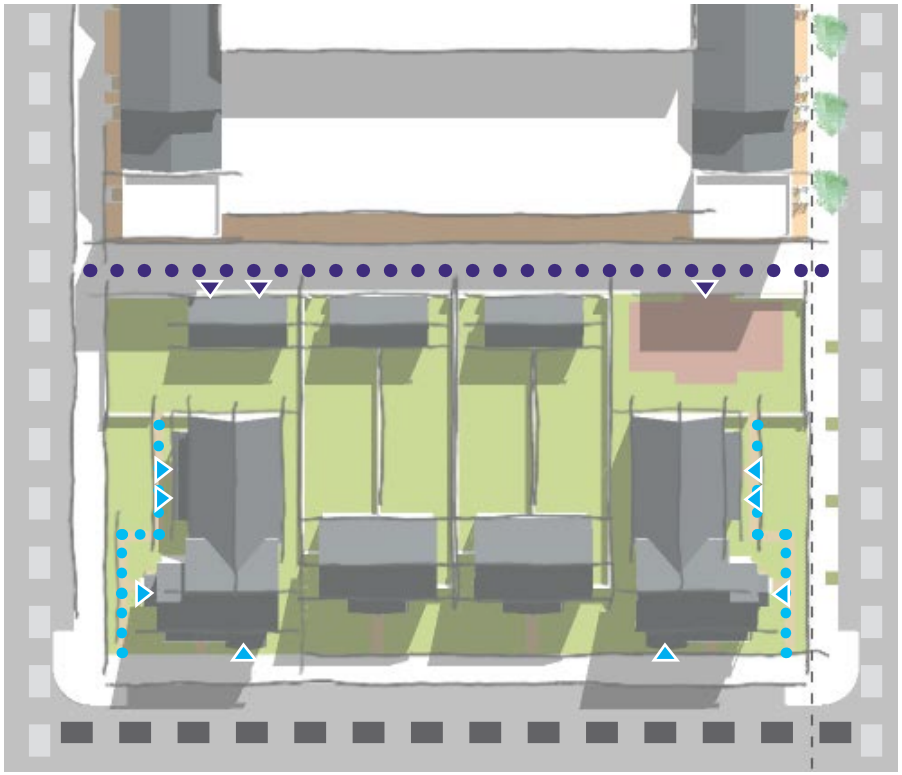
Willowbrook, LA County UA (Source: Zillow)

Triplex/Fourplex

Triplexes and fourplexes are similar in concept to the duplex, but can be configured in a variety of ways to achieve higher density structures that come in combinations of three or four units. A common entrance may lead to three or four units, or individual entrances may be located along the front and/or sides of each building.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians and cyclists access units from the sides and front of each complex. Bicycle parking should be provided in common garages or racks near the alley.
   - **Vehicle Access:** Vehicles can access shared lots or garages from the street or alley.
4. **Parking:** Shared lots or garages can be provided, although some units may not include any dedicated parking. On-street parking should be made available.



Illustrative Model

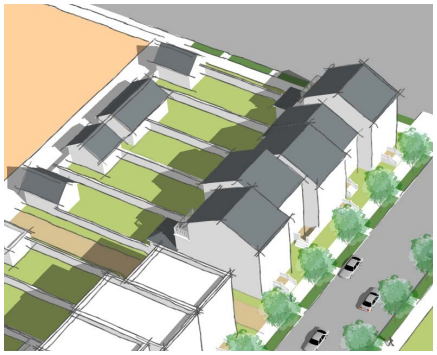
East Los Angeles, LA County UA (Source: Zillow)

Attached Townhouse

Attached townhomes offer many of the same benefits of single-family at higher residential densities. Units are typically 1-2 stories with up to three bedrooms and are typically no more than 30-40' wide. This unit size allows for higher densities (20-25 units/acre) when compared with single-family homes (7 units/acre). Attached units can include private backyards and feature minimal sidewalk setbacks. To facilitate pedestrian circulation, at least one public walkway should be provided at or near the center of each block.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians access units from the sidewalk and secure bicycle parking should be provided in each private garage.
   - **Vehicle Access:** Guests arriving by car park on-street, while townhome owners access each garage from a shared alley.
4. **Parking:** Up to two stalls can be provided in a detached, private garage that is located off the alley. On-street parking should be provided for guests.



Illustrative Model

LA Crescenta, LA County UA (Source: Zillow)

Compact Lot Subdivisions

Compact lot subdivisions are smaller, fee simple lots, in areas zoned for two-family and multi-family housing where infill development is encouraged. A "compact lot subdivision" is a land division that creates single-family residential lots with an area of less than 5,000 square feet. These compact lots are generally less than 50 feet wide, with modifications to other development standards, including but not limited to setback, street frontage, and access requirements.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians access units from the courtyard. Secure bicycle storage should be provided in each garage stall.
   - **Vehicle Access:** Vehicles can access units from driveways along the side lot line or alley.
4. **Parking:** Parking can be provided in a common suite of garages or carports in the rear of the complex. Alternatively, each unit may include its own single-stall garage.

Vehicular Entry
Pedestrian Access
Vehicular Path
Pedestrian Path
Primary Street
Side Street

Los Angeles, CA (Source: Gruen)

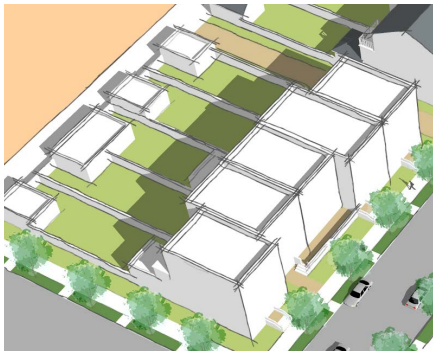
Los Angeles, CA (Source: Gruen)

Live/Work

Live-work lofts are a unit type that can be integrated into duplexes, detached/attached townhomes, and small lot projects. These units are typically two-or three stories, face the primary street, and include second and/or third-levels that open to the main living space below. Living spaces may be converted to workspace for small retail or office operations, artist studios, or other low volume commercial uses. They help to activate the street in areas where traditional retail is not feasible.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | **Commercial** | **Office** | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians and cyclists can access units from the sidewalk. Convenient bicycle parking(typically a pole or rack) should be provided for guests.
   - **Vehicle Access:** Commercial patrons park on-street and access units from the sidewalk.
4. **Parking:** Garages can be provided in shared complexes or as tuck-under stalls facing the alley.



Illustrative Model

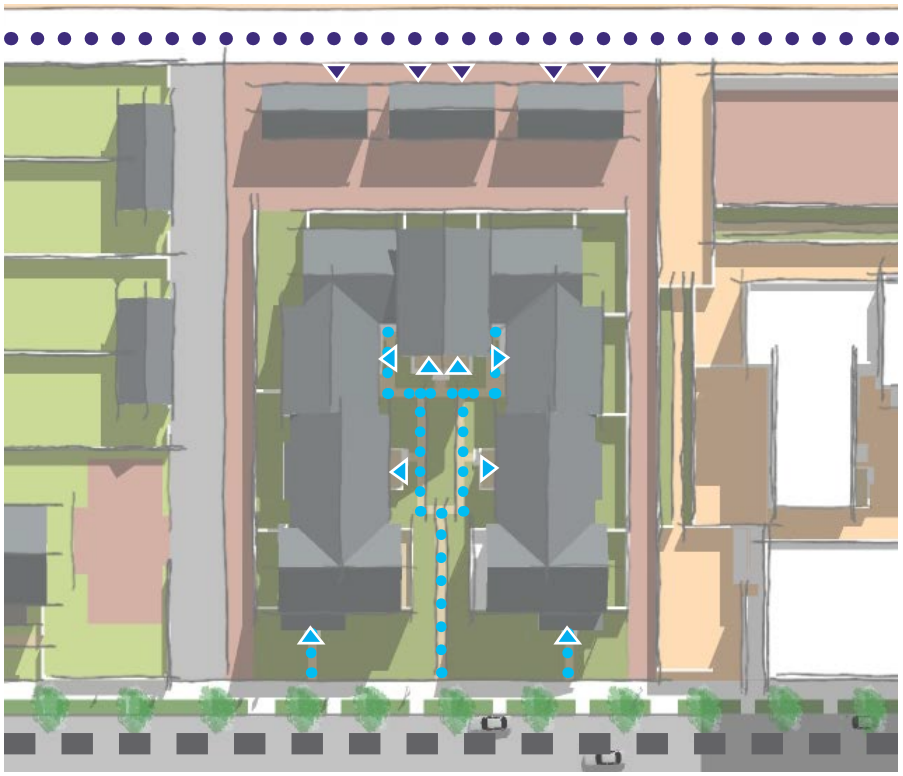
Santa Ana, CA (Source: Gruen)

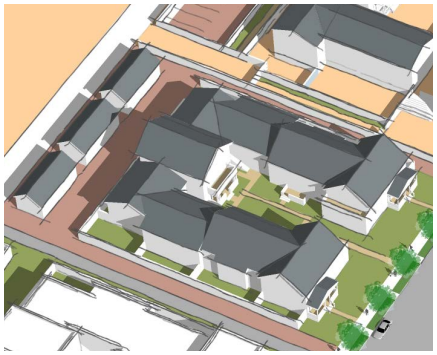
Courtyard

Courtyards are similar to bungalow courtyards (see earlier description) but units are fully attached and arranged in higher densities (2-3 stories). This arrangement yields more units per acre, but does not include private backyards. Instead, social interaction among residents is encouraged through a well-designed and maintained common courtyard.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | Commercial | Office | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrian/cyclist access to each unit is provided from the courtyard.
   - **Vehicle Access:** Vehicles access to the complex is typically through a driveway along the side lot line.
4. **Parking:** Parking is provided in carports or garages at the rear of the building. Residents park and walk through arcades to access courtyards and units.





Illustrative Model

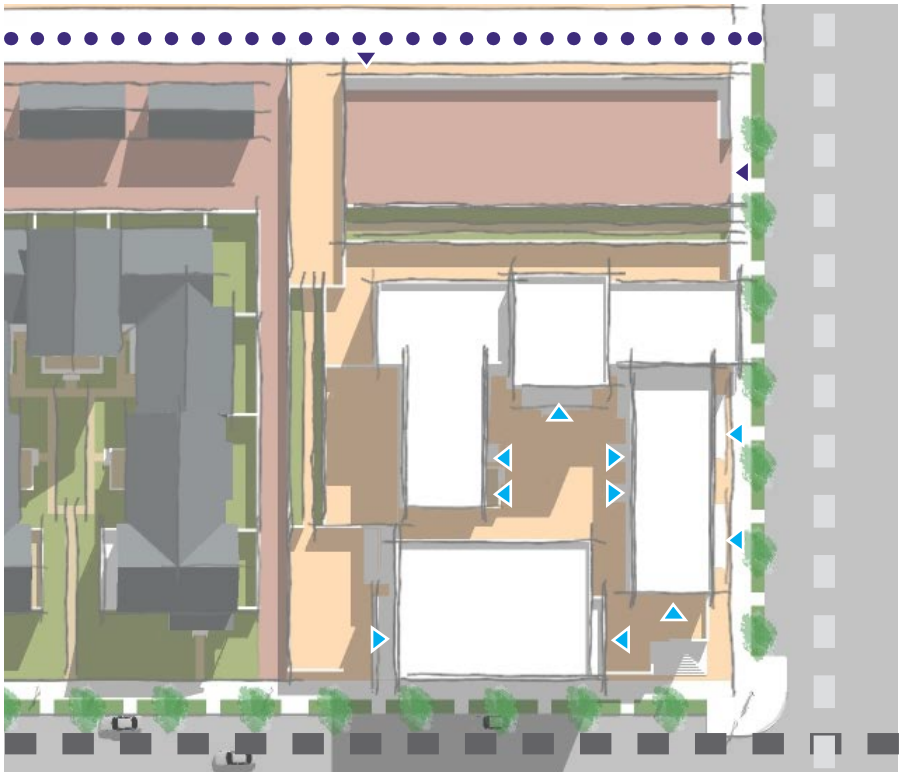
Los Angeles, CA (Source: Gruen)

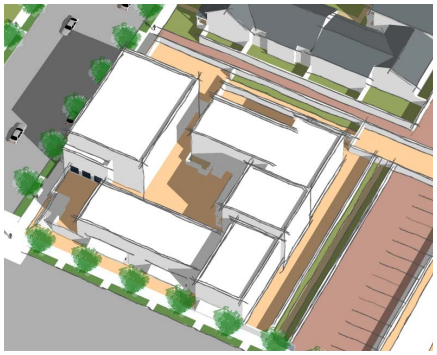
Hybrid Courtyard

Like the bungalow courtyard, hybrid courtyards share a common, central amenity space that is shared among residents and tenants. Hybrid courtyards, however, include a mix of higher density (2-4 story) attached multi-family buildings and/or a mixed-use (retail/office or retail/residential) building that is oriented to the primary street. This building type achieves high densities (40-50 units/acre) and a desirable mix of uses using Type V construction, which is less expensive to build.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | **1.0 - 1.9** | < 1.0
2. **Land Uses**
   - **Ground Floor:** **Residential** | **Commercial** | **Office** | Industrial
   - **Upper Floors:** **Residential** | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Ground-floor residential units are accessed from the courtyard, while upper units can be reached from a stairwell and hall. Commercial suites include street-facing entrances.
   - **Vehicle Access:** Access is provided from an alley or through a driveway along the side lot line.
4. **Parking:** Parking is provided in a shared lot at the rear or in a garage below the complex. Provide bicycle parking and parking spaces for car-sharing programs.





Illustrative Model

South Pasadena, CA (Source: Gruen)

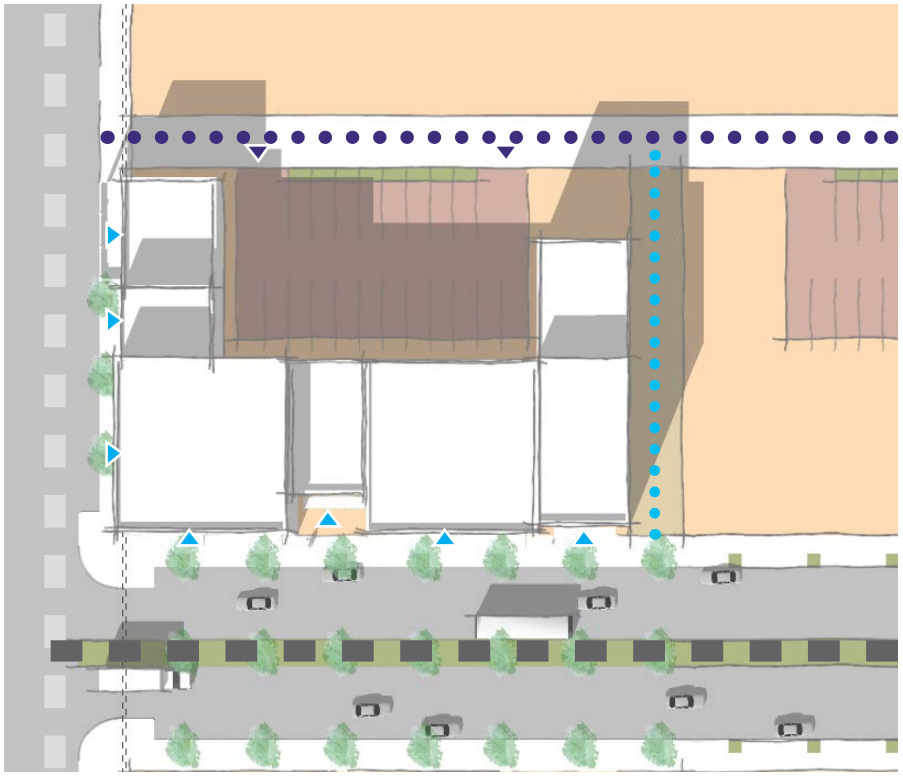
04 Higher Density Buildings

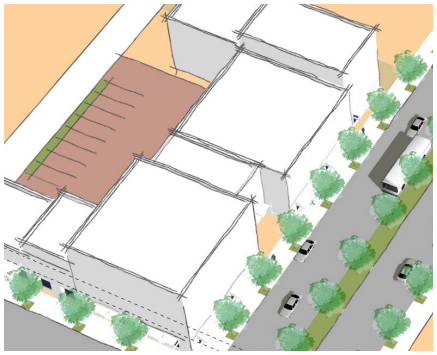
Hybrid Podium

Hybrid Podiums are buildings with one or two stories of concrete or steel floors, typically occupied by retail or parking, and 2 to 5 stories of wood frame construction residential or office uses. Hybrid podiums are common building forms for mixed-use developments along commercial corridors.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | **13 - 50** | < 12
   - **Floor Area Ratio:** **3.0 +** | 2.0 - 2.9 | 1.0 - 1.9 | < 1.0
2. **Land Uses**
   - **Ground Floor:** Residential | **Commercial** | **Office** | Industrial
   - **Upper Floors:** **Residential** | Commercial | **Office** | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Retail suites include street-facing entrances, while residents access units from a separate, private entrance that leads to stairwells/elevators and common corridors.
   - **Vehicle Access:** Vehicles access the complex from curb cuts located at the ends or rear of the building.
4. **Parking:** Parking for residents and customers is located below grade or at the rear of the property.





Illustrative Model

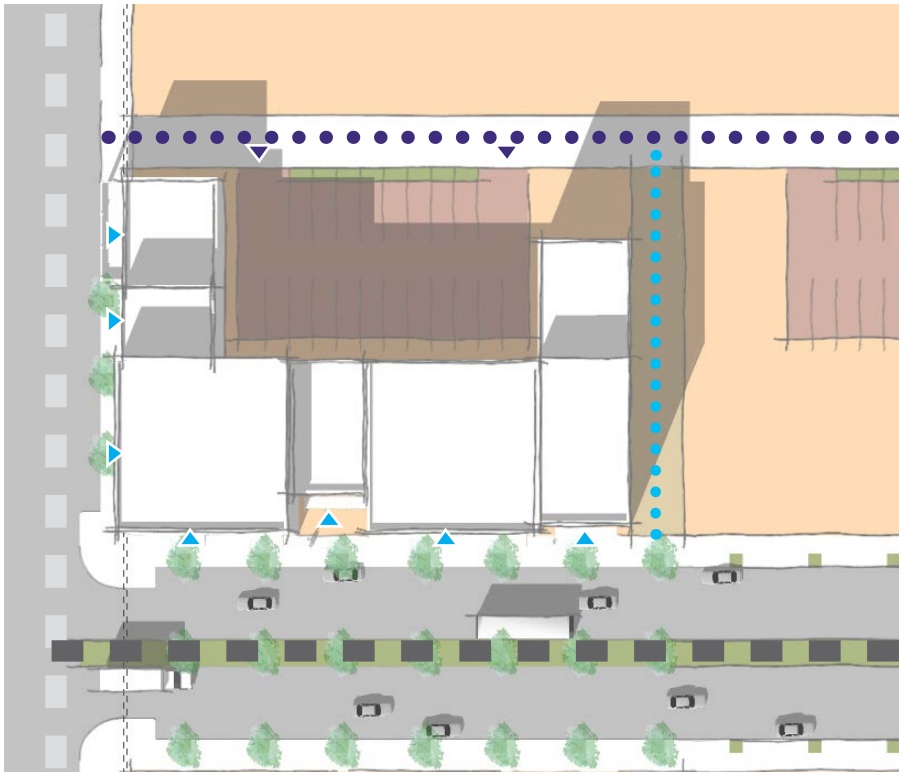
Williamsburg, VA (Source: Gruen)

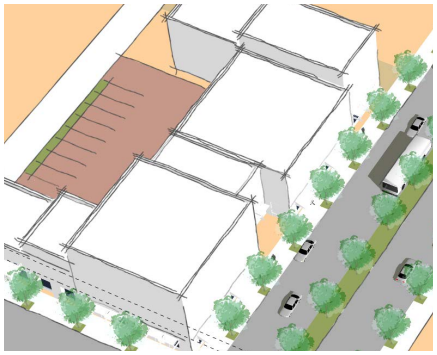
Flex Apartment/Mixed-Use

Flex apartments are a general, catch-all term for the most common building type used in TOD construction. These are multi-family structures between 3 and 7 stories in height, and may be build using Type V or modified Type III construction types, depending on the type and presence of retail. Buildings may be all-residential or include a mix of street-facing retail or commercial units. Densities of 50-100 units/acre are possible depending on site constraints.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | **51 - 99** | 13 - 50 | < 12
   - **Floor Area Ratio:** **3.0 +** | 2.0 - 2.9 | 1.0 - 1.9 | < 1.0
2. **Land Uses**
   - **Ground Floor:** Residential | **Commercial** | **Office** | Industrial
   - **Upper Floors:** **Residential** | Commercial | **Office** | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Retail suites include street-facing entrances, while residents access units from a separate, private entrance that leads to stairwells/elevators and common corridors.
   - **Vehicle Access:** Vehicles access the complex from curb cuts located at the ends or rear of the building.
4. **Parking:** Parking for residents and customers is located behind the building, in upper level podiums, or in below-grade garages.





Illustrative Model

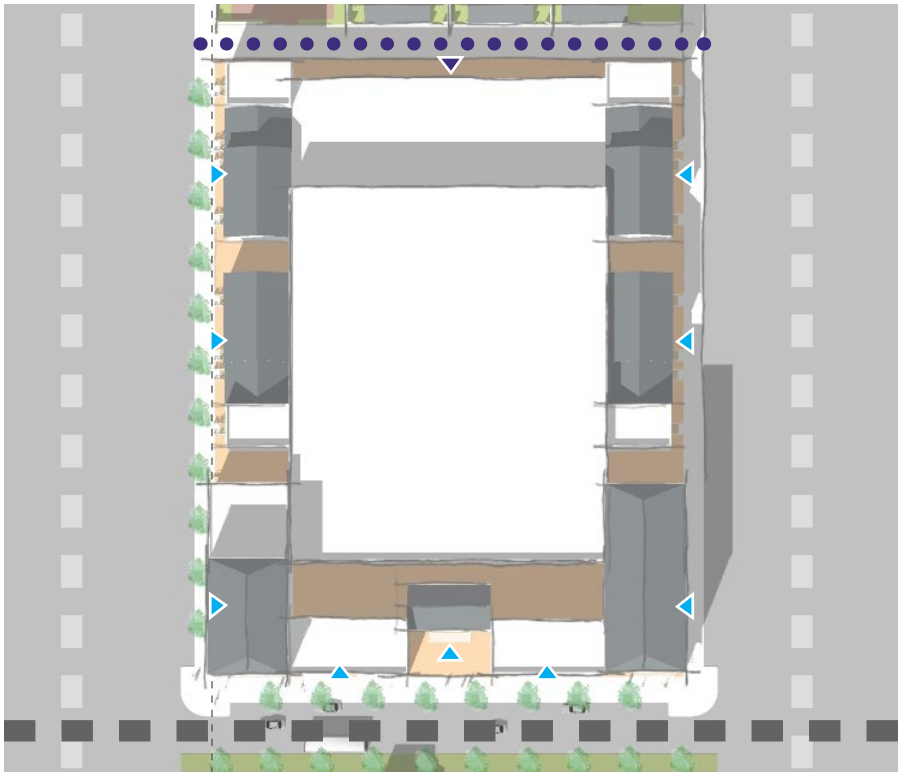
Marina Del Rey, LA County UA (Source: StreetView)

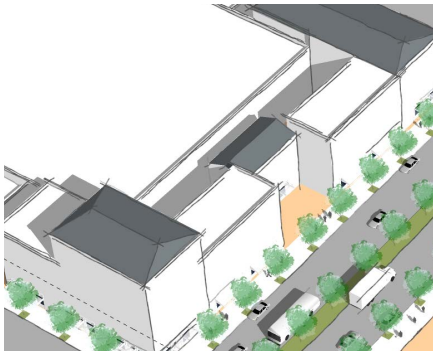
Liner Structure/Commercial Block

Liner structures are single-loaded (units located along only one side of a corridor) and are used to screen the blank façades of free-standing or podium parking structures. Units at-grade can be configured as live-work units or loft-style residential units with entrances facing the primary street.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | **51 - 99** | 13 - 50 | < 12
   - **Floor Area Ratio:** **3.0 +** | 2.0 - 2.9 | 1.0 - 1.9 | < 1.0
2. **Land Uses**
   - **Ground Floor:** Residential | **Commercial** | **Office** | Industrial
   - **Upper Floors:** **Residential** | Commercial | **Office** | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Pedestrians may access the building directly from the corridor, or from the rear through the parking structure.
   - **Vehicle Access:** Vehicles park in a podium parking structure with entrances located around the block.
4. **Parking:** Liner buildings typically wrap above-grade parking structures. Retail customers park on the lower levels and walk through arcades to access street-fronting retail, while residents can park on the upper levels and access units directly from the garage. Provide bicycle parking and parking spaces for car-sharing programs.





Illustrative Model

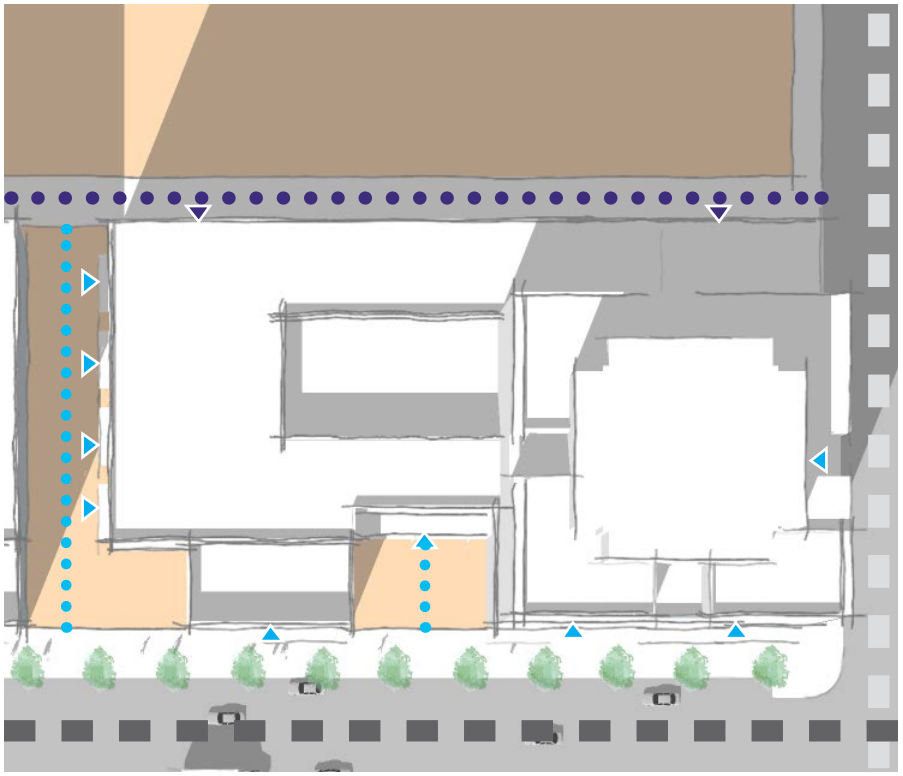
Boulder, CO (Source: Gruen)

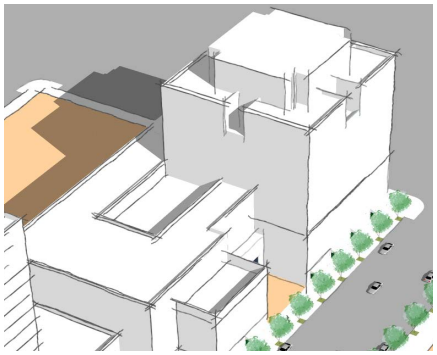
Mid-Rise Tower

Mid-rise towers are higher density (7-10 story) structures that are organized around a common set of elevators and stairwells. Several residential units can be located on a single floor plate in a number of configurations, from studio to four bedroom units. Parking is provided in above-grade podiums or in garages below-grade. An amenity deck that includes a terrace, barbecue, pools, gyms, and other features is typically included and maintained by the landlord or association.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | < 1.0
2. **Land Uses**
   - **Ground Floor:** Residential | Commercial | Office | Industrial
   - **Upper Floors:** Residential | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** Privately-owned pocket parks and plazas should be provided to encourage social activity and provide for convenient pedestrian/cyclist access and parking.
   - **Vehicle Access:** Access is provided from curb cuts located from an alley or from an adjacent street if permitted.
4. **Parking:** Parking is located in upper-level podium structures or in below-grade garages. Encourage occupants to use zero-emission vehicles by providing preferential parking for these vehicles and by providing charging stations. Provide bicycle parking and parking spaces for car-sharing programs.





Illustrative Model

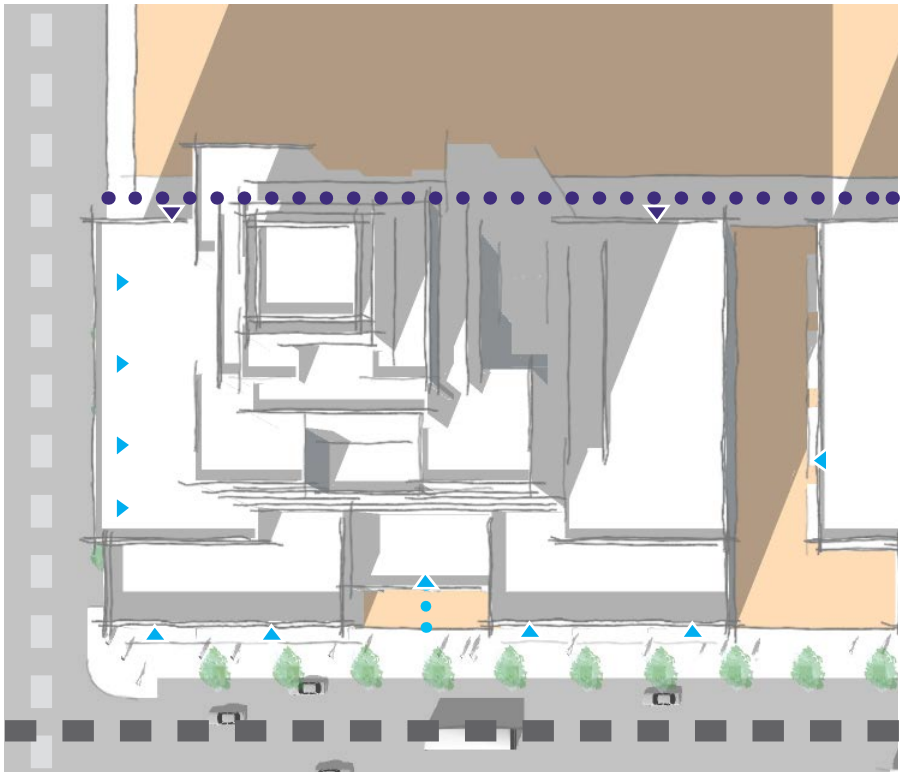
Washington, D.C. (Source: Gruen)

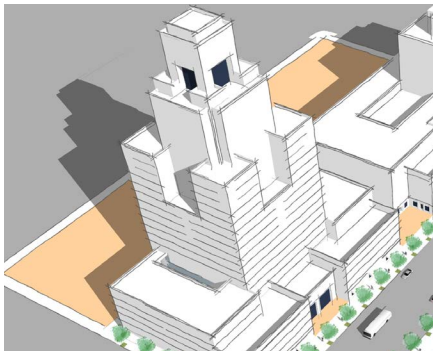
High-Rise Tower

While mid-rise towers achieve significant densities (100-150 units/acre), high-rise towers can be in excess of 10, 20, 30 or more stories. In most other respects, high-rise towers are similar. A diverse mix of residential, office, retail, or hotel can be included in a high rise tower, with separate entrances provided for each use. High-rise towers are feasible in select few, highly desirable markets (typically central business districts). Existing office towers may also be converted to a mix of uses.

Best Design Practices / Guidelines

1. **Density**
   - **Dwelling Units per Acre:** 100 + | 51 - 99 | 13 - 50 | < 12
   - **Floor Area Ratio:** 3.0 + | 2.0 - 2.9 | 1.0 - 1.9 | < 1.0
2. **Land Uses**
   - **Ground Floor:** Residential | Commercial | Office | Industrial
   - **Upper Floors:** Residential | Commercial | Office | Industrial
3. **Access**
   - **Pedestrian / Bicycle Access:** See mid-rise tower description.
   - **Vehicle Access:** See mid-rise tower description.
4. **Parking:** See mid-rise tower description.





Illustrative Model

Los Angeles, CA (Source: Gruen)

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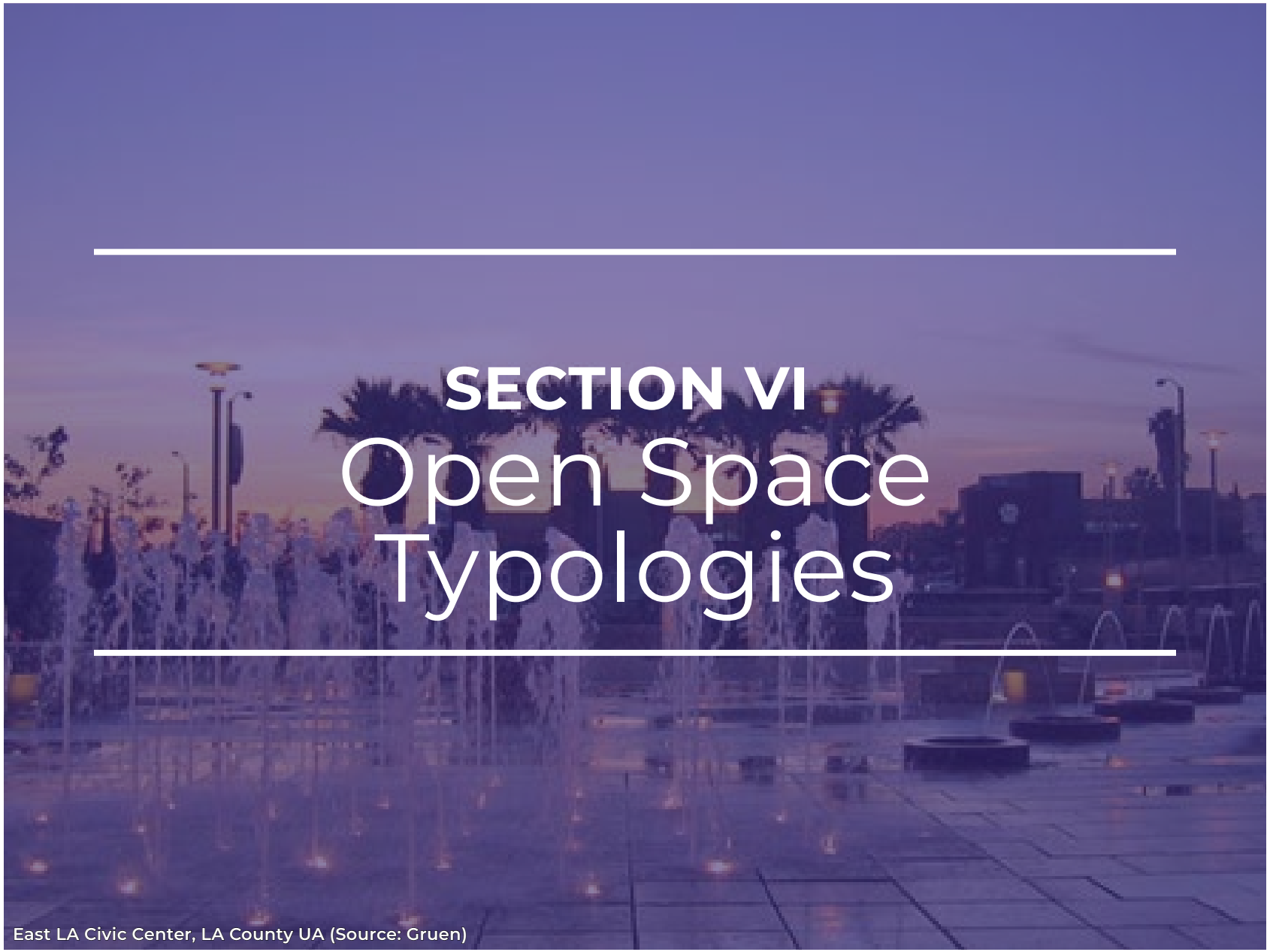
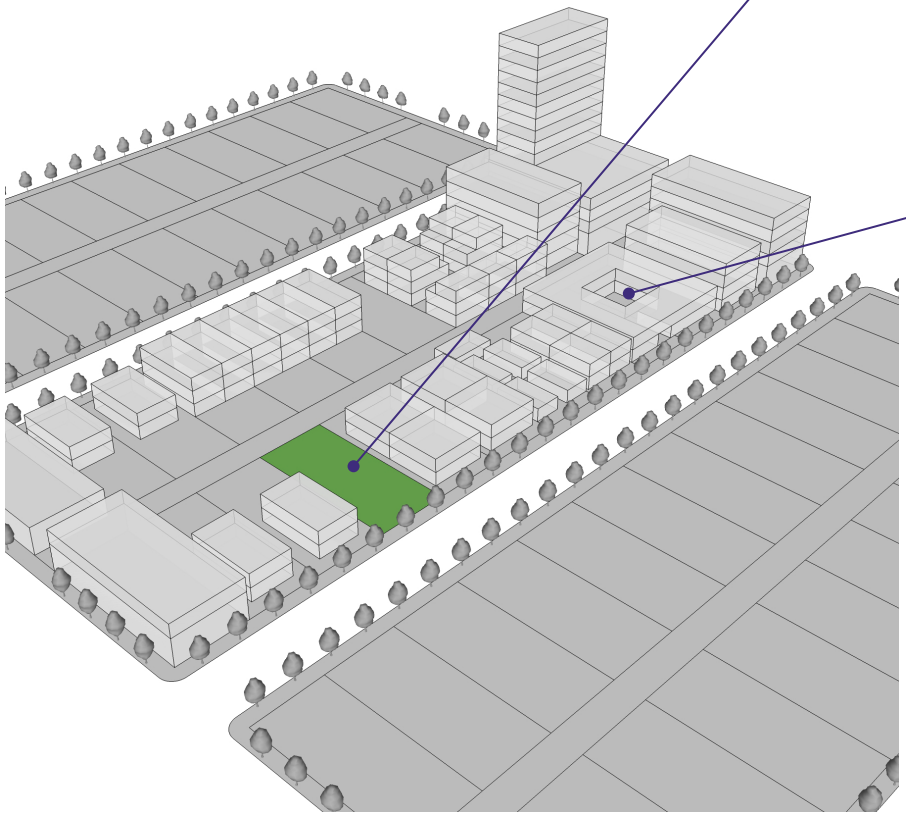


SECTION VI
Open Space Typologies

East LA Civic Center, LA County UA (Source: Gruen)

01 Open Space Typologies Overview

A key ingredient in creating a dynamic TOD which is connected by transit and active transportation is to create attractive and functional places that people want to be. Placemaking includes providing public gathering and open spaces which are linked to transit and transit supportive housing, educational, institutional, and commercial uses. These open spaces vary in size and function, some are programmed for events to activate an area, some may be adjacent to a transit station or civic building and others may be entirely for recreation.



Public

Passive

Passive public open space includes open plazas, paths, walkways, and trails

Active

Active public open space includes areas for events, exercise equipment, etc.

Private

Passive

Passive private open space may include paths and outdoor seating

Active

Active private open space may include event space, dining areas, etc.

02 Open Space Typologies

Parklet

Parklets convert curbside on-street parking spaces into viable community spaces for recreation, seating and outdoor dining. By converting one or two parking spaces into gathering spaces, the sidewalk is extended for passive recreation or as additional sidewalk seating for adjacent coffee shops, restaurants or other businesses.

Best Design Practices / Guidelines

1. Parklets should not encroach into the walking path and should be flush with the sidewalk.
2. Parklets should not impede proper stormwater drainage of the street. Some parklets can be used to infiltrate stormwater. Electrical wires should not be exposed.
3. A buffer should be provided from the parklet of at least 2 ft from travel lanes.
4. If there are multiple parklets on a street, the programming of the activities should vary between passive recreation and revenue generation for nearby businesses, such as outdoor dining connected to restaurants.

Public Pocket Park/Privately-Owned Public Space (POPs)

Pocket parks offer small areas for sitting, dining, recreation, and could be located on public or private property. Privately-owned public spaces may be internal courtyards, a sidewalk-adjacent easement designated for outdoor dining, or any other open spaces on private property designated for public uses or connectivity. A variety of social and recreational functions could take place in the pocket parks and certain pocket parks could be designed for a unique use, such as a dog park. Potential elements include lighting, permeable or decorative paving, fitness equipment, tables for games and dining; seating, planting, trees, water features to mask noise, public art, wayfinding, play equipment, and community information signage.

Best Design Practices / Guidelines

1. Design of parks should accommodate a diversity of users although some depending on simplicity; universal design could be devoted to specialty users, such as a children's playground or a dog park.
2. Sustainable features, such as bioswales, permeable paving, LED lighting, solar lighting, drought-tolerant landscaping, and canopy trees for shade should be incorporated.
3. Program parks to be integrated with surrounding uses, such as a coffee shop, restaurant, or other businesses.
4. Exercise equipment can be installed for public use.

East Los Angeles, LA County UA (Source: LA County)

East Los Angeles, LA County UA (Source: LA County)

Los Angeles, CA (Source: Gruen)

Black Cow Café, Montrose, LA County UA (Source: StreetView)

Paseo

A paseo is a landscaped public place containing a path designed for walking, strolling, and passive use. They can be used for biking. Paseos could be a mid-block pedestrian connection or part of a larger trail system connecting neighborhoods, parks, schools, and public sidewalks.

Best Design Practices / Guidelines

1. Paseos are wider than normal sidewalks as they contain a wide pathway (min. 15' to 20') with landscaping in the middle of or on each side of the pathway. They can contain pedestrian scaled lighting, an occasional bench for resting, trash receptacles, artwork, and could contain pet waste bag dispensers.
2. Pathways could be serpentine or straight and in some communities are grade separated from major streets. Alternatively, bollards can be used in non-grade separated treatments to delineate the paseo.
3. For security and to create an active edge, blank walls causing limited surveillance should be avoided in favor of windows and active yards.

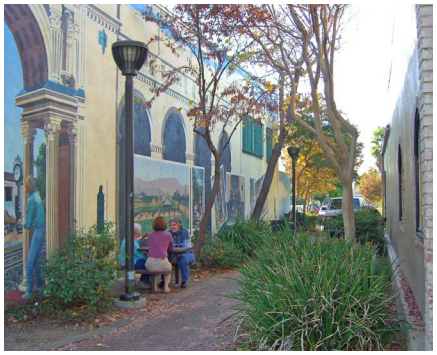
Linear Park

A linear park is a wide landscaped area parallel to a public street curb, a rail line, or a busway and used by pedestrians, bicyclists, joggers and other social, health and recreational opportunities. While similar to paseos, linear parks can be seen as extensions of a standard street right-of-way. A linear park may also be in a wide landscaped median of a public street.

Best Design Practices / Guidelines

1. Curb cuts and entrances for pedestrian/vehicular and bicycle crossings should be designed to provide safe, and attractive pedestrian access.
2. Pedestrian and bicycle pathways should cross at signalized perpendicular street intersections with consideration for separate striping for pedestrians and bicyclists.
3. Connecting pathways should meander through canopy trees for shade and colorful planting with active recreational and passive places dispersed as appropriate.
4. The character of linear parks could vary from low maintenance drought tolerant landscaping with bioswales to vibrant colorful planting with water features and art, and to an active market space atmosphere.

Claremont, CA (Source: Gruen)



Claremont, CA (Source: Gruen)

Proposed Linear Park, Walnut Park, LA County UA (Source: LA County)

Pedestrian Malls

Providing a sense of place and history involves creating great urban spaces but also preserving, where appropriate, landmarks and historic buildings adjacent to these spaces. The focus of a Station Area could be a traffic-free street reclaimed for pedestrians, active transportation, and transit, often called a pedestrian mall, with dense retail, office, and residential interspersed with the area's culture.

Best Design Practices / Guidelines

1. Pedestrian malls could be considered where they may operate as the main street, or in TODs with a strong market for retail, restaurants and entertainment uses such a tourist destinations and university settings.
2. For economic viability, pedestrian malls should extend on multiple blocks, should have frequent programming of events and be designed with consistent textured pavings, street furniture, outdoor dining, wayfinding signage, art work, and dramatic lighting.
3. For flexibility and fire life safety, consideration should be given to incorporating a two lane vehicular path that can be open and closed depending on events and anticipated crowds. This roadway space could be designed curbless with bollards.
4. Active ground level uses with large clear windows and entrances from the pedestrian mall is essential.

Green Alleys

While similar to pedestrian malls and paseos, green alleys are typically narrower passage ways designed for less frequent pedestrian and bicycle traffic. Vehicle traffic is often discouraged or limited using removable bollards. Green alleys typically form when vehicular service alleys are repuprosed to include more pedestrian-friendly lighting and paving, as well as planting and permable surfaces.

Best Design Practices / Guidelines

1. Repurpose service alleys which are underutilized to create green alleys to improve pedestrian circulation.
2. Pave the main pathway with permeable paving and landscape the outer portion of the alley to allow surface water infiltration.
3. Line pathways with pedestrian lighting such that the alley is sufficiently lit for pedestrian traffic, but does not disturb adjacent residents.

Minneapolis, MN (Source: Gruen)

Pearl Plaza, Rowland Heights, LA County UA (Source: StreetView)

Los Angeles, CA (Source: Gruen)

Willowbrook, LA County UA (Source: StreetView)

Neighborhood Park

A neighborhood park is typically recreation-oriented with children's playgrounds, community gardens, picnicking, and could include swimming, tennis, or basketball courts as well as passive landscaped areas. The neighborhood park could be public or private. If private it may be a part of a housing or mixed use development.

Best Design Practices / Guidelines

1. Each neighborhood park's uses and design should respond to the individual needs and character of a neighborhood.
2. If on private property the park should be designed to intuitively welcome the public by its visibility through limited barriers from the sidewalks and streets.
3. The programming of existing neighborhood parks and recreation centers should be regularly monitored and adapt to new trends such as skate parks, soccer fields, or dog parks.

Town Square

Historically, a Town Square is situated within a gridded street system and framed by active uses. Town Squares can also be defined as a civic space adjacent to a public building such as a cathedral or a civic building. They include features including a fountain, space for large events, performance space like a band shell, sculpture, sitting areas, cafes, and landscaping for storm water management. Seasonal activities such as temporary ice skating are also common to a Town Square depending on its size.

Best Design Practices / Guidelines

1. The town square/transit plaza should be easy in walking distance of the most dense portions of the Station Areas, preferable in the core and appeal to diverse multi-generations.
2. Amenities to consider for the town square include arbors, trellises, sun terraces, decks, art installations, concert and performance spaces, formal seating areas, secondary sitting areas such as seating walls and steps, lighting, focal points, out door dining areas, recreational activities, bicycle hubs, shared vehicles, fountains, play areas, way finding signs and kiosks, trees and landscaping with a variety of color and forms.

Belvedere Park, East Los Angeles, LA County UA (Source: LA County)

Whittier Narrows Rec. Area, Whittier, LA County UA (Source: LA County)

Waterside at Marina Del Rey, LA County UA (Source: Gruen)

East LA Civic Center, LA County UA (Source: Gruen)

Plazas

Plazas are diverse in scale and character, and typically create a vibrant pedestrian environment. Plazas are flexible in their programming and use which allows for a variety of plaza types such as a transit plaza, street plaza, and gateway plaza: **Transit plazas** are open spaces adjacent to a transit station and should serve rail or multiple bus lines or both with passenger amenities including vendors stands and route signage. **Street plazas** are small public open spaces immediately adjacent to a sidewalk or an extension of the sidewalk. **Gateway plazas** are open spaces in front of a major building to operate as a gateway or entrance to the building and may be privately owned but open to the public.

Best Design Practices / Guidelines

1. Each plaza should contain pedestrian amenities and be planned with enough flexibility for use in all seasons and times of day.
2. Plazas should be distinct places which as visible and easily accessible to people from the public street and connected to the pedestrian and bicycle network in the Station Areas.
3. Amenities to consider for the plaza include arbors, trellises, sun terraces, decks, art installations, concert and performance spaces, formal seating areas, secondary sitting areas such as seating walls and steps, lighting, focal points, outdoor dining areas, recreational activities, bicycle hubs, shared vehicles, fountains, play areas, wayfinding signs and kiosks, trees and landscaping with a variety of color and forms.

Willowbrook Station Plaza, LA County UA (Source: Metro)

South Pasadena, CA (Source: Gruen)

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SECTION VII
Next Steps

Arcadia, LA County UA (Source: StreetView)

01 Lessons Learned from Atlantic/Whittier Station Area

The following are lessons learned from the planning process for development of the TOD Toolkit, including input from local stakeholders in the Atlantic/Whittier case study area. The content is divided by subject area related to the public and private realms.

Streetscape and Walkability

- The concept that improving the streetscape encourages walking has a lot of local support.
- There is a strong desire to maintain and improve sidewalks where needed to complete pedestrian routes.
- Making alleyways more inviting and safe for walking is desired.
- Many would like the Toolkit to consider the effects of mobile food establishments, and provide tools to better manage food trucks and sidewalk vending that can at times lead to inaccessible sidewalks.
- Wherever possible, sustainable landscaping should be used, including shade trees.

Built Environment

- Many residents desire a preservation of single-family neighborhoods, if not in actual density and type of building, then in character.
- There is a desire to encourage the re-use of unmaintained/ abandoned buildings and use of vacant lands for mixed-use development.
- Many desire that the Toolkit discourages tall buildings and encourages developments that fit the East Los Angeles community, like Spanish bungalow styles.
- Encouragement of improvements to commercial business facades is a goal of the community.
- The need to add residential density and accommodate population growth, and the need to provide densities that support the future rail station, are at times in conflict with local aspirations to preserve single-family neighborhoods.

Urban Design and Cultural

- There is a need for the creation of inviting parklets with shade trees and sitting areas.
- A desire exists for new cultural spaces including historical information on Chicano and indigenous people histories, and info on local heroes.
- Murals and public art are desirable in shared spaces.
- Historical and cultural landmarks should be preserved as part of any revitalization efforts.

Support Local Business

- The community wants local businesses to remain, and new businesses can be encouraged, but they should not be developed at the expense of existing local businesses.
- Better walkability can help business traffic.
- Mixed-use should be encouraged with businesses at street level and housing in upper levels; create more parking for businesses.

Parking

- More parking supply should be created without sacrificing aesthetics.
- Parking structures should be used to consolidate parking spaces, especially around busy business areas.
- There is a desire to incorporate green infrastructure improvements with new parking spaces.
- There is a strong preference for Metro trains and stations to be underground to avoid eliminating parking spaces for local businesses.

Traffic and Roadways

- The community desires fewer reductions in traffic capacity to accommodate other modes such as bicycle lanes and light rail tracks, as many arterials are commute routes with high traffic volumes to and from downtown Los Angeles and other areas.
- The local population would like bicycle lane development to be

more focused, as currently facility utilization is seen to be low. Future rail transit and stations should be underground to avoid the loss of travel lanes.

- County standards, General Plan aspirations, and local and national Complete Streets initiatives and other movements to accommodate travel modes equally are sometimes in conflict.

Lighting

- Pedestrians would like to have improved lighting in the area at the sidewalk level at sitting areas (gathering points, plazas, or transit stops).
- Alleyways can become better mobility options, and would encourage walkability between neighborhoods and shopping areas, with better lighting.

Bike Lanes / Safety

- Pedestrian and cyclist safety is important for mobility, and many desire more traffic-protected bike lanes, curb extensions, and more visible and controlled crosswalks.
- More protection for bicyclists against conflicting traffic movements (such as at vehicle right-turn locations) is desired.

Affordable / Senior Housing

- There is a need for more affordable housing, and the use of abandoned or unmaintained buildings and vacant lots should be used for this purpose.
- Affordable housing should be provided for existing area residents but not necessarily to encourage new residents and potentially add additional traffic to the area.

02 TOD Specific Plans

The TOD Toolkit will be a guide for the County of Los Angeles and area residents and business owners to refer to when implementing public streetscape improvements, updating area land use plans, and improving or developing private property.

The Toolkit is not a regulatory document, in that it does not prescribe public improvements or private property treatments. A framework for future specific plan development efforts is discussed here.

A specific plan effort would be the next step in implementing the measures identified in the TOD Toolkit. A specific plan would define implementation at a more defined and measured level for station areas where TOD planning is being pursued by the County. The General Plan for the County of Los Angeles defines the Specific Plan framework, with the General Plan as the larger County-wide overarching document.

A specific plan is a tool to implement the General Plan within a focused area, and in the case of TOD planning the related specific plan area would be focused around a proposed or existing station location. The purpose of specific plans is to ensure that new development and mobility improvements both adhere to common plan details and specific guidance over a long-term period.

Specific plans must further the goals and policies of the General Plan, and they must be consistent with the General Plan. The specific plans then enforce local land use and design details as defined by directives and policies, but also enforce consistency within the plan area for local public works projects, tentative/parcel maps, and area zoning ordinances adoption or amendments.

California Government Code Sections 65450 et seq. require specific plans to include text and diagrams that detail the following:

- Distribution, location, and extent of the uses of land, including open space, within the project area;
- Proposed distribution, location and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the project area and needed to support the land uses described in the specific plan;
- Standards and criteria by which development will proceed and, where applicable, standards for conservation, development, and utilization of natural resources; and
- Implementation measures, including regulations, programs, public works projects, and
- Financing measures necessary to carry out the above

Specific plans may also address affordable housing, resource management, or other areas relevant to the project area. In addition, a specific plan must be prepared, adopted, and amended in the same manner as a general plan, except that a specific plan may be adopted by resolution or by ordinance and may be amended as often as deemed necessary by the Board of Supervisors.

SECTION VIII
Appendix

Montrose, LA County UA (Source: StreetView)

Los Angeles County

Transit-Oriented District (TOD) Toolkit

Existing Conditions Report

Prepared October 2019
Revised October 2020

Partially funded by SB1 Caltrans Sustainable Transportation Planning Grant Program.

Acknowledgments

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Overview

The Los Angeles (LA) The County General Plan Transit-Oriented Districts (TODs) Program was developed to update planning of communities within a half-mile radius of existing and new transit facilities. The overall goal of the program is to enable transit-supportive uses and infrastructure near these transit facilities.

Currently, the Los Angeles County Metropolitan Transportation Authority (LA Metro) is evaluating locations for additional rail lines and extensions of existing lines. While LA Metro is refining these station locations, the County initiated preparation of a TOD Toolkit to complement the General Plan by establishing general guidelines and best practices and providing a consistent and uniform approach in designing areas within a half-mile of the new TOD ("station areas"). At the time of the TOD Toolkit project, the following 10 new rail stations have been proposed in or within a half-mile radius of a LA County Unincorporated Area (LA County UA):

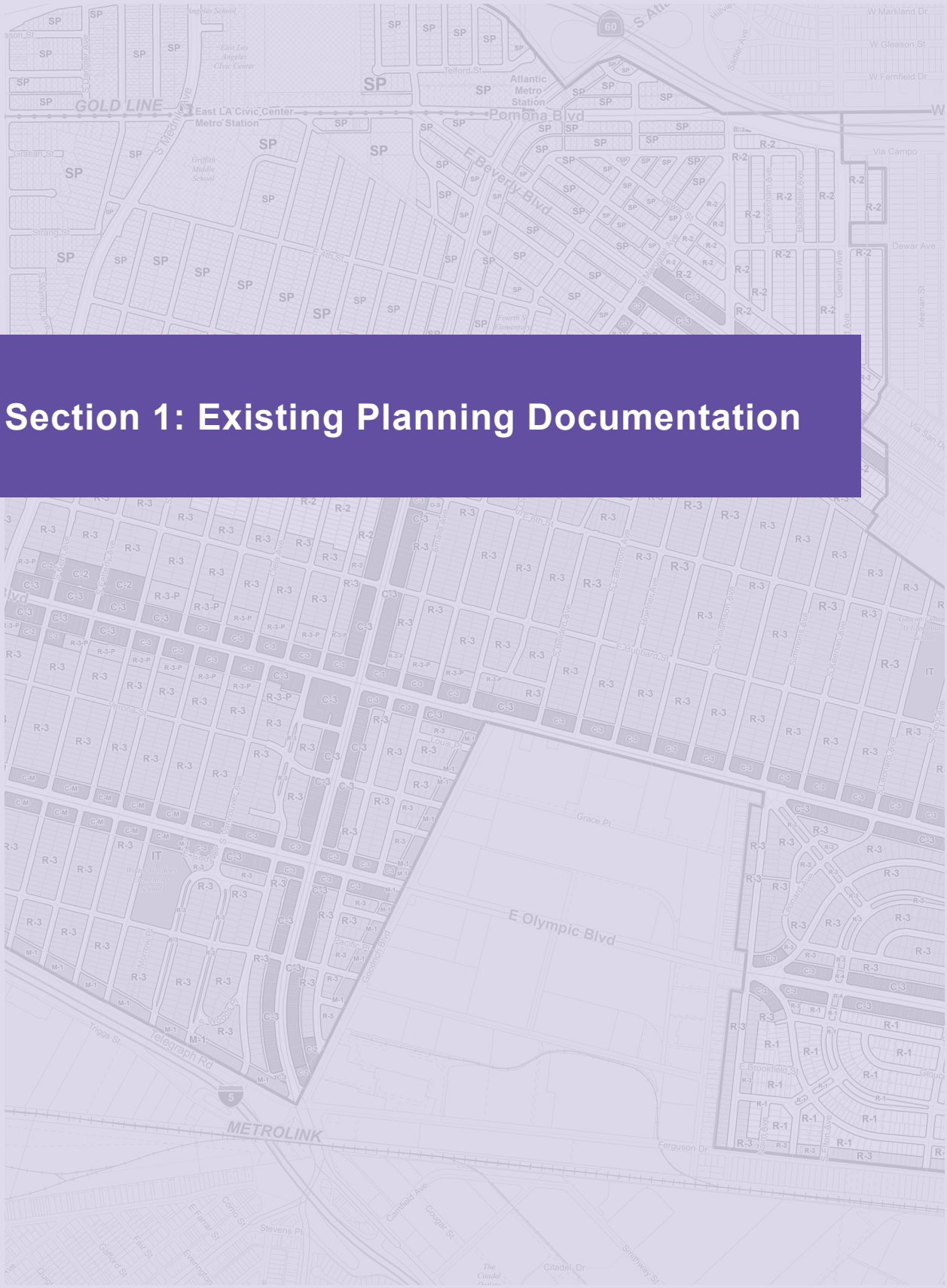
Stations	Station Location
Transit Corridor: Eastside Transit Corridor Phase 2	
Atlantic/Whittier	LA County UA
Santa Anita	LA County UA
Peck	*South El Monte*
The Shops at Montebello	*Montebello*
Norwalk	LA County UA
Lambert	*Whittier*
Commerce	*Commerce*
Transit Corridor: D Line (Purple Line) Extension	
Westwood/VA Hospital	LA County UA
Westwood/UCLA	*City of Los Angeles*
Transit Corridor: West Santa Ana Branch	
Florence/Salt Lake	*Huntington Park*

Maps of each station area are provided in Appendix A. Of these ten station areas, the County selected the Atlantic/Whittier Station Area in the East Los Angeles UA to serve as a case study for the TOD Toolkit to demonstrate how general guidelines may be applied to a TOD.

Prior to the completion of the Toolkit, this Existing Conditions Report (ECR) was prepared in Fall 2019 to establish a review of adopted plans which govern all LA County UAs which should be consulted in addition to the Toolkit, once completed, and to summarize the existing conditions for pedestrians, motorists, bicyclists and transit users in the Atlantic/Whittier Station Area. The other station areas have been summarized in a matrix in Section 5.5 Implications for other Potential TOD Areas.

While the majority of the Atlantic/Whittier half-mile station area is comprised of the LA County UA known as East Los Angeles, the southeast portion is located in the City of Commerce; this analysis of existing conditions will only consider the area which is within the LA County UA.

Section 1: Existing Planning Documentation



1.1 Overview of Regional and Local County Plans

The matrix below provides an overview of existing area plans and guidelines that provided guidance in the development of the TOD Toolkit. Further details of each document, including data summaries relevant to the Toolkit and the East Los Angeles Case Study, are provided in Appendix B.

Table 1.1: Matrix Summary of Regional and Local County Plans

Document	Summary
County of Los Angeles	
General Plan (2015)	**Goal** • Provides policy framework for guiding jobs and housing growth, within the unincorporated areas of Los Angeles County. **Relevance for TOD Toolkit:** • Defines 11 planning areas, including the Metro (East Los Angeles) area. • Identifies concepts for Transit Center Opportunity Areas • Policies of the Land Use Element that are applicable to TOD include: » Encourage infill development, adaptive reuse of underutilized structures and economically distressed neighborhoods, and encourage TOD and a mix of uses in transit and major commercial corridors. This policy supports TOD planning by providing economic benefits and efficient land uses focused in the TOD area, with a mix of uses that encourages short trips between local land uses and less driving, within close access to transit to also support the local relationship between land uses and the transit system. » Encourage development regulations for various densities, promoting bicycle, walking, transit, and reductions in vehicle miles traveled (VMT). The provision supports TOD by providing adequate density in the TOD area, which can improve connectivity to transit and destinations such as home, work, school, and spaces of recreation. » Consider existing area for the design and scale of proposed buildings; Promote sustainable design; Encourage pedestrian activity; Promote distinctive buildings at prominent locations; Facilitate the street as public space. These aspects provide for new development that fits well into the existing urban fabric, while providing for human-scale development and readable local centers where major buildings act as new landmarks for navigation and define major activity points. This all supports the sidewalk environment and good pedestrian and public realm experience. • Policies of the Mobility Element that are applicable to TOD include: » Accommodate all users. This policy responds to the need to provide transit options for all community members and visitors that travel along local roadways within the TOD area.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
	» Promote active transportation through a context-sensitive process; implement low-speed roadway environments and reduce crossing distances; and ensure a comfortable walking environment for pedestrians; and ensure a comfortable bicycling environment. This leads to the proper balance of roadway design for the users that currently and are expected to make trips in various modes. This directly supports a quality environment for active transportation within the TOD. » Expand transportation and multi-modal options, and increase transit access for underserved users; improve the efficiency of the public transportation system; reduce vehicle trips. This helps to reinforce the linkages between local land uses and the transit system, encouraging more trips on public transit and less trips via auto. » Facilitate transit-oriented land uses, pedestrian-oriented design, connections to transit; implement parking strategies that facilitate transit use; maintain transportation right-of-way corridors for future mobility. This policy supports a quality pedestrian environment, and encourages planning around needed linkages to and from transit access points and parking locations.
Housing Element (2014)	**Goals:** • Provides existing and projected future housing needs for County areas; defines goals, policies, and implementation programs; for housing; guides decision making on housing needs; and implements actions to encourage private sector development of housing. **Relevance for TOD Toolkit:** • Defines a lack of housing diversity, with a majority being single-family residential. This defines a need for more types of housing across more density levels, and this more diverse supply can provide more affordable housing. • Documents an inventory of adequate sites for potential new housing sites. This provides input to a planning process for future residential land uses that fit well into the existing local community.
Los Angeles County Code	**Goals:** • Subdivision Ordinance – Regulation of development within a subdivision including internal roadways, lot geometry, and public utilities and infrastructure. • Zoning Ordinance – Regulates development on individual parcels, including land use, building height and setbacks, and parking. • Community Standards Districts – Provides incentives for multi-family and mixed-use developments through density bonuses for lot consolidation and infill development. • Mixed Use Ordinance – Allows mixed-use development and live/work uses in some commercial zones.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
Los Angeles County Code	**Relevance for TOD Toolkit:** • Defines development standards for minimum lot size, maximum height limit, parking requirements, and density. These definitions provide parameters for the Toolkit measures related to land use. • Community Standards Districts (CSDs) provide for reduced parking requirements for selected areas. The Whittier Boulevard corridor is one of these areas. These reduced requirements provides input to parking policy planning for the Toolkit, providing more flexibility for development in that corridor. • The CSDs also define special standards for setbacks, landscaping, pedestrian character, signage, security features, and other elements. These standards provide parameters for the urban design and site design elements of the Toolkit. • The Mixed-Use Ordinance provides guidelines on the location and screening of parking and other elements, so that buildings and circulation are close to frontages/sidewalks. For mixed-use land uses, this provides parameters for design suggestions that support street life and a quality pedestrian environment. • The Mixed-Use Ordinance provides specialized parking standards for live/work units. This provides more flexibility in the implementation of mixed-use developments.
East Los Angeles 3rd Street Plan (2014)	**Goals:** • The Plan provides a vision plan and set of strategies and design guidelines for the 3rd Street corridor in East Los Angeles. **Relevance for TOD Toolkit:** • A portion of the half-mile project area for the Atlantic/Whittier proposed station location is within the Plan area. This is therefore adjacent to the Atlantic/Whittier station area and provides local planning solutions and context. • Specific guidelines for land use, massing, and the public realm are provided for the TOD, Neighborhood Center, and Atlantic corridor areas that are within the Atlantic/Whittier radius area. This provides input on local preferences from this recent planning effort into the Toolkit land use elements. • Includes planning for multiple roadway corridors and neighborhoods, and encompassed four station areas: » Indiana Street » 3rd Street » Maravilla/Civic Center » Atlantic

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
	• For TOD areas, defines gateways, mixed-use land use allowances, context-sensitive and shared parking strategies, and walkability and safety. This provides for the Toolkit a set of locally developed ideas in this area for incorporation into other areas of the County. • For neighborhood centers, defines uses for shallow parcels, safe pedestrian and bicycle travel networks between neighborhoods, infill development, corridor versus neighborhood development, and housing options and supporting service amenities. • For Atlantic station, defines patterns of development to reinforce pedestrian character and appeal to variety of commercial activities, promote the location of parking behind buildings, and restore balance between residential and industrial uses. For this typical commercial and industrial mixed corridor near the Atlantic station, best practices for local planning solutions in these areas are provided.
East Los Angeles 3rd Street Form-Based Code Specific Plan (2014)	**Goals:** • This is a Specific Plan that implemented a framework for a form-based code in the area. The project area was the 3rd Street corridor in East Los Angeles, and other major corridors to the north and south. **Relevance for TOD Toolkit:** • Defines standards and regulations for all areas such as parking, shared parking, and landscaping and parking lot screening. This provides input into TOD Toolkit parking area guidelines for improved integration of those elements. • Defines forms and articulation for all zones. • Defines standards for 3rd Street TOD area, including rowhouse, court, hybrid court, lined block, and flex block. • Defines standards for Atlantic Boulevard corridor, including court, lined block, and flex block. • Defines standards for neighborhood centers, including house, duplex/triplex, rowhouse, court, hybrid court, and flex block. • Defines standards for low-moderate density residential areas, including house and duplex/triplex. • For all of these land use areas, the plan provides examples for local implementation of these use types.
Los Angeles County Bicycle Master Plan (2012)	**Goals:** • Guides development and maintenance of comprehensive bicycle network in County areas for 20 years (2012 to 2032). **Relevance for TOD Toolkit:** • Proposes network of complete streets, improving bicyclist safety, increasing public awareness of and support for bicycling. This provides definitions for a future network of these facilities for the TOD Toolkit areas.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
	• Atlantic/Whittier station is within the Metro Planning Area of the General Plan. Needs to improve bicycle travel safety specifically for that area are defined. • Proposed bicycle facilities at nodes and within corridors are defined. This provides framework for facilities to be considered for points (nodes) on the mobility network in the TOD Toolkit, as well as roadway corridors.
Los Angeles County TOD Access Study (2013)	**Goals:** • Assesses the station access capacity and needs within nine proposed TOD areas in Los Angeles County. • Reviews the state of public amenities that support bicycle, pedestrian, and transit travel. • Includes conceptual bicycle and pedestrian infrastructure plans. **Relevance for TOD Toolkit:** • Recommends categories of pedestrian improvements for safer roadway crossings, improved sidewalk areas, reducing travel speeds, and providing improved public space. This provides for the TOD Toolkit options across multiple categories for pedestrian improvements in the public realm. • Recommends bicycle improvements including preferred widths for mixed-flow travel lanes, widths for striped bicycle lanes and buffers, and configuration of bicycle paths. This provides parameters for proper integration of bicycle facilities into existing roadways and lanes, with geometric adjustment. • Recommends amenities for bicycle nodes including bicycle parking. Provides concepts for incorporation of bicycle-supportive amenities into the TOD Toolkit elements.
Los Angeles County Model Design Manual for Livable Streets (2011)	**Goals:** • Defines design principles for streets that follow State of California legislation and the goals of accommodating all users within each roadway corridor. • Promotes active transportation over motorized uses. **Relevance for TOD Toolkit:** • Promotes adherence in roadway planning to principles of livable streets including the integration of income, racial and social equity; accommodation for users of all ages; and integrate connectivity with safe and inviting site interfaces and access. Provides guidance to Toolkit on roadway planning guidelines and context. • Defines the creation of inviting places based on appropriate architecture, street furniture, landscaping and public art. Provides guidance on the public realm and the pedestrian and overall street experience. • Encourages planning that reflects local diversity and culture. Provides context planning guidance for the local area.

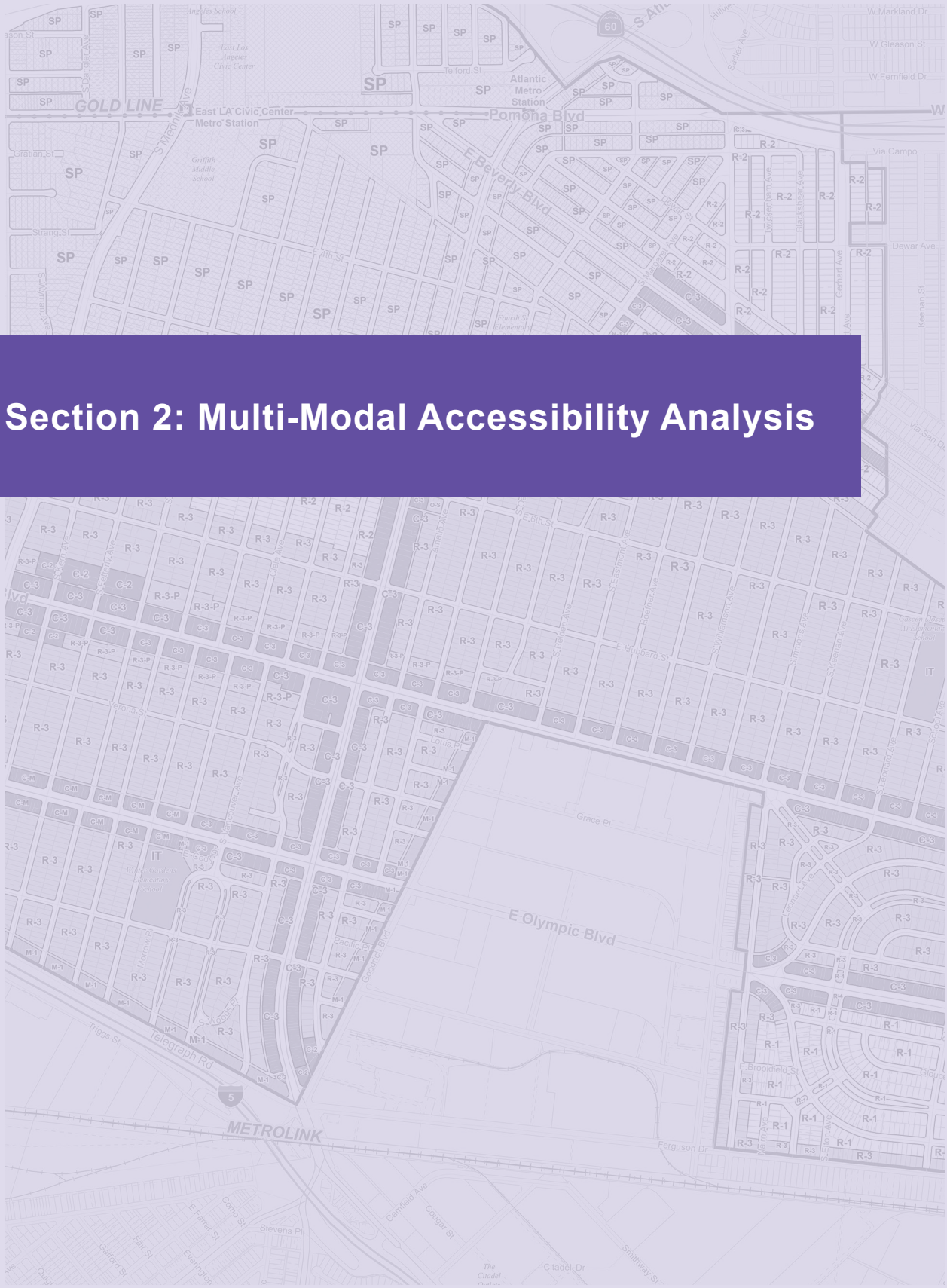
Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
	• Defines the incorporation of neighborhood visions and the minimization of displacement of current residents. Provides guidance for planning oriented to the local area and for minimization of negative impacts to residential areas. • Encourages planning for healthy lifestyles, environmental stewardship, and context-sensitivity design for neighborhood character density, and function. Provides support for incorporating health-based measures such as supporting walkability and comfortable biking connections. • Defines benchmarks for walking and bicycling comfort; access for students; safety for seniors, children, and disabled persons; and reduction of fatalities in the future to zero. Provides guidance for incorporating safety and comfort for various roadway users.
Los Angeles County Draft Vision Zero Action Plan (2019)	**Goals:** • Elimination of traffic-related deaths on unincorporated County roadways by 2035. • Targets safety improvement planning on collision concentration corridors. • Sets objectives of enhancing processes and collaboration of roadway safety planning, addressing health and vulnerability of users, and promoting collaboration with communities on safety. \ **Relevance for TOD Toolkit:** • Defines benchmarks and metrics for the evaluation of successful implementation. Provides a framework for proper planning for sustainable improvements. • Documents the need to overcome planning hurdles including the development of community support, securing adequate funding, providing for operations and maintenance, and properly analyzing environmental effects. Provides a framework for the later implementation phase of improvements in the TOD areas.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
Los Angeles County Metropolitan Transportation Authority	
Metro Complete Streets Policy (2014)	**Goals:** • Ensure that streets form a comprehensive and integrated transportation network promoting safe and convenient travel for all users. • Preserve flexibility, recognize community context, and incorporate design guidelines and standards that support best practices. • Improve access to transit service by improving convenience, safety, and attractiveness. • Establish concepts of multi-jurisdictional cooperation to provide seamless mobility networks. • Provide for health, equity, and economic vibrancy. **Relevance for TOD Toolkit:** • Defines transportation network planning to serve all users and operators or public transit, bicyclists, persons with disabilities, seniors, children, motorists, users of green modes, and movers of commercial goods. Provides goals for including all roadway users in planning for the Toolkit. • Sets guidelines for context sensitivity, so that residential neighborhoods and business districts have appropriate customized treatments, and so that appropriate measures will be used for urban, suburban, and rural areas. This provides guidance on properly applying commercial versus residential neighborhood guidelines, and for varying levels of densities, in the Toolkit. • Define consistency with best practices of Metro First/Last Mile Strategic Plan, NACTO Urban Street Design Guide, NACTO Urban Bikeway Design Guide, and Los Angeles County Model Design Manual for Living Streets. This points to the numerous plans that must be considered for the Toolkit to be successful and integrated well with other planning processes. • Defines a process that incorporates latest design standards but balances user needs. This provides guidance on considering all roadway users while defining design elements to conform to current regulatory framework, and be acceptable to local jurisdictions. • Incorporates Complete Streets infrastructure into transit and highway planning and design. This guides the public realm and roadway guidelines for the Toolkit, providing for more varied and inclusive roadway planning concepts. • Encourages the creation of connected networks that include each type of users and increases connectivity as part of future transportation investments. Defines connected segment concepts that are valuable to providing various options for improved travel routes for all users. • Defines a policy framework for education and technical assistance; joint development; and system connectivity, integration, and performance This provides a framework for Complete Street implementation that is valuable for the implementation phase of the Toolkit.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
East LA Community Plan (1988)	**Goals:** • Defines a framework of goals, policies and programs that is designed to provide guidance to those making decisions affecting the allocation of resources and the pattern, density, and character of development in East Los Angeles. **Relevance for TOD Toolkit:** • Establishes policies for rehabilitation of existing commercial uses and development of new commercial infill along major corridors such as Whittier Boulevard and Atlantic Boulevard. • Defines the need for a Whittier Boulevard specific plan. • Provides guidance for residential neighborhood stability, appropriate intensification if appropriate to area, and proper separation of high-density uses from low-density uses, • Promotes common/shared parking areas, unified architectural themes, and improvements to image of major corridors, • Established the land use categories of low-medium-density residential, medium-density residential, residential parking, community commercial, major commercial, commercial manufacturing, and public use.
Parks Needs Assessment (2016)	**Goals:** • Quantifies the need for parks and recreational resources **Relevance for TOD Toolkit:** • Study conducted a comprehensive assessment of park needs and opportunities throughout County. • Established a list of priority projects. • Defines best practices and a strategy for funding of future projects. • Defines a high need for Atlantic/Whittier station area.
On-Demand Personal Mobility Devices Pilot Program (2019)	**Goals:** • Implement a program to support transportation alternatives and transit connections, and reduce greenhouse gas emissions. • Provide devices to operate on County roadways, and evaluate data from program. **Relevance for TOD Toolkit:** • Provides ability to better connect destinations on small trips, and to connect to transit. • Provides an evaluation of use potential and validity as major alternative mode of transportation in area.

Table 1.1: Matrix Summary of Regional and Local County Plans	
Document	**Summary**
Southern California Association of Governments	
SCAG 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS)	**Goals:** • Provides a long-range vision for the integration of land use and transportation planning. • Balances future mobility and housing needs with economic, environmental, and health goals. **Relevance for TOD Toolkit:** • Defines capital projects that will provide more alternatives to driving including improvements to bus service, expansions of Metrolink commuter rail, and implementing streetcar service. • Promotes increased use of bus transit, rail transit, bicycling, walking, and all non-motorized transportation. • Dedicated funding for repairs to sidewalk networks. • Provided for investments in the regional bikeway network. • Identifies regional strategic areas for infill and investment. • Supports planning in high quality transit areas
National Association of City Transportation Officials (NACTO)	
Urban Street Design Guide	**Goals:** • Provides guidance that follows the mission of NACTO….”making streets safer, more livable, and more economically vibrant”. **Relevance for TOD Toolkit:** • Provides guidelines for complete streets and placemaking. • Design guidance is provided for street design, interim designs, and intersections.

Section 2: Multi-Modal Accessibility Analysis



2.1 Transit, Motorized Transportation, and Parking

Existing Roadway Classifications

Existing roadway classifications in the project area are illustrated on Figure 2.1. The primary roadways in the area are designated as Major Highways. To the west of Atlantic Boulevard, Whittier Boulevard is designated as a Secondary Highway. There are not any designated collector-level roadways in the project area, and all other connecting roadways are local.

Existing Transit Service

This project area is served by public bus transit lines operated by Metro, Montebello Bus Lines, and the County of Los Angeles (El Sol Shuttle). Figure 2.2 illustrates the lines and stop locations of these services.

Existing Daily Vehicle Volumes

Existing traffic volumes from available Department of Public Works data is provided on Figure 2.3. The highest volumes on the roadways where this data is available are as follows - 15,054 on Whittier Boulevard, 13,550 on Atlantic Boulevard, and 13,872 on Olympic Boulevard

Existing Vehicle Collision Patterns

The intersection of Atlantic Boulevard and Whittier Boulevards has a concentration of collisions that is higher than other areas, as identified on the heat map (a method of showing concentrations of occurrences) provided by Figure 2.4. This intersection and the intersection of Atlantic Boulevard and Olympic Boulevard have the highest concentration of collisions in the project area. These two intersections have the highest density of vehicle collisions in the station area, but a moderate density in absolute terms.

On-street parking along Atlantic Blvd.

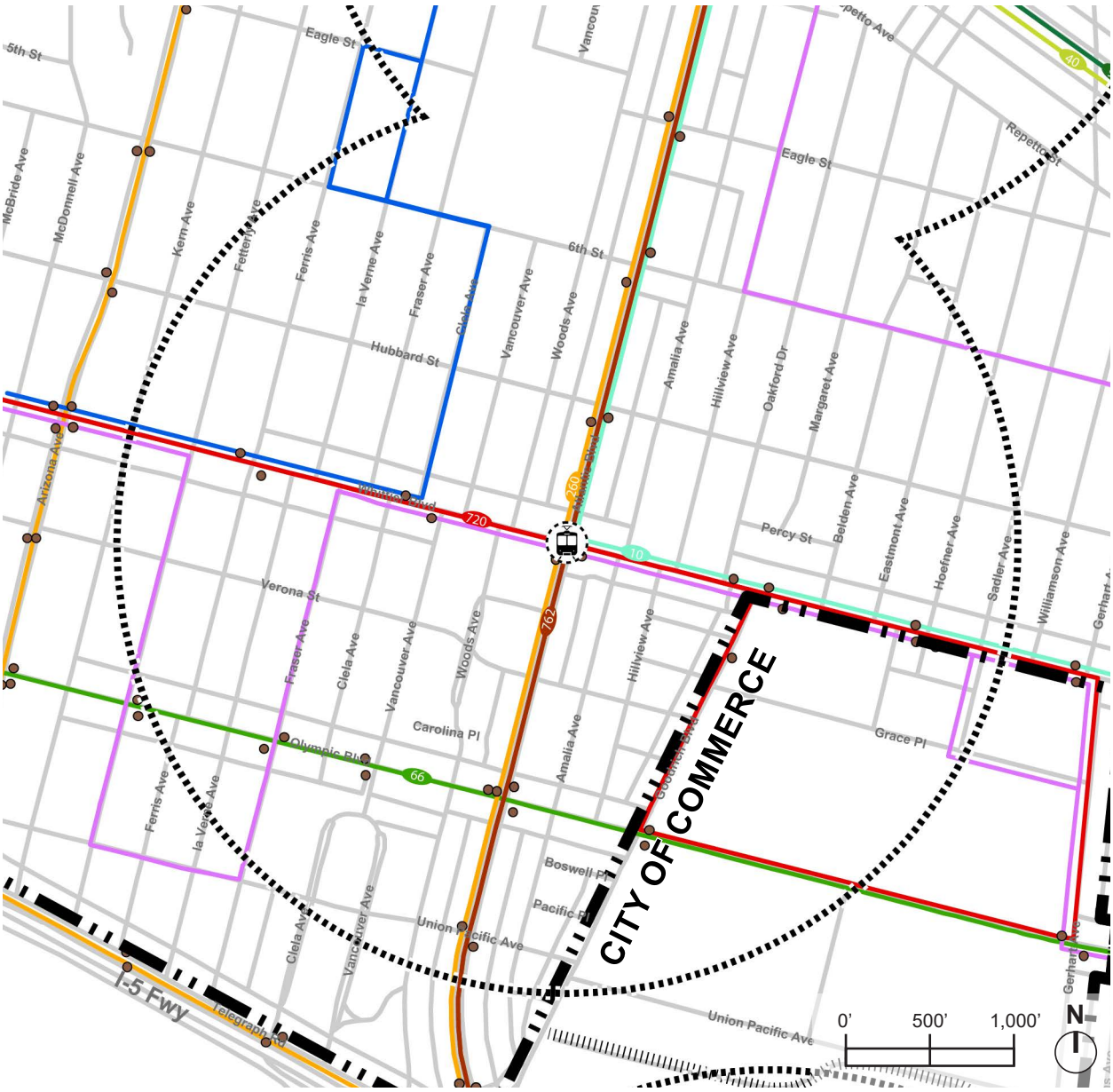
Standard bus shelter along Atlantic Blvd.

Figure 2.1: Roadway Classifications

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Major Highway
- Secondary Highway
- Local Street

Figure 2.2: Existing Public Transit Service



Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Bus Stops
- El Sol Shuttle Union Pacific/ Salazaar Park
- El Sol Shuttle Whittier/ Baybrook
- Metro Rapid 720
- Metro Rapid 762
- Metro Rapid 260
- Metro Local 66
- Montebello Line 10
- Montebello Line 90
- Montebello Line 40

Figure 2.3: Existing Daily Roadway Vehicle Volumes

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Less than 24,000
- 24,000 - 27,000
- Greater than 24,000

Figure 2.4: Existing Vehicle Collision Patterns

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station

Collision Density

- High
- Medium-High
- Medium
- Medium-Low
- Low

2.2 Active Transportation

Existing and Proposed Bicycle Infrastructure

Figure 2.5 illustrates the presence of existing Class III bicycle route bicycle facilities exist in the station vicinity. According to the Los Angeles County Bicycle Master Plan (2012), the County is considering a comprehensive bicycle network in the station area. This currently includes a Class I bicycle path on Woods Avenue (providing direct connections to the north and south of the proposed station site) and a Class III bicycle route on Whittier Boulevard (providing direct connections to the east and west of the proposed station site).

Sidewalks

The project area has an existing sidewalk network that provides for pedestrian travel along major arterial and collector roadways and local residential area roadways.

Station Walkshed

The Atlantic/Whittier station area has a grid of streets with a typical block size of 770 feet by 240 feet. This makes the area relatively walkable to the potential transit station, a key ingredient in a TOD.

The station area has a developed pedestrian network, illustrated on Figure 2.6. Controlled/signalized intersections with crosswalks are spaced at close intervals on Whittier, Atlantic and Olympic boulevards and many intersections on minor streets have all-way stop control. There are marked (non high-visibility) crosswalks at many non-signalized intersections along Whittier Boulevard and Atlantic Boulevard. Many crosswalks are not marked at minor street intersections.

Vehicle-Pedestrian Collision Patterns

The Figure 2.7 illustrates Collision Concentration Corridors for East LA. Whittier Boulevard between Vancouver Avenue and Woods Avenue, one block west of the intersection of Atlantic and Whittier, has the highest concentration of vehicle-pedestrian collisions. Other intersections in the Atlantic Boulevard and Whittier Boulevard corridors have concentrations of such collisions as well.

Minimal streetscape furniture along Whittier Blvd.

Figure 2.5: Existing and Proposed Bikeways

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station

Existing Bikeways Class

- II
- III

Proposed Bikeways Class

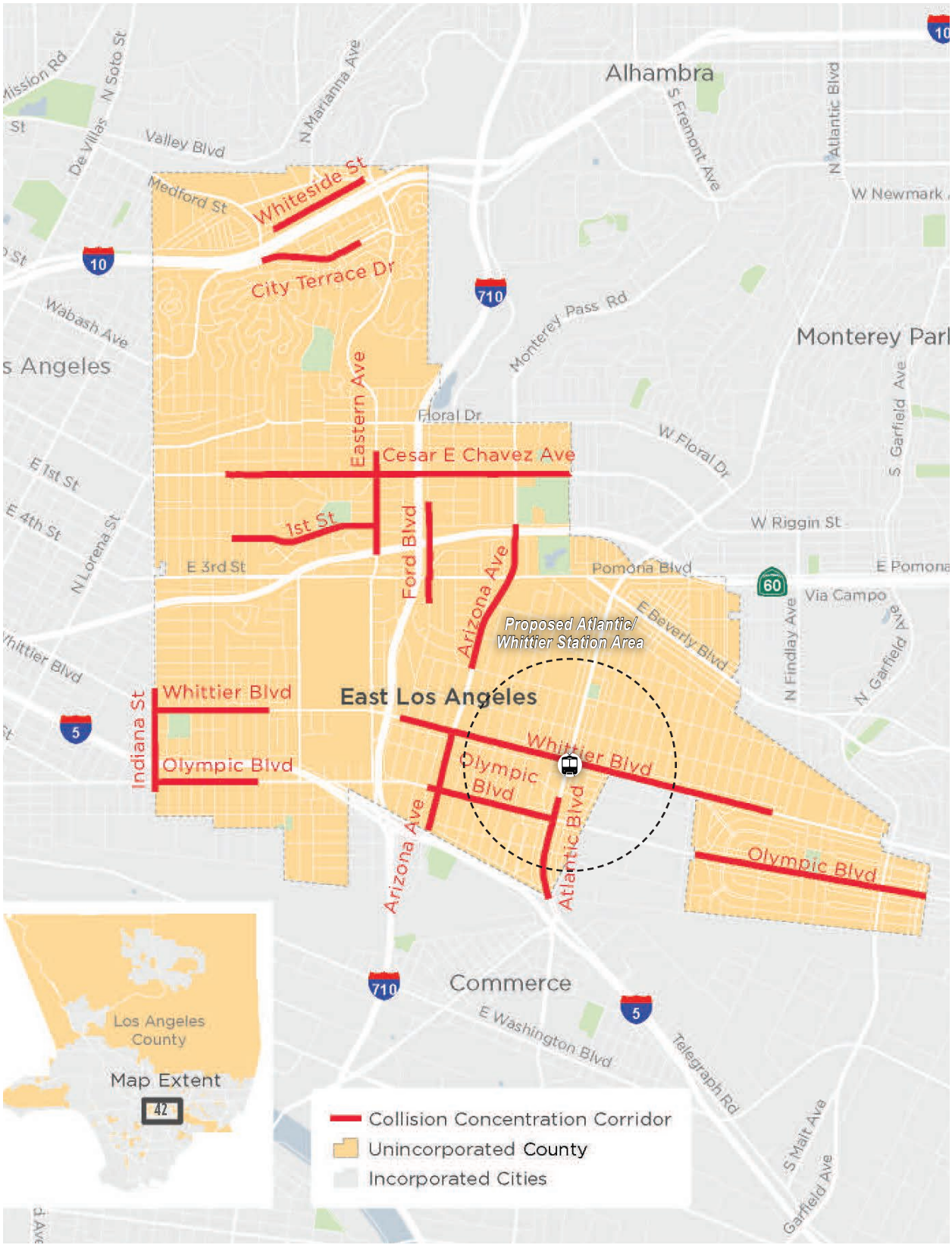
- I
- II
- III

Figure 2.6: Existing Traffic Controls and Crosswalks

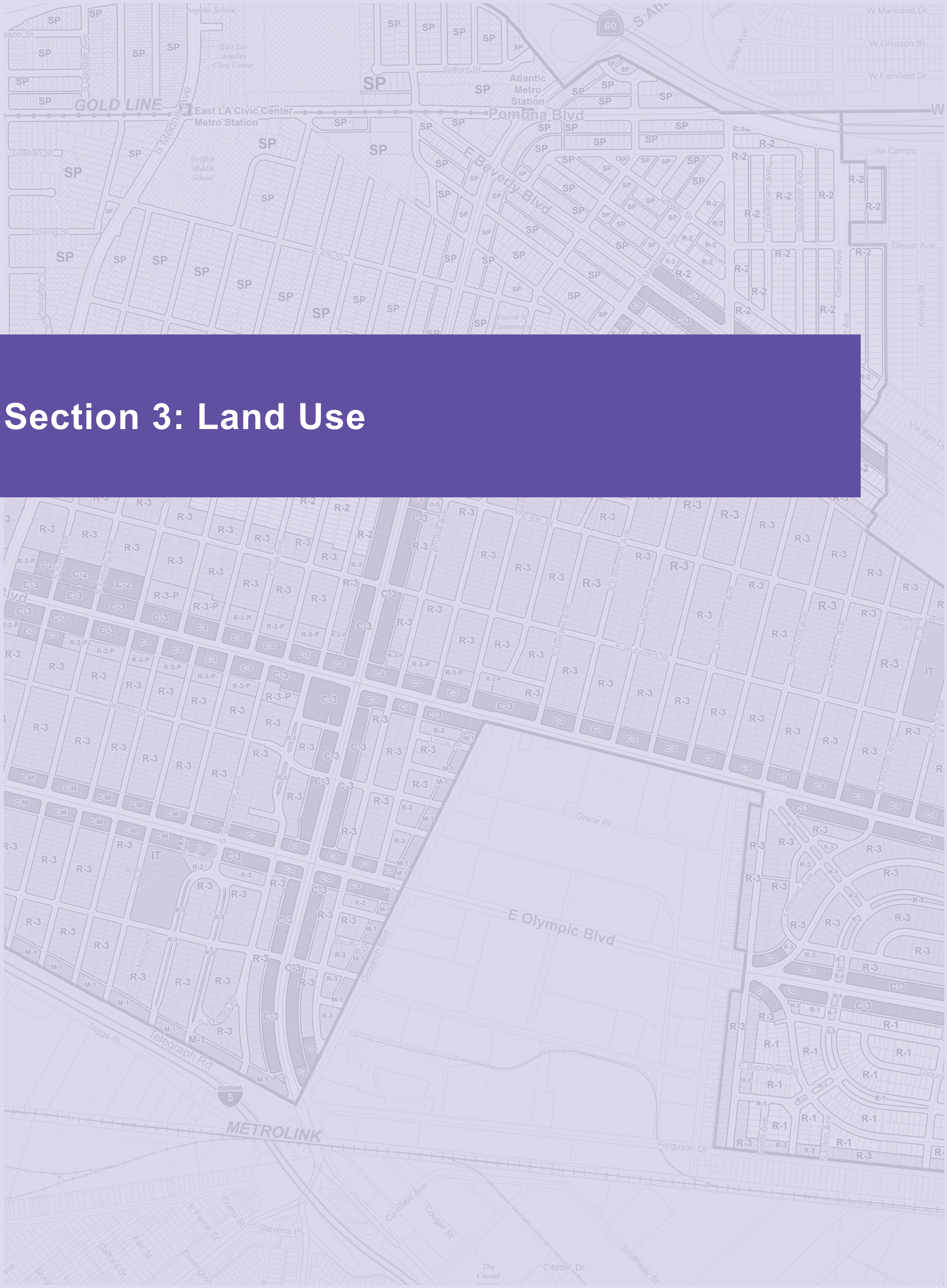
Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- High Visibility Crosswalk (Partial-School Zone)
- Standard Crosswalk (Partial-School Zone)
- Standard Crosswalk (All Way-School Zone)
- Standard Crosswalk (All Way)
- Standard Crosswalk (Partial)
- All Way Stop Control
- Partial Stop Control
- Missing Sidewalks

Figure 2.7: Existing East LA Collision Concentration Corridors



Source: Los Angeles County Draft Vision Zero Action Plan (DRAFT 2019)



Section 3: Land Use

3.1 Existing Land Uses

Commercial

Existing development in the Atlantic/ Whittier station area from the proposed Atlantic/Whittier Station consists of 1-story commercial structures along Atlantic, Whittier, and Olympic Boulevards. Parking for these commercial properties is mostly provided either on-street or in surface parking lots at the rear of businesses and accessed via east-west alleyways and side-streets. Some surface parking lots are visible and accessed from major corridors like Atlantic Boulevard and Whittier Boulevard.

This is consistent with the General Plan land use designations, which concentrates the Commercial Major designation along these corridors.

Residential

On other streets in the area there is a mix of single family and multi-family structures. Higher density residential is generally located in the northern portion of the half-mile station area near James A. Garfield High School.

This is somewhat consistent with the General Plan land use designations. While the majority of the station area as Residential Medium Density, the current residential land uses appear to be more consistent with the Residential Low/Medium designation as most residential lots are single-family.

Civic/Open Space

There are two schools in the half-mile area (Winter Gardens Elementary School and James A. Garfield High School) and one park (Atlantic Avenue Park).

Transit Supportive Uses

Transit-supportive uses generate high pedestrian activity support multiple trips, foster an active environment throughout the day and increase transit ridership. Transit-supportive uses include retail, restaurants, outdoor cafés, grocery stores, bookstores, neighborhood services, childcare, multi-family residential, affordable housing, offices, entertainment, hotel, medical clinics, recreational facilities, fitness clubs, educational facilities and other uses that cater to the needs of transit users, residents and employers.

As of today, most of the transit-supportive uses within the half-mile station area are located along major commercial corridors like Atlantic Boulevard, Whittier Boulevard, and Olympic Boulevard. Uses along these corridors include grocery stores, pharmacies, coffee shops, medical clinics, and banks. Limited multi-family residential uses are located along residential streets throughout the half-mile area.

Notable transit-supportive uses which appear to be lacking in the half-mile area include recreational facilities, substantial office space, and childcare facilities.

Major Activity Centers

The proposed Atlantic/Whittier Station is within one mile from the East Los Angeles Civic Center, which is a major employer for the area and houses several critical community institutions. The largest shopping destination within the half-mile station area is Commerce Center, a power center at Goodrich Boulevard and Whittier Boulevard.

There is a large group of industrial uses at the southeast portion of the half-mile area which serves as a major employer for the area.

Figure 3.1: Keyed Map of Typical Land Uses

Typical retail along Whittier Blvd.

Commerce Center shopping center

Atlantic Park

Typical residential street in half-mile station area

3.2 Land Use Designations

The majority of the station area's land use is governed by the General Plan apart from the northwest portion which falls within the East Los Angeles 3rd Street Specific Plan's boundary.

East Los Angeles 3rd Street Specific Plan

Much of the area governed by the Specific Plan is designated as Public/Civic for the James A. Garfield High School on 6th Street. The Specific Plan designates the parcels adjacent to the school as Residential Low/ Medium density.

General Plan

The General Plan designates most of the station area as Residential Medium land use. Major corridors in the station area (Atlantic Boulevard, Whittier Boulevard, and Olympic Boulevard) have commercial land use designations. The most common of these designations is Commercial Major. Some properties on the outer edge of the half-mile station area along Goodrich Boulevard have the Commercial Manufacturing designation. This arrangement concentrates higher density commercial activities at major intersections and along major corridors.

Figure 3.2 illustrates the current General Plan and East Los Angeles 3rd Street Specific Plan land use designations for unincorporated Los Angeles County parcels within the half-mile station area.

Zoning

The zoning designations in the half-mile station area are consistent with the general plan land use designations. Unlike the General Plan, the zoning code does not provide a separate designation for a parking zone in this station area. The majority of the station area is zoned for Residential Medium.

Figure 3.3 illustrates the current zoning designations for unincorporated parcels within the half-mile station area.

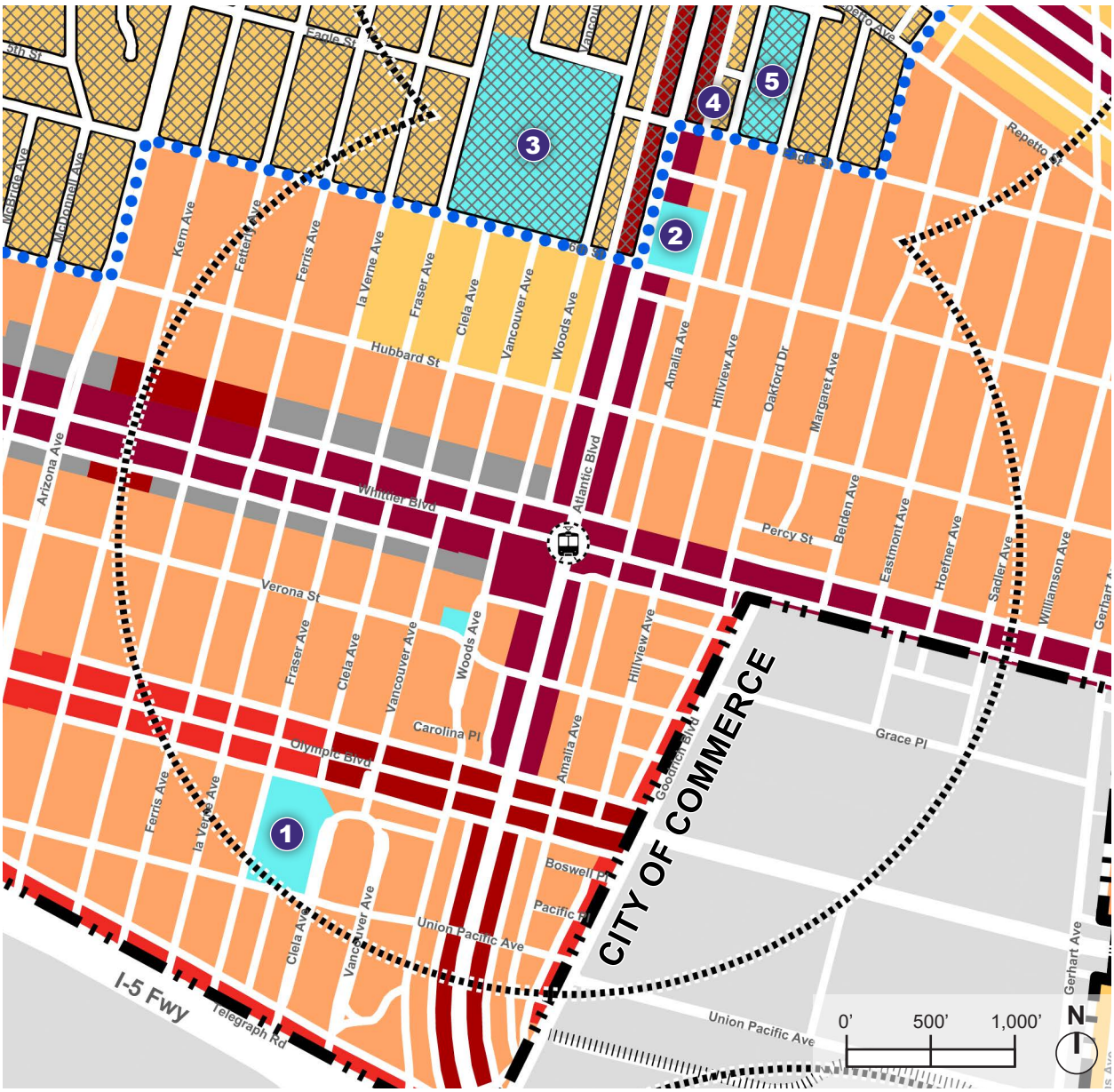
One of several car dealerships along Atlantic Boulevard

Alleyway behind commercial properties along Atlantic

Medium-density residential along Arizona Street

Single-family residential

Figure 3.2: General Plan & East Los Angeles 3rd Street Specific Plan Land Uses

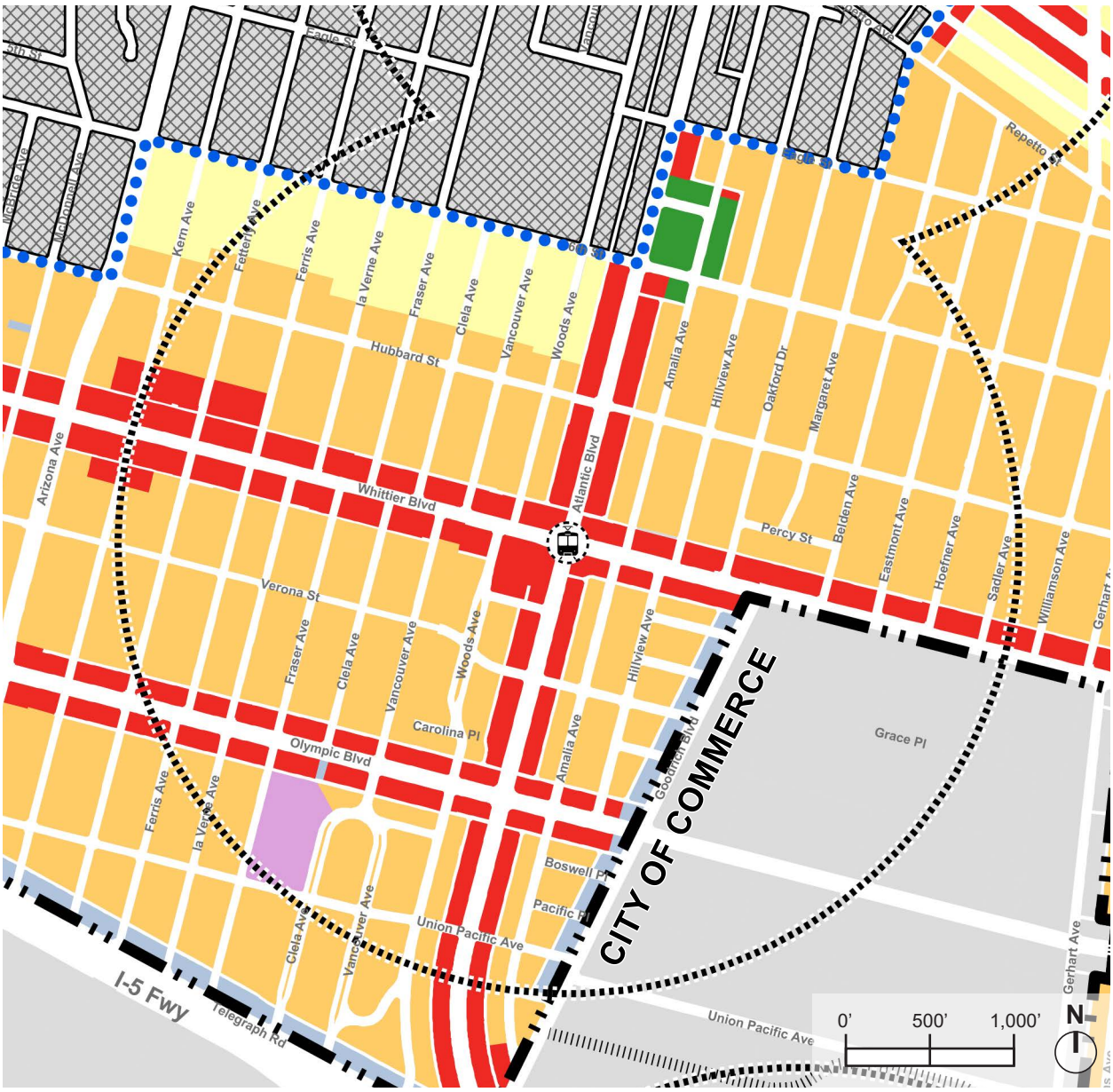


Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- East L.A. 3rd Street Specific Plan Boundary
- Properties subject to East L.A. 3rd Street Specific Plan
- Residential Low/Medium
- Residential Medium
- Residential - Parking
- Commercial Manufacturing
- Commercial Community
- Commercial Major
- Mixed Use Zones - Atlantic Boulevard (AB) Zone
- Public/Civic
- 1 Winter Gardens Elementary School
- 2 Atlantic Avenue Park
- 3 James A. Garfield High School
- 4 4th Street New Primary Center School
- 5 Fourth Street Elementary School

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning

Figure 3.3: Zoning Map

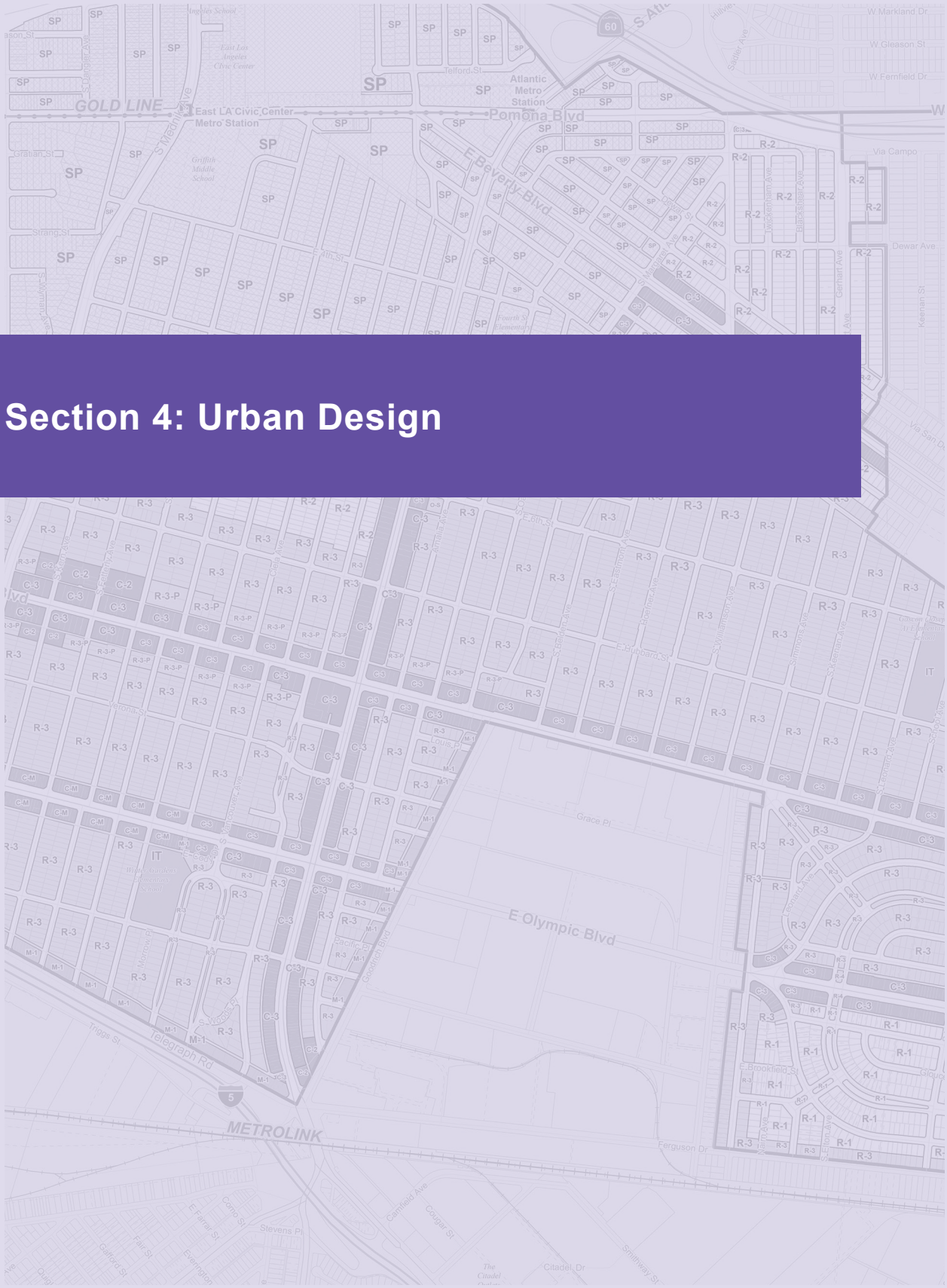


Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- East L.A. 3rd Street Specific Plan Boundary
- Properties subject to East L.A. 3rd Street Specific Plan
- Residential Low
- Residential Medium
- Commercial
- Open Space
- Institutional
- Manufacturing

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning

Section 4: Urban Design



4.1 Existing Character of Building Stock

The historic neighborhoods that make up East Los Angeles were a mix of residential and commercial properties that date back to the late 1800's. The neighborhoods surrounding the Atlantic/Whittier Station include housing stocks of Craftsman bungalows, Revival, and Modern traditional styles. Prominent commercial and civic buildings have also provided a unique architectural setting which has made East Los Angeles a signature community.

Most of the buildings within the half-mile station area are one- to two-story structures. Most commercial structures share a party wall with few stand-alone structures along major corridors. Buildings are typically built to the property line with parking located at the rear and accessed via an alley.

Just outside of the unincorporated Los Angeles County area but within the half-mile station area in the City of Commerce lies a "big box" retail center along Whittier Boulevard.

Residential structures are typically single-family bungalows and national-style houses with some multi-family courtyard apartment housing throughout. Residential buildings typically have small front lawns that are fenced in and many have a covered small front porch or stoop. Residential lots generally have garages at the rear accessed via a driveway.

Historic Resources

The Golden Gate Theater has been identified as a historic resource by the Los Angeles County. The building has been adapted to be and now operates as a CVS pharmacy. Apart from the theater, there are no other officially designated historic resources identified in the Atlantic/Whittier station area.

4.2 Parks and Recreational Facilities/Tree Cover

Parks

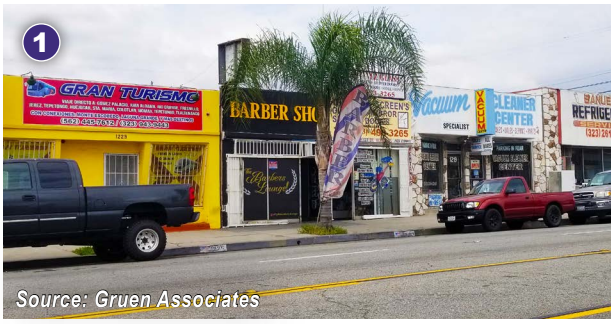
There is one park within the half-mile station area: Atlantic Avenue Park, located at the intersection of Atlantic Boulevard and 6th Street.

Tree Cover

While residential streets in the half-mile station area generally do not have street trees, the three major commercial corridors and arterials (Atlantic Boulevard, Whittier Boulevard, and Olympic Boulevard) each have street trees:

- **Atlantic Boulevard** is landscaped with an inconsistent pattern of street trees that do not provide significant shade for pedestrians at regular intervals.
- **Whittier Boulevard** is landscaped on both sides of the right-of-way with mature palm trees at regular intervals.
- **Olympic Boulevard** is landscaped with larger, shade-providing trees but at irregular intervals. This leaves the street canopy along Olympic Boulevard comparatively sparce.

Figure 4.1: Urban Design



Multiple adjoined commercial tenants along Atlantic Blvd.

Atlantic Park

Typical residential throughout half-mile station area

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- Street Trees, illustrative

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning

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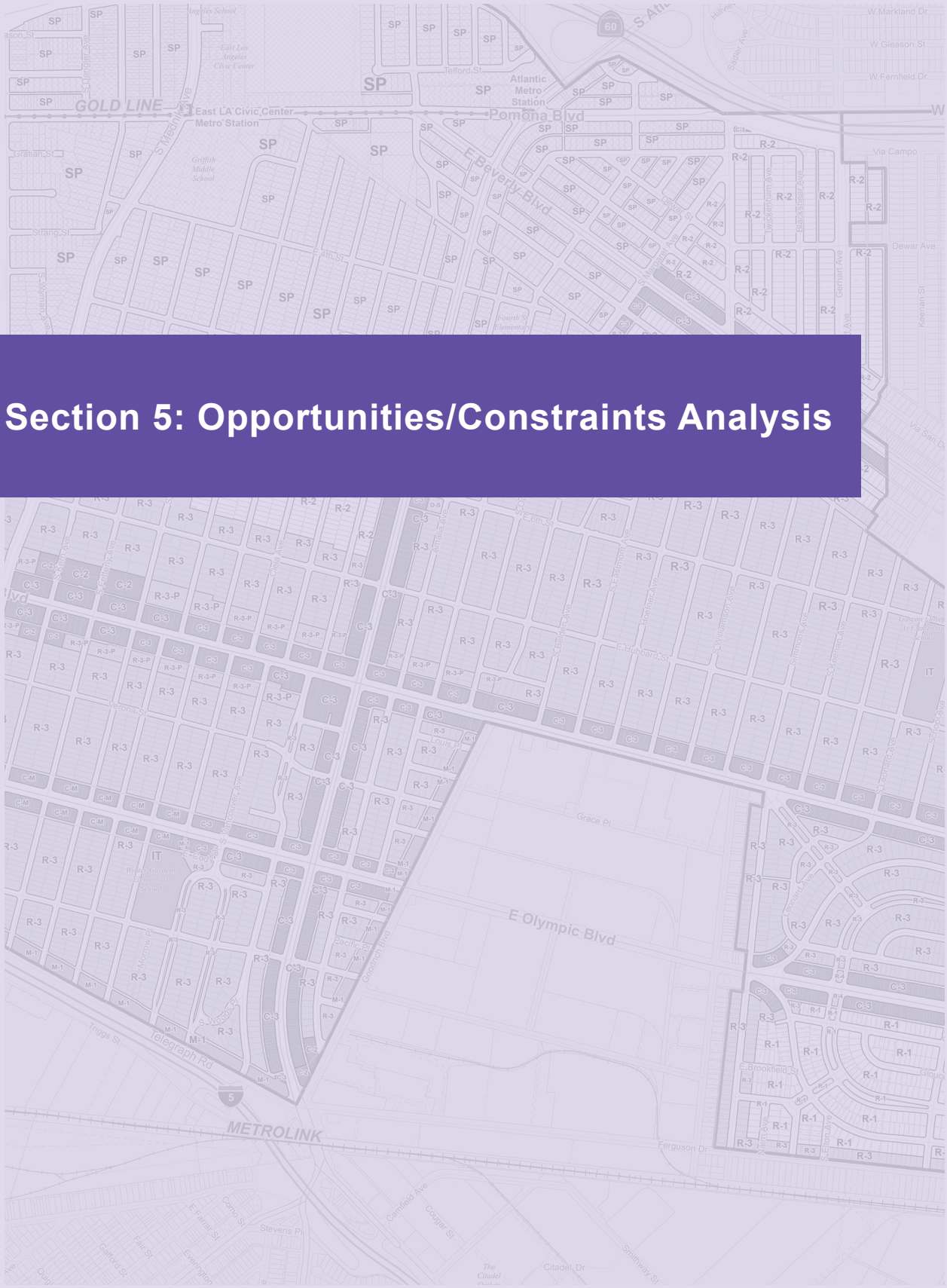
Section 5: Opportunities/Constraints Analysis



5.1 Opportunities and Constraints Overview

Opportunities and constraints to neighborhood improvements were identified by analyzing the existing regulatory framework and by conducting a site visit to the station area. Key factors of consideration have been organized by the following three categories: Mobility, Land Use, and Urban Design. The following pages are a synthesis of the consultant team's findings.

Key Concerns

Mobility

The major corridors within the half-mile station area form relatively short blocks with frequent bus transit service. While these factors make the station area walkable, sidewalks along connector streets are generally too narrow for comfortable pedestrian passage.

Land Use

Empty storefronts along Whittier Boulevard and vacant/underutilized lots along Atlantic Boulevard are the primary locations for potential redevelopment. Additionally, the several commercial lots with parking located in the rear pose as additional opportunities for targeted infill development in conjunction with shared parking strategies.

Urban Design

Whittier Boulevard generally has more streetscape improvements than Atlantic Boulevard or Olympic Boulevard. Continuing these streetscape improvements to all major corridors and implementing a uniform pattern of shade-providing street trees will provide the station area with a defined sense of place. There are limited opportunities for streetscape improvements along residential streets, which have far more narrow sidewalks.

Typical street crossing condition

Arcade to access shared parking at rear of property

Whittier Boulevard streetscape

Figure 5.1: Aerial Imagery

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning

5.2 Mobility

Opportunities

1. Introduce curb extensions to widen sidewalks at key intersections.
2. Establish a parking benefit district and evaluate the costs/benefits associated with charging for parking if/when the Atlantic/Whittier station is operational.
3. Encourage new development projects to incorporate terraces, bar seating, and other unique treatments to activate the streetscape and provide new places to gather.
4. Identify additional non-arterial, low volume streets for bicycle treatments, including bike boulevards, signage, or protected and unprotected lanes as ROW permits.
5. Incorporate traffic calming techniques and treatments to slow vehicles and make pedestrians more visible to drivers in the corridor.
6. Utilize existing network of alleys to increase pedestrian and bicyclist connections.

Constraints

1. Many residential units are at or above permitted occupancy levels, which generates a high demand for parking.
2. Where cross-streets intersect Whittier and Atlantic, the sidewalk width at each corner does not meet ADA requirements.
3. Narrow rights-of-way along Atlantic and Whittier preclude the installation of bike lanes, assuming all on-street parking remains and no lanes of traffic are repurposed.
4. A considerable number of vehicular-pedestrian and vehicular-bicycle accidents have occurred in the station area due to poor visibility, high traffic volumes, inadequate turning radii, and unsignalized crosswalks.
5. Many residents who rely on wheelchairs have been observed within the station area, but narrow sidewalk widths and unsignalized crosswalks may present accessibility issues.

The images A through F below are keyed to the figure on the following page.

High vehicle speeds cause difficulties in mobility for the elderly and school children.

Some sidewalks have street furniture and objects that obstruct pedestrian walkways.

Poor pavement conditions can create challenges for pedestrians and bicyclists.

Heavy traffic volumes, high vehicle speeds, and a lack of bike lanes leave many bicyclists biking on the sidewalks.

Many transit stops don't have seating or a shelter, forcing some users to stand while waiting for the bus.

Long distances to the nearest crosswalk in some areas cause some pedestrians to jaywalk across arterials.

High traffic volumes and closely spaced intersections create traffic backflow.

Few streets provide enough landscaping to shade pedestrians from the sun.

Sidewalks cluttered with outdoor displays pose as obstacles for pedestrians.

Figure 5.2: Mobility Opportunities & Constraints

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- Landscaping/Shade
- Maintenance
- Bus Stop Improvements
- Engineering
- New/Improved Bike Lane
- Traffic Calming Devices
- Crosswalk Improvements
- Enforcement
- New Crossings/Connections
- Visibility
- A thru I — Keyed photos from previous page

Prepared by Gruen Associates and KOA. Data Sources: Los Angeles County Department of Regional Planning

5.3 Land Use

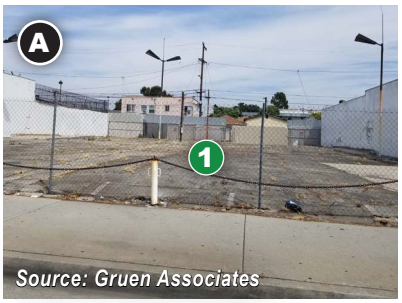
Opportunities

1. Development opportunities with a mix of uses at select locations along Atlantic and Whittier commercial corridors.
2. Encourage new housing types to increase density and promote affordability, while preserving the existing housing stock.
3. Dealerships, body shops, and other auto-oriented businesses along Atlantic have large surface parking lots that could be redeveloped. Many of these structures are vacant.
4. Existing neighborhood features relatively high densities that could support transit ridership.
5. Identify key parcels for shared parking facilities that can be used by businesses within 1-3 blocks, which will allow many surface parking lots behind storefronts to be redeveloped.
6. Propose redevelopment strategies that will allow current, more auto-oriented businesses to thrive, while not precluding future TOD and land use intensification.
7. Examine opportunities to enhance connections to major activity centers such as alleyway improvements and new bike facilities.

Constraints

1. The shallow depths of the small lots along major streets makes future densification difficult. Properties in the Atlantic/Whittier station area have a typical lot depth of 100 feet and a typical lot width of 45 feet. These dimensions severely limit the space available for properties to redevelop individually; larger projects may require lot consolidation.
2. Current plans in residential areas allow for only 30 units/acre, 35' high limit; these standards are more restrictive than modern TOD best practices.
3. Parking standards are relatively high for a TOD supportive environment.

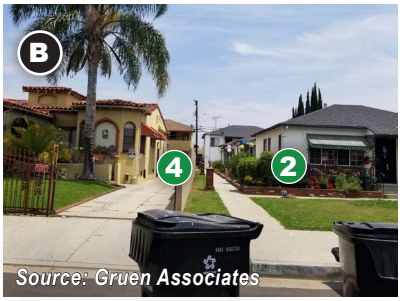
The images A through F below are keyed to the figure on the following page.



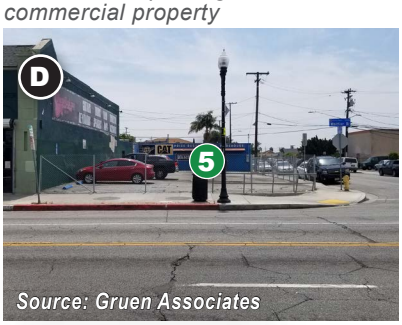
Vacant parcel along Atlantic Blvd.

Underutilized parking lot at rear of commercial property

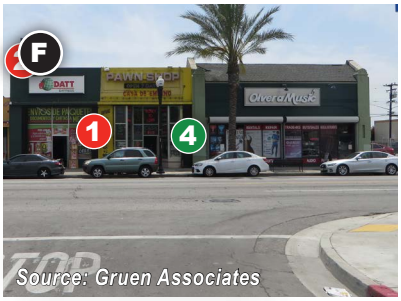
Vacant car dealership along Atlantic Blvd.



Multi-family housing with additional units in rear



Shared parking potential



Narrow storefronts along Whittier Boulevard

Figure 5.3: Land Use Opportunities & Constraints

Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- East L.A. 3rd Street Specific Plan Boundary
- Properties subject to East L.A. 3rd Street Specific Plan
- Primary Redevelopment Opportunity Sites
- Secondary Redevelopment Opportunity Sites
- Limited Redevelopment Potential
- A thru F — Keyed photos from previous page

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning, Los Angeles County Assessor

5.4 Urban Design

Opportunities

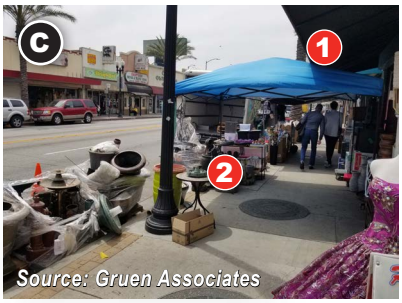
1. Promote the County's parklet program and encourage more small businesses to install and maintain parklets along Atlantic and Whittier.
2. Encourage commercial façade treatments that feature a simple color palette, preserve the character of historic buildings, and are free of unnecessary and busy signage.
3. Require formula/chain businesses to incorporate public art, appropriate massing, materials, and color, and other features that are consistent with and reinforce neighborhood character.
4. Encourage developers to build privately-owned, publicly-accessible (POPs) pocket parks that can serve as places for meeting, recreation, and events.
5. Consider installing "treelets" in between on-street parking stalls to introduce trees within a constrained right-of-way.
6. The Design Guidelines may identify appropriate treatments that property owners can install to restore the historic character of single-family and duplex residential structures.
7. Identify areas for public art installations, including murals, sculptures, and others.
8. Implement a uniform street tree palette and install street trees at regular intervals along major corridors to further define a sense of place for the station area.

Constraints

1. Some storefronts are covered with inadequately-sized and poorly-placed canopies that do not provide adequate sun protection.
2. Many storefronts include window decals, advertising, limited signage, flags and tents on the sidewalk, and other façade treatments that do not reinforce a sense of place for the station area.
3. Canary island palm trees and a limited number of canopy trees do not provide adequate sun protection, particularly for south-facing storefronts.
4. Atlantic Boulevard has very few street trees and lacks the pedestrian lights, potted plants, and benches present on Whittier Boulevard due to narrow sidewalks.
5. Strip malls, blank walls, and other factors detract from the quality of the pedestrian environment.
6. Small businesses may find that façade treatments are cost prohibitive; identify low-cost and effective treatments that reinforce the station area's character.
7. Power line poles are located along residential streets such as Vancouver Avenue and Oakford Drive, as well as in the alleys behind commercial properties that are parallel to Atlantic and Whittier Boulevards. While these are unsightly and occupy valuable space for potential streetscape amenities, undergrounding these utilities would be costly.

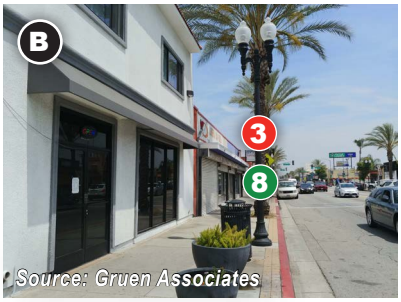
The images A through F below are keyed to the figure on the following page.

Historic building with simple color pallette



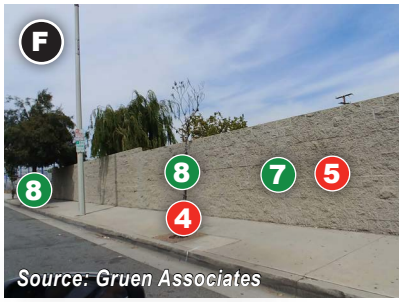
Sidewalk cluttered with outdoor displays

Installed parklet along Whittier Blvd.



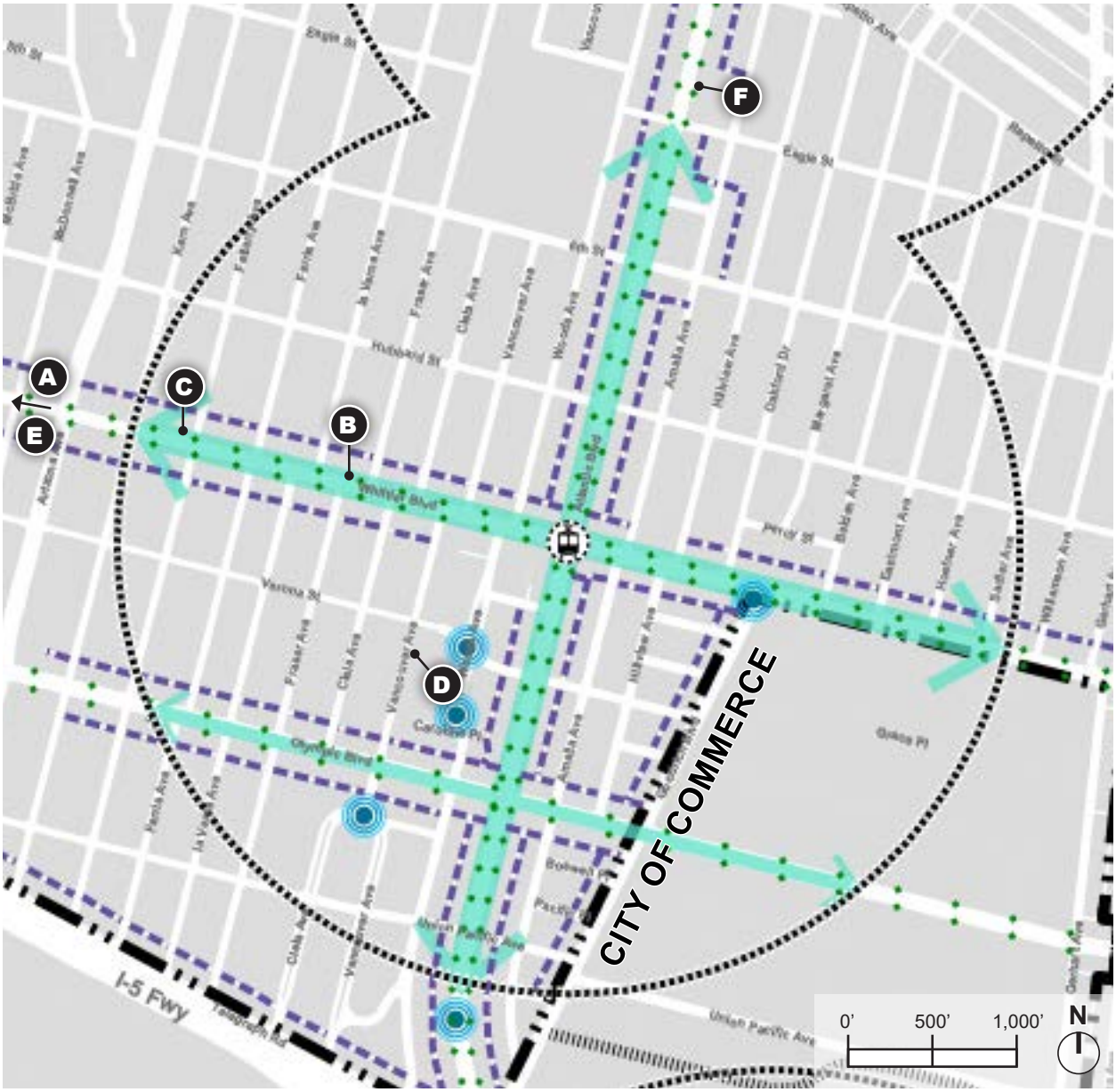
Whittier Boulevard streetscape

Multi-family housing with historic character



Atlantic Boulevard streetscape

Figure 5.4: Urban Design Opportunities & Constraints



Legend

- ½ Mile Radius from a Potential Transit Station
- Potential Atlantic/Whittier Station
- Rail Line
- Commerce / Unincorporated County Boundary
- Street Trees, illustrative
- Terminating Vista
- Existing Alley
- Potential Streetscape Improvements
- A thru F — Keyed photos from previous page

Prepared by Gruen Associates. Data Sources: Los Angeles County Department of Regional Planning

5.5 Implications for other Potential TOD Areas

Table 5.5.1 below provides a general overview of the possible implications for developing guidelines for the 10 planned future rail station areas under consideration at the time of the TOD Toolkikt project as described in "Overview" on page 4. The methodology and process utilized for the analysis of the Atlantic/Whittier Station Area in the preceding sections can be applied to the other potential TOD station areas when considering implications.

While each station is within a half-mile of a LA County UA, many of the half-mile station areas are primarily comprised of land in incorporated jurisdictions. Appendix A includes maps of each station.

Table 5.1: Potential TOD Area Implications

Potential TOD Area	Overview of ½ mile Station Area	Considerations for Guidelines
Santa Anita Station and Peck Station Proposed Eastside Transit Corridor (See Figure A.1 in the Appendix)	» Less than 50% of the half-mile station areas is within a LA County UA. The remaining portion of the station areas, including the future transit stations, are in the City of South El Monte. » Land uses within the County area around the Santa Anita Station plus a portion of the Peck Station area are designated as Open Space as this area is within the Whittier Narrows area. A small portion of the County area is designated for agriculture related uses and manufacturing.	Limited development potential except for open space improvements, however, accessibility and mobility for transit users to the station is an important consideration.
The Shops at Montebello Proposed Eastside Transit Corridor (See Figure A.2 in the Appendix)	» Less than 20% of the half-mile station area is within a LA County UA. The remaining portion of the station area, including the future transit station itself, is in the City of Montebello. The station would be adjacent to the Shops at Montebello regional shopping center. Land within the unincorporated area is scattered on the perimeter of the half-mile station area cut off from the station by the 60 Freeway and major roadways. » A variety of land uses are currently permitted with the designations closest to the shopping center at the east with the most potential for more intense development.	Limited development potential except parcels near the shopping center. Accessibility and mobility to the transit station along local streets (such as San Gabriel Boulevard) and adjacent to the regional shopping center property will be critical considerations for future improvements to the station area.
Atlantic/Whittier Station Proposed Eastside Transit Corridor (See Figure A.3 in the Appendix)	» See Existing Conditions Report » Most of the unincorporated County area within the Atlantic/Whittier Station half-mile area is not guided by the 3rd Street Specific Plan. The southeast portion of the half-mile station area is in the City of Commerce.	East 3rd Street Specific Plan guides only a small portion of development in this area.

Table 5.1: Potential TOD Area Implications

Potential TOD Area	Overview of ½ mile Station Area	Considerations for Guidelines
Commerce Station Proposed Eastside Transit Corridor (See Figure A.3 in the Appendix)	» The half-mile station area contains only one parcel that is in the a LA County UA. The remaining portion of the station area, including the future transit station itself, is in the City of Commerce.	The scarcity of LA County UA parcels within this station's half-mile station area would limit County TOD facility and infrastructure improvements.
Norwalk Station Proposed Eastside Transit Corridor (See Figure A.4 in the Appendix)	» The majority of the half-mile station area is within a LA County UA. The epicenter of the station area, including the station itself, is in the City of Santa Fe Springs. » Most of the unincorporated station area parcels are zoned for lower-density residential uses, and parcels along the major road are zoned for commercial uses.	Though the Norwalk Station is the incorporated City of Santa Fe Springs, there is a potential for a coordinated development approach between the two jurisdictions. There are also a few parcels in the area that are zoned for commercial or multi-family development.
Lambert Station Proposed Eastside Transit Corridor (See Figure A.4 in the Appendix)	» Only a few unincorporated area parcels are within the half-mile station area. The majority of the station area, including the future transit station itself, is in the City of Whittier and the rest is in the City of Santa Fe Springs. The unincorporated parcels are located northwest of the station. » The station area parcels within the unincorporated area are designated as single-family residential (R-1) and residential agricultural (R-A).	Very little to no development potential for more intense development within the unincorporated area, however coordination with other jurisdictions would improve accessibility and mobility in the area.
Florence/Salt Lake Station West Santa Ana Branch (See Figure A.5 in the Appendix)	» Only a few unincorporated area parcels are within the half-mile station area. The remaining portion of the station area, including the future transit station itself, is in the City of Huntington Park. » The station area parcels within the unincorporated area are designated as single-family residential (R-1).	Very little to no development potential for more intense development within the unincorporated area, however coordination with other jurisdictions would improve accessibility and mobility in the area.
Westwood/VA Hospital Station Purple Line Extension (See Figure A.6 in the Appendix)	» The majority of the half-mile station area is within a LA County UA and the remaining portion is in the City of Los Angeles. » The majority of the unincorporated station area parcels are designated as institutional (IT) and open space (O-S). A very small portion of this area is designated as medium density multi-family residence (R-4).The open space and institutional areas contain the Los Angeles National Cemetery, the VA West Los Angeles Medical Center, the West Los Angeles Sawtelle VA, and the Los Angeles National Veterans Park.	The U.S. Department of Veterans Affairs (VA) has prepared the West Los Angeles Campus Draft Master Plan for the planning of the VA future campus. Metro is coordinating with the County regarding their First-Last Mile plans for the future station. The Westside Cities Council of Governments is updating their Westside Mobility Study which includes determining and integrating regional arterial improvements and funding strategies.
Westwood/UCLA Station Purple Line Extension (See Figure A.6 in the Appendix)	» Only a few unincorporated area parcels are within the half-mile station area. Most of the station area, including the station itself, is in the City of Los Angeles. » The station area parcels within the unincorporated area are designated as institutional (IT) and open space (O-S).	

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Appendix A: Potential Future Rail Stations

A.1 Potential Future Rail Stations for Measure M Projects

Figure A.1: Santa Anita and Peck Stations

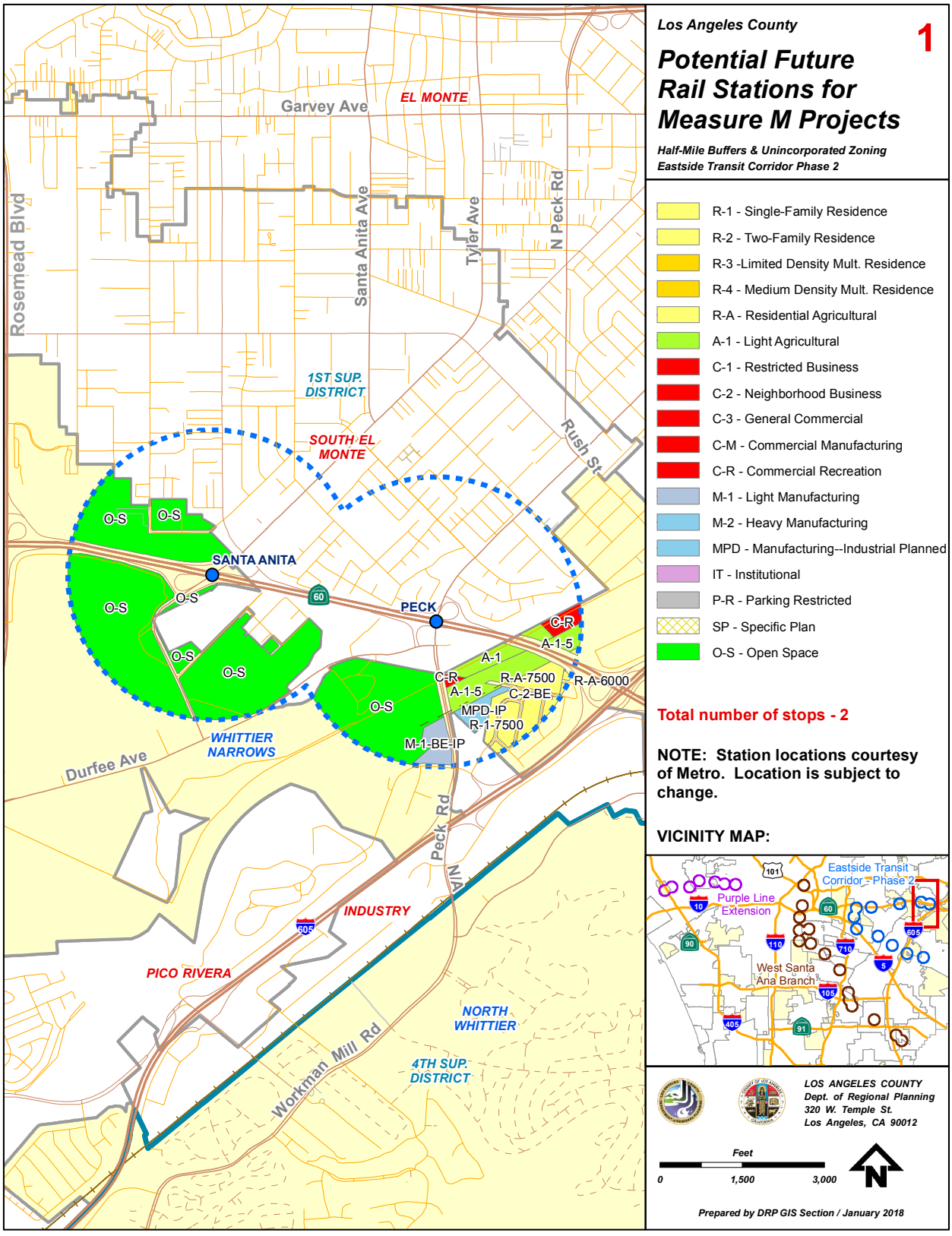


Figure A.2: The Shops at Montebello Station

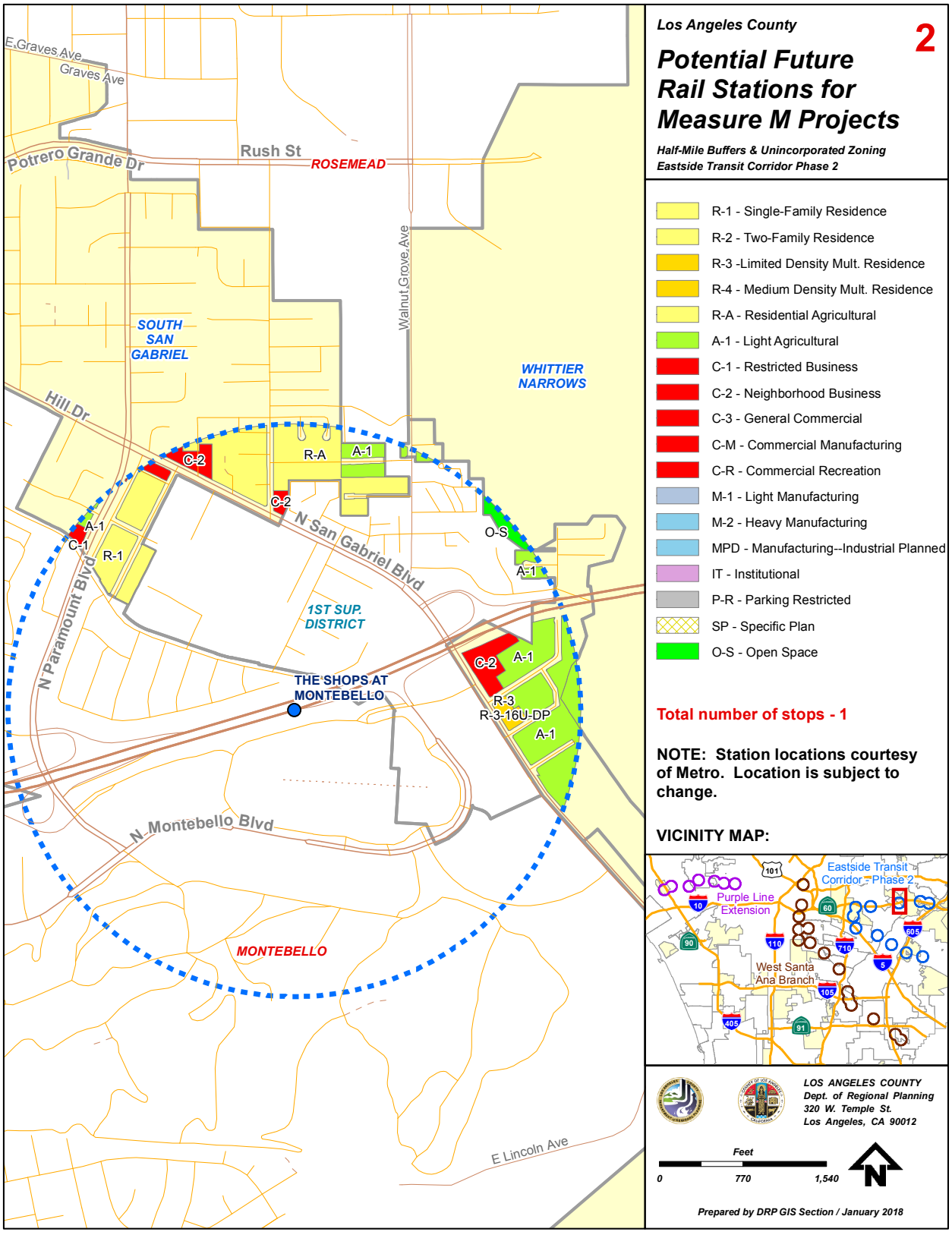


Figure A.3: Relocated Atlantic, Atlantic/Whittier, and Commerce Stations

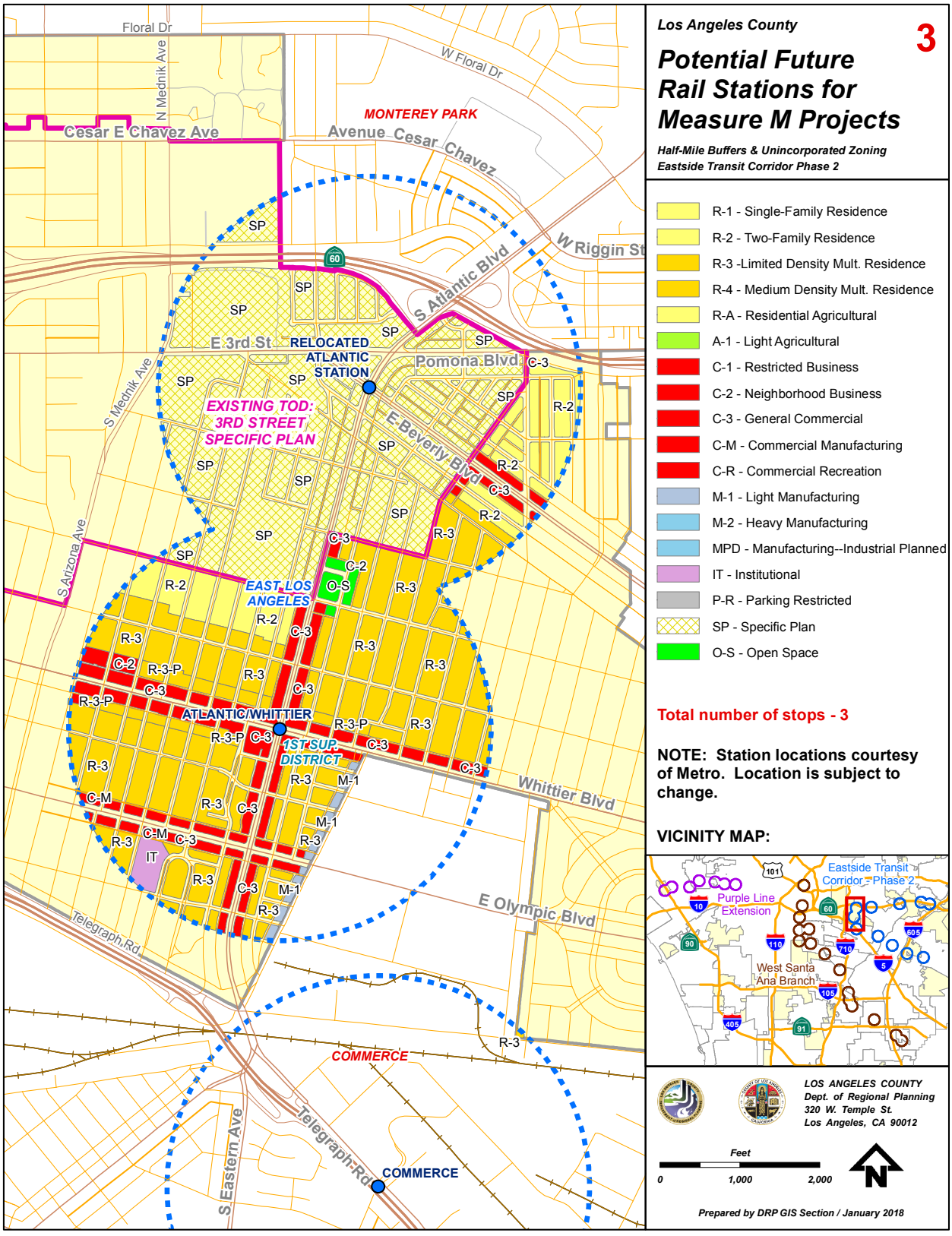


Figure A.4: Norwalk and Lambert Stations

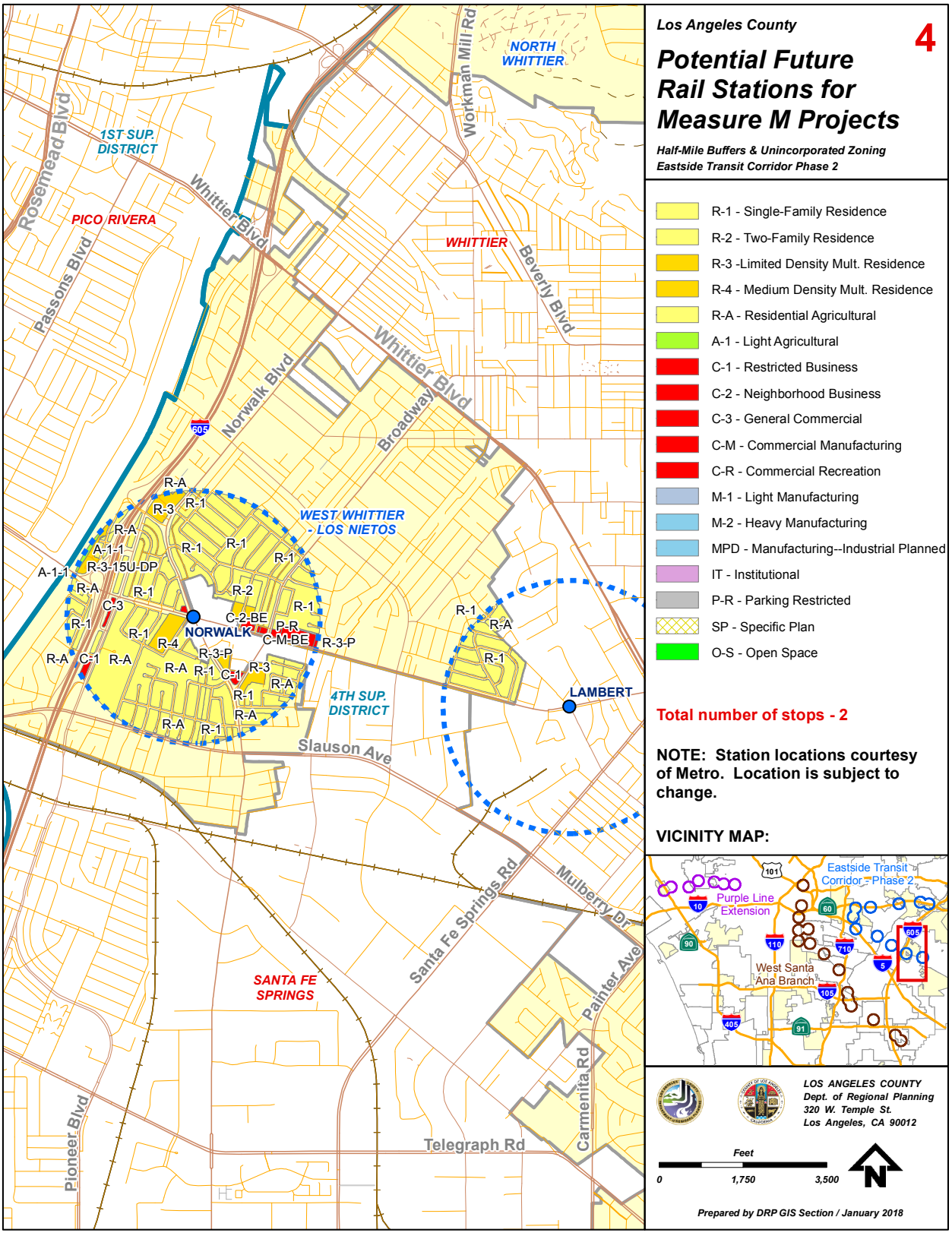


Figure A.5: Florence/Salt Lake Station

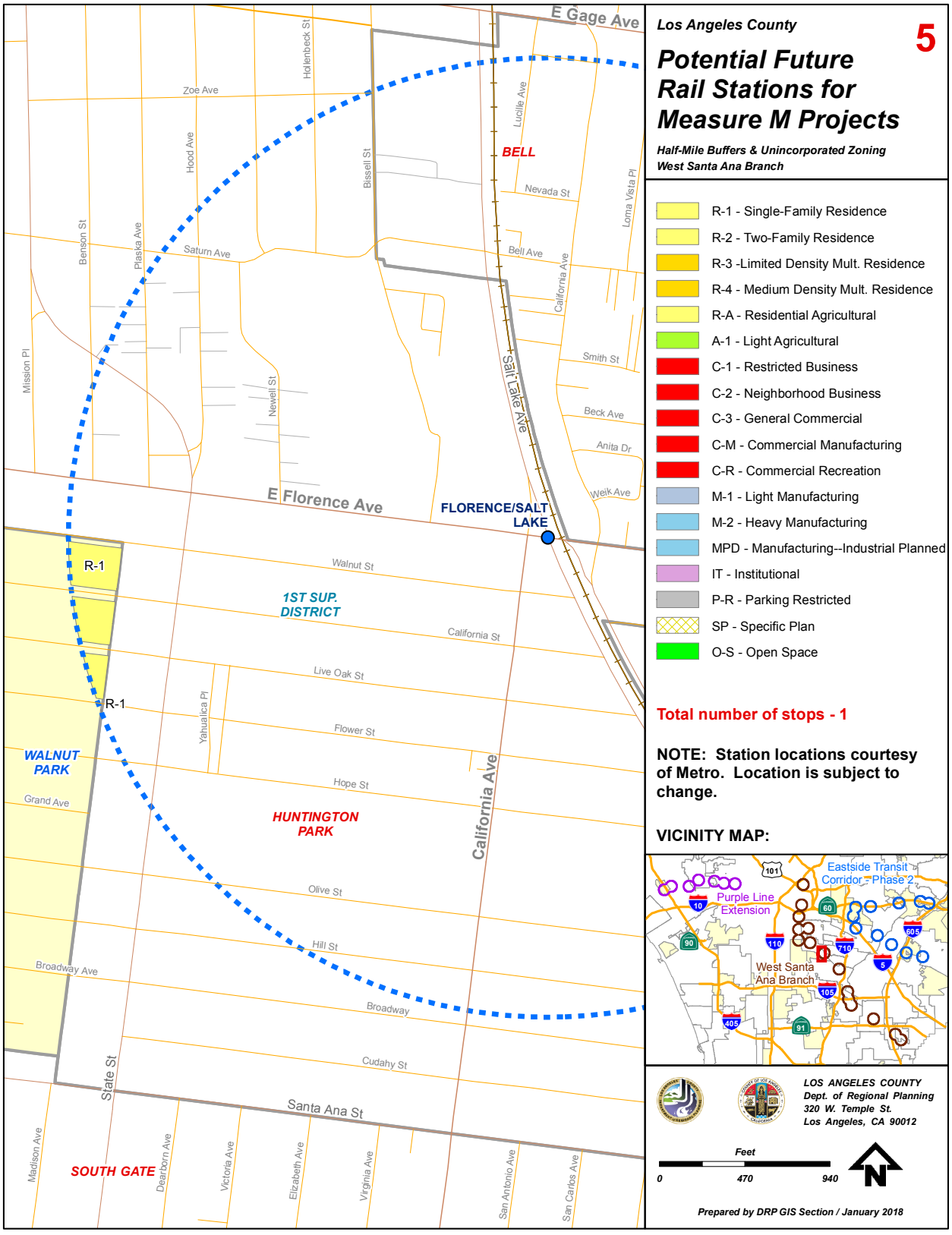
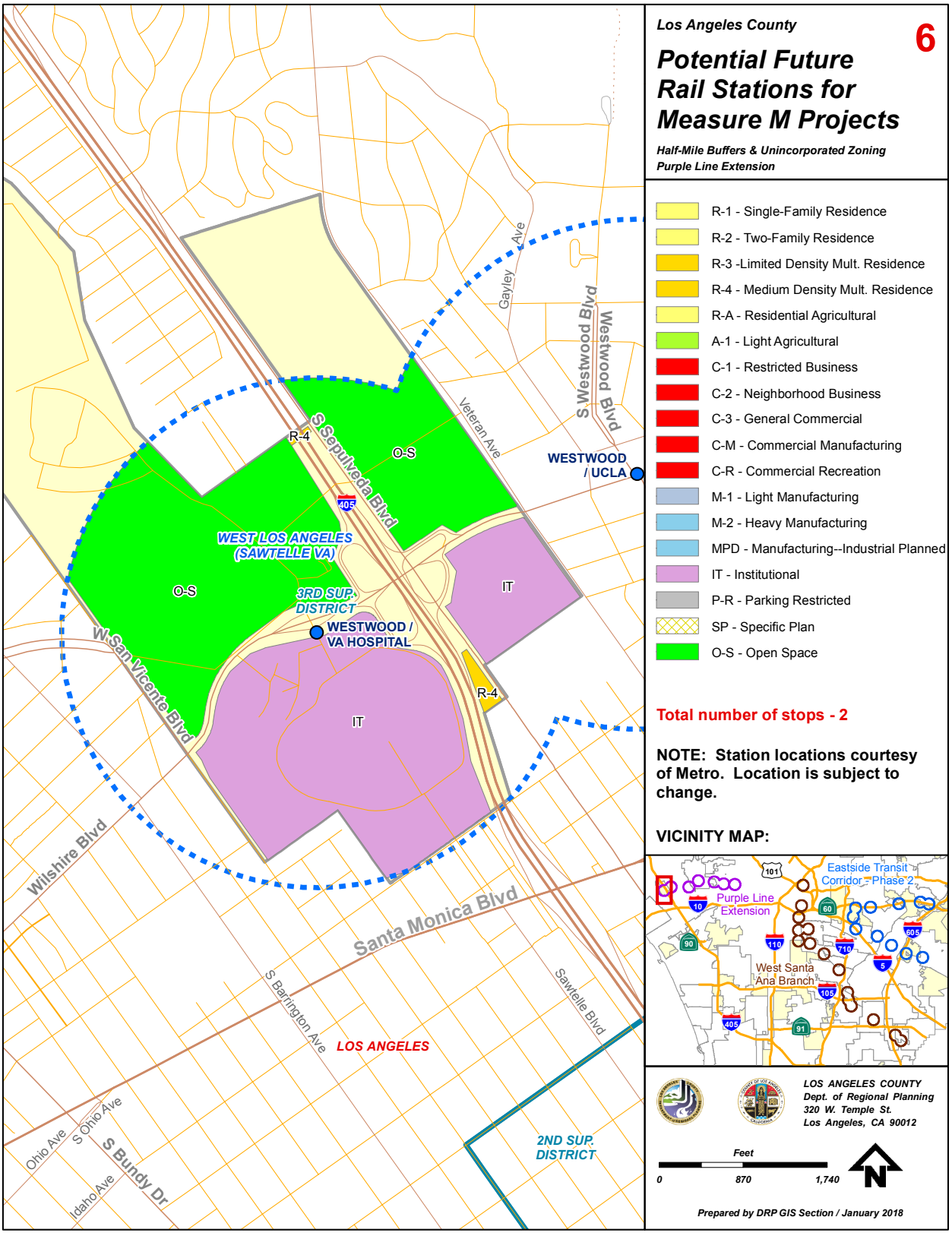


Figure A.6: Westwood/VA Hospital and Westwood/UCLA Stations



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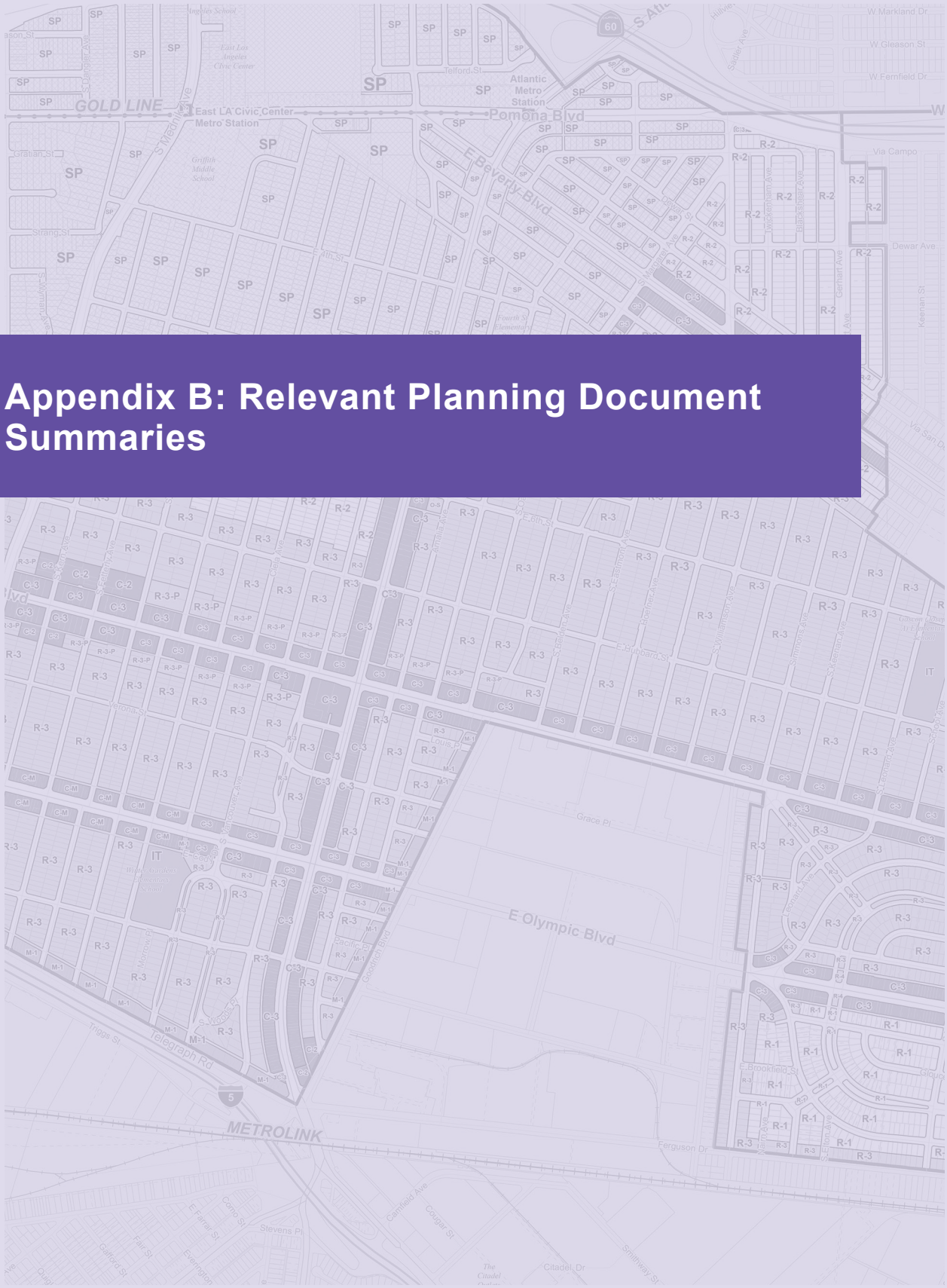
Appendix B: Relevant Planning Document Summaries



B.1 Los Angeles County General Plan (2015)

The 2035 Los Angeles County General Plan, adopted in 2015, provides a policy framework for guiding jobs and housing growth, within the unincorporated areas of Los Angeles County. The Planning Framework defines 11 Planning Areas to guide preparation of plans that respond to the uniqueness of each area. The proposed Atlantic/Whittier station area is within the Metro (East Los Angeles) Planning Area.

The Planning Framework identifies Opportunity Area Types which should be considered when preparing community-based plans. Figure B.1 identifies the East Los Angeles Transit Center Opportunity Area, which is consistent with the boundaries of the adopted East Los Angeles 3rd Street Plan and Form-Based Code Specific Plan. Transit Center Opportunity Areas are supported by transit and provide opportunities for a mix of higher intensity development and improvements that promote complete streets with active transportation. The proposed Atlantic/Whittier Station is located outside of the Transit Center Opportunity Area, and only a small portion of its half-mile station area is within the East Los Angeles Transit Center Opportunity Area.

Land Use Element

Unincorporated Los Angeles County area not within a specific plan is subject to the General Plan's Land Use Element. The Land Use Element defines Transit-Oriented Districts (TOD), areas within a half-mile radius from a major transit stop. These have the greatest potential for infill development suited for higher density housing and a mix of uses. The 3rd Street Specific Plan is identified as a TOD by the General Plan, which shares the same boundaries as the East Los Angeles Transit Center Opportunity Area (see Figure B.1). A major issue for TOD areas is an abundance of small lots which can be difficult to redevelop in order to achieve the desired density.

Land Use Element implementation programs include the Planning Areas Framework Program, the TOD Program, the Adaptive Reuse Ordinance and the Community Design Guidelines. For descriptions of these programs, refer to Chapter 16: General Plan Implementation Programs of the General Plan.

Selected Relevant Land Use Goals and Policies

GOAL LU 4: Infill development and redevelopment that strengthens and enhances communities.

- **Policies LU 4.1-4.4**: Encourage infill development on vacant, underutilized, and/or brownfield sites, the adaptive reuse of underutilized structures and economically distressed neighborhoods, and encourage transit-oriented development and mixed use in along transit corridors and major commercial corridors

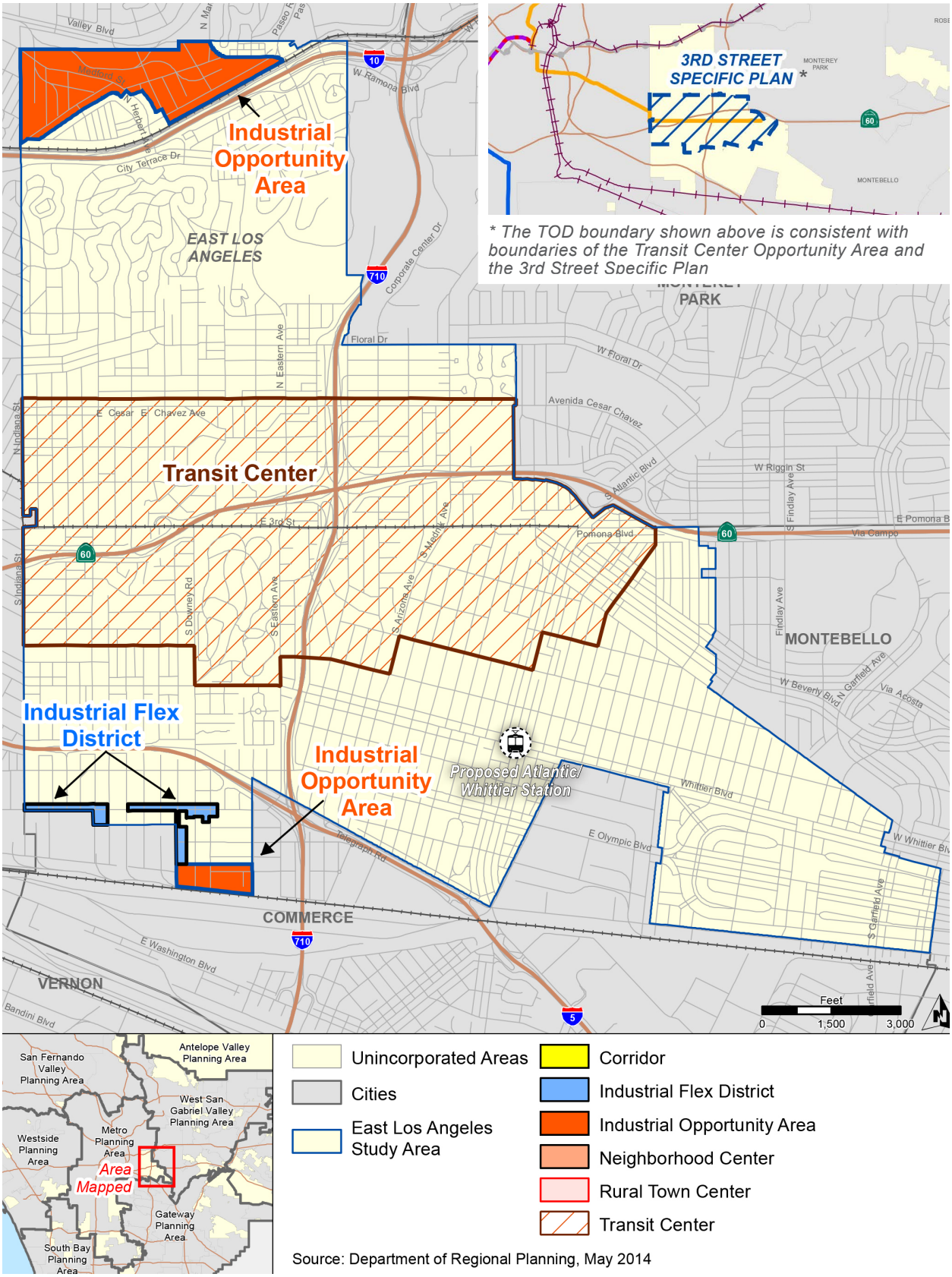
GOAL LU 5: Vibrant, livable and healthy communities with a mix of land uses, services and amenities.

- **Policies LU 5.1-5.8**: Encourage development regulations for various densities, building types and styles, a diversity of commercial and retail services, support a mix of land uses that promote bicycling and walking, and reduce vehicle miles traveled (VMT), and direct resources to areas that lack amenities such as transit, bikeways, and parks.

GOAL LU 10: Well-designed and healthy places that support a diversity of built environments.

- **Policies LU 10.1-10.13**: Consider the fabric of the existing area for the design and scale of proposed buildings as reflected in massing, materials and architectural styles; Promote sustainable design; Encourage pedestrian activity through appropriate frontages on the street, landscaping features and street furniture; Promote architecturally distinctive buildings and focal points at prominent locations such as near transit

Figure B.1: Opportunity Areas - East Los Angeles



Source: Department of Regional Planning, May 2014

stations; Facilitate the street as public space.

GOAL LU 11: Development that utilize sustainable design techniques.

- **Policies LU 11.1-11.8**: Encourage sustainable energy practices, development to maximize passive and active solar design techniques; Maximize interconnectivity and utilizing public transit.

Mobility Element

The California Complete Streets Act of 2008 requires the General Plan, through its policies and programs, to demonstrate how the County will accommodate all users for all modes of travel, making streets accessible and convenient to walk, bike or take transit.

The proposed station location is at the intersection of Atlantic and Whittier Boulevards. Both streets are designated as Major Highways due to high traffic volumes. Major Highways generally require four or more travel lanes, medians, and potentially access control and limits on intersecting streets. The typical right-of-way in urban areas is 100 feet. Alternative major highway sections may be proposed to accommodate features such as raised medians, bicycle facilities, and wider parkways with varying right-of-way widths.

Mobility Element implementation programs includes the Parking Ordinance, Community Pedestrian Plans, Safe Routes to School Program, and the Multi-modal Transportation Planning Function. For descriptions of these programs, refer to Chapter 16: General Plan Implementation Programs of the General Plan.

Selected Relevant Mobility Goals and Policies

GOAL M 1: Street designs that incorporate the needs of all users.

- **Policies M 1.1-1.3**: Accommodate all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit and persons with disabilities.

GOAL M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.

- **Policies M 2.1-2.11**: Promote active transportation and accommodate all users through a context-sensitive process; Implement street and intersection design components such as reducing lane widths to 10 or 11 feet in low speed environments and smaller corner radii to reduce crossing distances; Ensure a comfortable walking environment for pedestrians such as adequate lighting, high visibility cross walks and curb ramps which are pedestrian friendly and ADA compliant. Ensure a comfortable bicycling environment by implementing components such as road diets and bicycle signal detection at all signalized intersections.

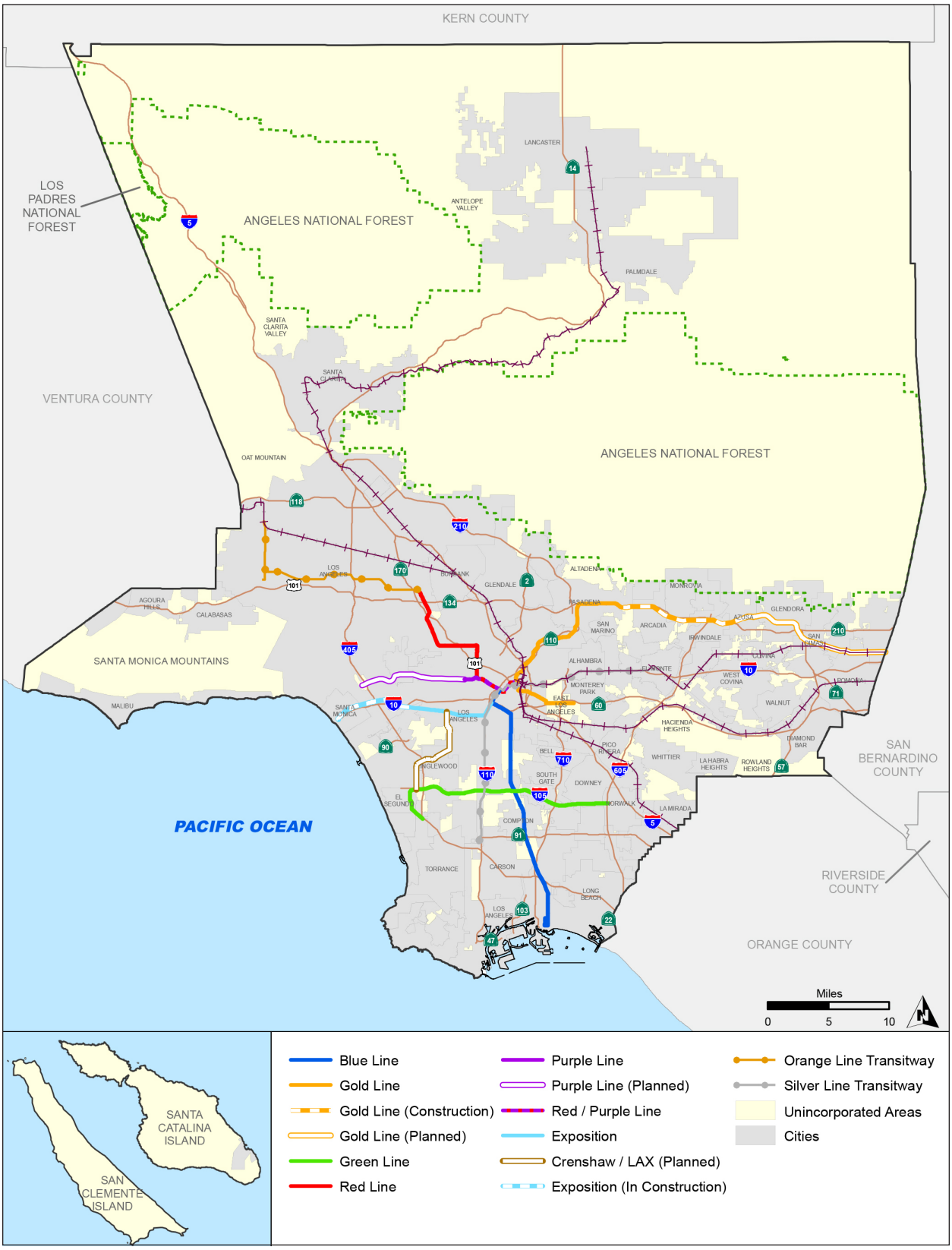
GOAL M 4: An efficient multi-modal transportation system that serves the needs of all residents.

- **Policies M 4.1-4.16**: Expand transportation and multi-modal network options and increase transit access for underserved transit users; Improve the efficiency of the public transportation system with bus lanes, signal prioritization and connections to a larger regional transportation network; Reduce vehicle trips through the use of mobility management practices, such as the reduction of parking requirements and employer/institution based transit passes.

GOAL M 5: Land use planning and transportation management that facilitates the use of transit.

- **Policies M 5.1-5.5**: Facilitate transit-oriented land uses and pedestrian-oriented design, particularly in the first-last mile connections to transit; Implement parking strategies that facilitate transit use and reduce automobile dependence; Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus service

Figure B.2: Major Public Transit Systems



Source: Los Angeles County General Plan (2015)

B.2 Housing Element (2014)

The Housing Element determines the existing and projected housing needs of the unincorporated areas, establishes goals, policies and implementation programs that guide decision making on housing needs, and implements actions that encourage the private sector to build housing.

The Housing Strategy is comprised of goals and policies to address housing availability, affordability, neighborhood and housing preservation, equal housing opportunity, and implementation and monitoring. Thirty-one programs, such as Adequate Sites for Regional Housing Needs, General Plan Update, Zoning Ordinance Update Program, Density Bonus Ordinance, and the Transit-Oriented Districts Program all have objectives and policies to implement the County's housing goals.

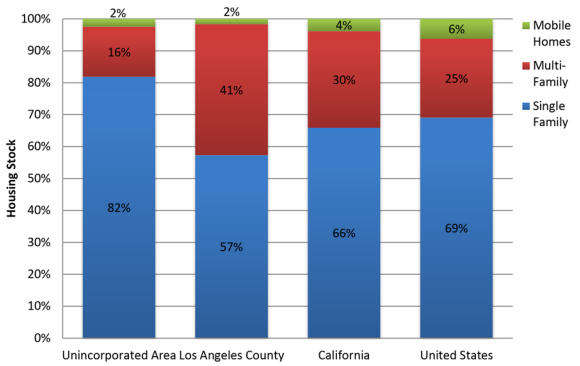
Housing Needs Assessment

One of the most prevalent issues found throughout many unincorporated areas is the lack of housing diversity as shown in Figure B.5, which profiles the housing stock by type. The majority of the housing stock in unincorporated areas of Los Angeles County are single-family homes with only 16% being multi-family which is much higher when compared to the rest of California and the United States.

Adequate Sites Assessment

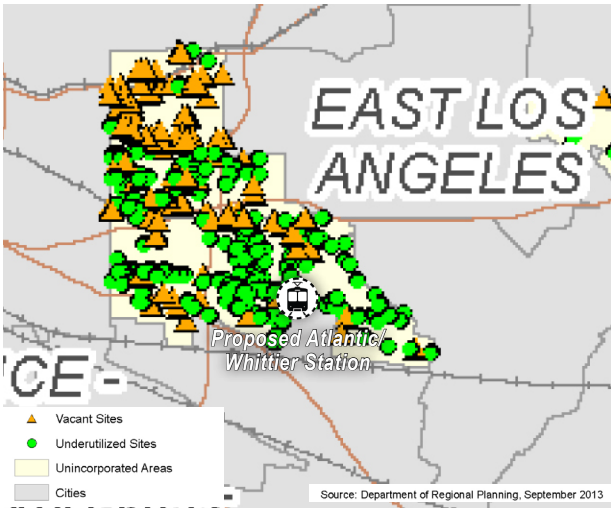
An inventory of adequate sites for new housing was developed before and after the General Plan Update. As shown on Figure B.4, unincorporated East Los Angeles has an issue with underutilized and vacant sites. Figure B.4 shows the implementation of the General Plan Update, including the 3rd Street Plan and Form-Based Specific Plan, having a positive effect on the Adequate Sites Inventory by reducing the amount of underutilized and vacant sites.

Figure B.3: 2010 Housing Stock by Type



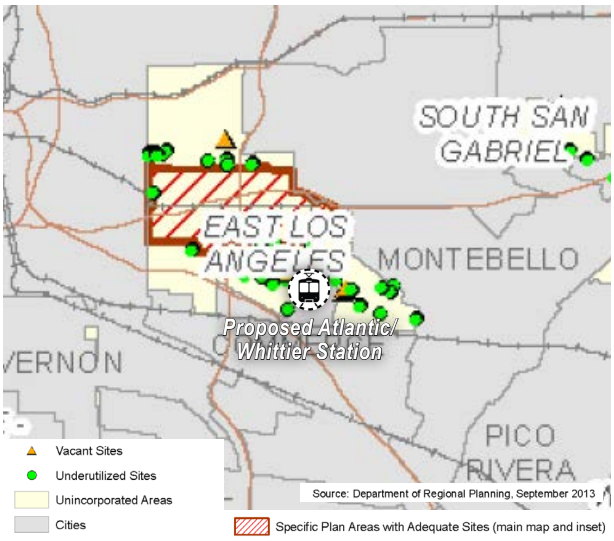
Source: U.S. Census 2010, American Community Survey 2006-2010 (Seq 33, B11011).

Figure B.4: Los Angeles County Adequate Sites Inventory (2013)



Source: Los Angeles County Housing Element (2014)

Figure B.5: General Plan Update/Adequate Sites Analysis (2013)



Source: Los Angeles County Housing Element (2014)

B.3 Los Angeles County Code

The Zoning Ordinance

The Zoning Ordinance (Title 22 of the Los Angeles County Code) regulates single-lot restrictions such as use, height, and requirements for setbacks and parking. As shown on Figure B.6, the proposed station at the intersection of Atlantic and Whittier Boulevards is generally surrounded by the C-3 General Commercial and R-3 Limited Density Multiple Residence zones. Mixed use developments are allowed in C-3 zones through a director's review, but is not allowed in R-3 zones.

Title 22 Development Standards for C-3 and R-2 Zones

Minimum Lot Size

- **C-3:** No min. Area Required
- **R-3**: 5,000 sf

Maximum Height Limit

- **C-3:** No height limit specified but permit buildings with total floor area that does not exceed 13 times the buildable area on one parcel of land. Joint live and work units and vertical mixed use developments in zones C-3 and C-M, pursuant to the Mixed Use Ordinance, have a maximum height limit of 60 feet.
- **R-3**: 35 feet

Parking

- **C-3**
  - » **General Commercial:** 1 space for each 250 sq. ft.
  - » **Non-medical Office**: 1 space for each 400 sq. ft.
  - » **Eating/Drinking Establishments:** 1 space for each 3 persons, based on load determined by Public Works Department (min. of 10 spaces)
- **R-3**
  - » **Efficiency or One Bedroom:** 1.5 covered spaces
  - » **Two or More Bedrooms**: 1.5 covered spaces and .5 uncovered space
  - » **Guest Parking**: For apartment complex with more than 10 units, 1 guest parking per 4 units

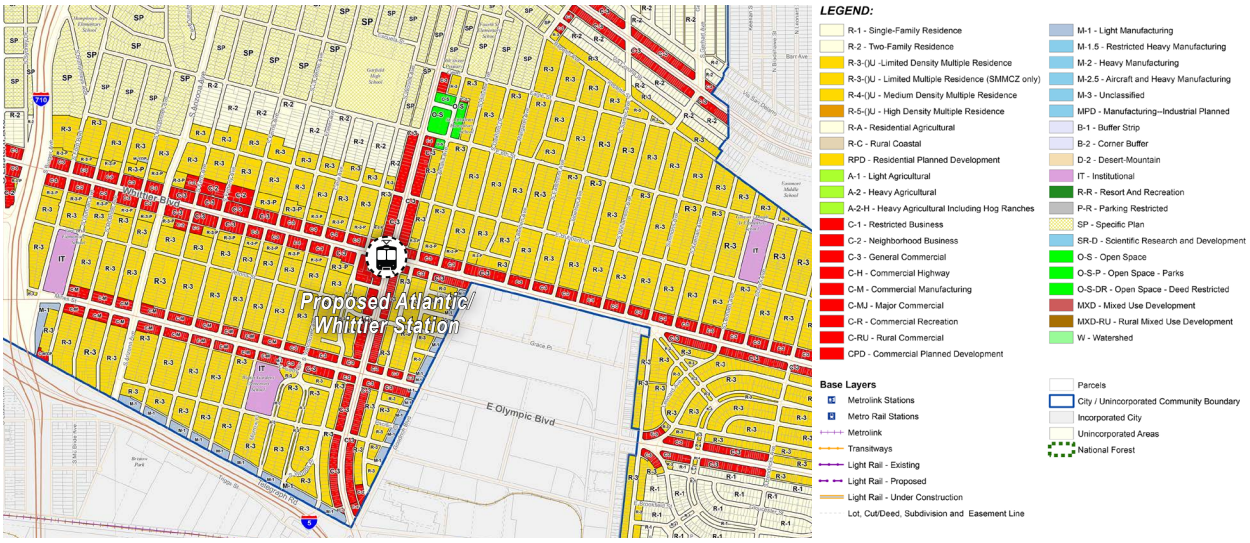
Density

- **C-3:** NA
- **R-3**: 30 du/ac

Community Standards Districts

Community Standards Districts (CSDs) provide incentives for multi-family and mixed use developments, such as the East Los Angeles CSD. These incentives include

Figure B.6: Los Angeles County Zoning - East Los Angeles



Source: Los Angeles County Department of Regional Planning

density bonuses for lot consolidation and infill development in multi-family zones.

The Atlantic/Whittier Station is within the East Los Angeles CSD. Within this CSD, the proposed station is within the Whittier Boulevard Area which carries area-specific standards. The Whittier Boulevard area specific development standards are established to provide a means of implementing the East Los Angeles Community Plan ("community plan").

Whittier Boulevard Area Wide Development Standards

Parking

- Parking shall not be required for new developments or expansions proposed within the first 50-foot depth of any commercial lot fronting Whittier Boulevard. Parking shall be required for new developments and expansions proposed beyond the 50-foot depth of any commercial lots fronting Whittier Boulevard.
- Parking for retail and office uses shall be calculated at one space for every 400 square feet of gross floor area.
- For restaurants having a total gross floor area of less than 1,000 square feet, the required parking shall be based on one space for each 400 square feet of gross floor area.
- There shall be one parking space for each six fixed seats in a theater or cinema (single screen or multi-screen). Where there are no fixed seats, there shall be one parking space for each 35 square feet of floor area (exclusive of stage) contained therein.
- All parking areas shall be located to the rear of commercial structures and out of view of Whittier Boulevard.
- A six-foot high wall (masonry or wood) shall be provided between the property and contiguous residentially zoned properties.

Setbacks

- New developments and expansions of existing structures shall maintain a maximum 10-foot setback along Whittier Boulevard. Within the 10-foot setback, permitted uses shall include outdoor dining, outside display, landscaping, street furniture and newsstands

Landscaping

- Landscaping shall be provided with the objective of creating an inviting and interesting pedestrian environment along the Whittier Boulevard area and rear alleys. At least five percent of the net lot area shall be landscaped.

Pedestrian Character

- To encourage the continuity of retail sales and services, at least 50 percent of the total width of the building's ground floor parallel to and facing the commercial street shall be devoted to entrances, show windows, or other displays which are of interest to pedestrians.
- Clear or lightly tinted glass shall be used at and near the street level to allow maximum visual interaction between sidewalk areas and the interior of buildings. Mirrored, highly reflective glass or densely tinted glass shall not be used except as an architectural or decorative accent totaling a maximum 20 percent of the building facade.
- A minimum of 30 percent of the building frontage above the first story shall be differentiated by recessed windows, balconies, offset planes, or other architectural details which provide dimensional relief. Long, unbroken building facades are to be avoided.

Additional Standards

- Additional requirements were enumerated relating to signage, loading, materials, awnings, mechanical equipment, and security features permitted in the Whittier Boulevard Area.

Mixed Use Ordinance

The Los Angeles County Mixed Use Ordinance was adopted in 2009. The ordinance permits mixed use developments and joint live and work units in zones C-H (Commercial Highway), C-1 (Restricted

Business), C-2 (Neighborhood Business), C-3 (Unlimited Commercial), and C-M (Commercial Manufacturing) provided that the applicant obtains a ministerial director's review and approval or a minor conditional use permit. The ordinance does not permit any mixed use developments nor joint live and work units if any portion of the development would be located in a Significant Ecological Area (SEA); an Environmentally Sensitive Habitat Area (ESHA); a Very High Fire Hazard Severity Zone; an Airport Land Use influence area as depicted in the Los Angeles County Airport Land Use Plan; on land with a slope of 25 percent or more; or, on land not served by a public water or public sewer system.

Mixed Use Development Standards

Parking

- With the exception of fully subterranean structures, all parking areas shall:
  - » Be located in the rear of the structure(s); and
  - » Be completely screened with walls and/or landscaping so that they are not visible from the street that provides frontage, except that views of parking areas down or along access driveways need not be screened.
- Separate commercial and residential parking spaces must be provided in compliance with Part 11 of Chapter 22.52, which spaces shall be separately designated by posting, pavement marking, and/or physical separation.

Loading/unloading

- Off-street loading areas shall be located toward the rear of the structure(s) and shall not be visible from the street.

Trash/recycling

- Areas for the collection and storage of refuse and recyclable materials shall be located on the site in locations that are convenient for both the residential and commercial uses. The trash enclosures shall be located toward the rear of the structure(s) and shall not be visible from the street.

Density

- **Zones C-H, C-1, and C-2:** 17 dwelling units per net acre max.
- **Zones C-3 and C-M:** 50 dwelling units per net acre max.

Height

- **Zones C-3 and C-M:** 60 feet above grade max., excluding chimneys and rooftop antennas.

Performance Standards

- With the exception of entrance hallways and joint live and work units, commercial and residential uses shall not be located on the same floor;
- With the exception of joint live and work units, the ground floor space shall be devoted solely to commercial uses;
- With the exception of joint live and work units, all floor space above the ground floor shall be devoted solely to residential uses.
- The hours of operation for commercial uses shall be no earlier than 7:00 a.m., and no later than 10:00 p.m., daily.

Joint Live and Work Unit Development Standards

Parking

- Parking for joint live and work units shall comply with the provisions of Section 22.52.1145.

Minimum Size

- The minimum size of a joint live and work unit shall be 1,000 square feet.

B.4 East Los Angeles 3rd Street Plan (2014)

The 3rd Street Plan is a vision plan that sets forth a comprehensive set of strategies and design guidelines consistent with the goals, objectives, and policies of the County of Los Angeles General Plan and the East Los Angeles Community Plan.

This Plan builds on the 1978 East Los Angeles Community Plan and its revisions, and outlines what is necessary to succeed over a twenty-year planning horizon. Furthermore, this Plan also addresses the limitations of the 1978 plan and the East Los Angeles Community Standards District (CSD) regulations, through a new form-based code (see 2A.5) completed concurrently with this Plan to implement the 3rd Street Plan.

Only a portion of the Atlantic/Whittier half mile station area is within the 3rd Street Plan area.

3rd Street Vision

Major changes are expected around the Gold Line stations of Indiana, Maravilla, Civic Center, and Atlantic. 3rd Street station areas will be transformed into “transit centers” with vibrant mixed-use buildings containing retail shops, restaurants, or offices that support both the community and will serve as a destination for visitors and commuters. A variety of housing types will be encouraged near stations to accommodate residents of different ages, incomes, and household sizes. Plazas, outdoor dining, and public art will help to create attractive, distinctive, and vibrant places. The 3rd Street vision and transformation plan includes the following four transit station areas:

- Indiana Station Area
- 3rd Street between the freeways
- Maravilla and Civic Center Station Areas
- Atlantic Station Area

Plan Framework

Figure B.7 identifies areas and six area typologies within the Plan area with the potential future change, which are depicted in Figure B.8 as an illustrative study. The objectives of the three area typologies identified in Figure B.7 that are within half mile radius of the Atlantic/Whittier Station but do not enclose the station are discussed below:

1. TOD (labeled 1 on Figure 2A.4.1)

- Establish Indiana Station and Atlantic Station as western and eastern gateways
- Allow for mixed-use buildings that provide a range of goods, services, housing, and employment opportunities
- Provide a context-sensitive parking strategy, shared parking, and recognize non- motorized travel
- Enhance retail viability, walkability and safety on 3rd Street with an improved streetscape and open space strategy

2. Neighborhood Center (labeled 2 on Figure 2A.4.1)

- Maximize shallow parcels with mixed-use buildings in an effort to provide valuable ground floor retail space or business suites as well as upper floor apartments or condominiums
- Establish a safer pedestrian and bicycle network for north-south travel between the neighborhoods in and out of East Los Angeles
- Enable suitably-scaled infill development to reinforce the existing scale and historic resources
- Enable corridor development that is compatible and consistent with the scale and character of adjacent neighborhoods
- Provide varied housing options and resident-oriented service amenities

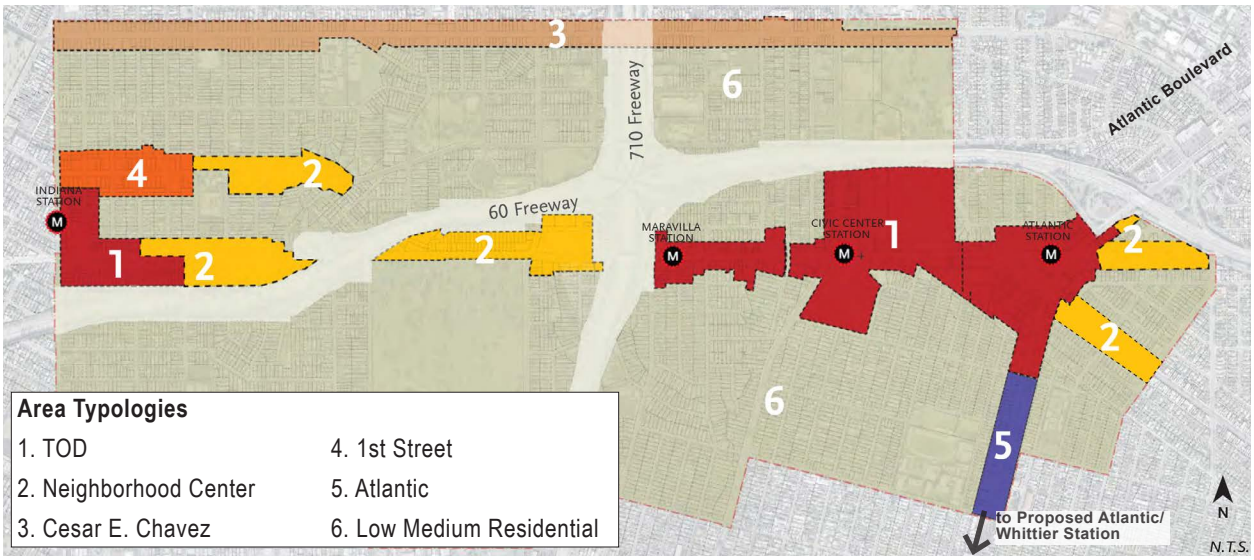
5. Atlantic (labeled 5 on Figure 2A.4.1)

- Establish a unique pattern of development that will reinforce the pedestrian character of this district and create a distinctive setting that will appeal to a wide variety of retailers, employers, and shoppers
- Reinforce the commercial fabric of Atlantic Boulevard, providing parking and services behind building

- Provide alternative high value uses and restore balance between residential and neighborhood-compatible industrial activity

Conceptual sketch of 3rd Street and Atlantic Station
Source: East Los Angeles 3rd Street Plan (2014)

Figure B.7: Plan Framework



Source: East Los Angeles 3rd Street Plan (2014)

Figure B.8: Illustrative Plan - Atlantic Station Area Vision

C Mixed-use infill and new street alignment with shared surface parking

D Gold Line Atlantic Station platform

E Courtyard housing infill opportunity site

F New MTA-funded Park-Once garage

G Mixed-use infill fronting 3rd, Atlantic, and Beverly, over subterranean garage

H Rowhouses and/or live-work fronting a proposed park

I Two-story mixed-use infill with parking in rear

Source: East Los Angeles 3rd Street Plan (2014)

B.5 East Los Angeles 3rd Street Form-Based Code Specific Plan (2014)

Transect Zones

This Form-Based Code Specific Plan (Form-Based Code or ordinance) is established as the primary means to implement the East Los Angeles 3rd Street Plan. The Form-Based Code, as shown on Figure B.9, identifies eight transect zones within the specific plan area. The proposed relocation of the Atlantic Station is within the 3rd Street (TOD) zone, and is within a half mile of the Atlantic Boulevard (AB), Neighborhood Center (NC) Civic (CV), and Low-Medium Density Residential (LMD) zones. The proposed station at Atlantic Boulevard and Whittier Boulevard is within a half mile of the AB, CV and LMD zones.

General Standards

This section establishes general standards and regulations that apply to all Transect Zones. Standards such as Parking, Shared Parking, and Landscaping and Screening for Parking Lots.

Required Form and Articulations

This section establishes the building forms and articulations for each Transect Zone. Architectural Character, Building Massing, Materials, Openings and Roofs fall under the provisions of this section.

Transect Zone Standards

This section establishes the allowable uses and development standards for each Transect Zone, such as allowed building types as shown on Figure B.10.

Atlantic Boulevard (AB)

- **Building Types:** Court; Lined Block; Flex Block
- **Height**: 2.5 stories max; 40 ft. max. overall
- **Density**: 30 du/ac
- **Building Scale**: Any building greater than 150 feet in length shall be designed with a forecourt frontage type or other similar massing break

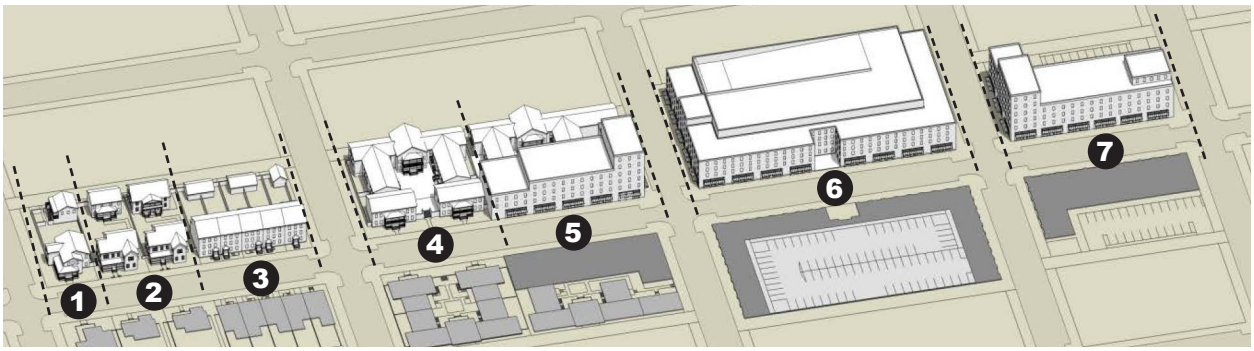
Figure B.9: Transect Zones

Source: East Los Angeles 3rd Street Plan (2014)

Low-Moderate Density Residential (LMD)
Building Types: House; Duplex/Triplex

- **Height**: 2.5 stories max; 35 ft. max. overall
- **Density**: 17 du/ac
- **Building Scale**: Any building greater than 150 feet in length shall be designed with a forecourt frontage type or other similar massing break

Figure B.10: Building Types Plan and Diagram



1. **House:** A building designed as a single-family dwelling unit, and may be used for non-residential purposes where allowed.
2. **Duplex/Triplex:** A building containing two or three dwelling units where each dwelling unit is accessed directly from the street, and may be used for non-residential purposes where allowed.
3. **Rowhouse:** A residential building that is an attached structure that shares a common party wall with another of the same type and is arranged side by side. The delineation of a private yard is evident.
4. **Court:** A building comprised of attached and/or stacked dwelling units arranged around a shared, landscaped courtyard that is visible from the street. Dwelling units face and are directly accessed from the street or courtyard. In qualifying Transect Zones, Court buildings may accommodate ground floor non-residential uses.
5. **Hybrid Court:** A building that is a combination of the Court and Flex Block buildings designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences that combines stacked dwelling units with the Court housing types. May contain horizontal mixed uses.
6. **Lined Block:** A building that conceals a larger structure such as a public structure or "big box store" and which is designed for occupancy by retail, service, and/or office uses on the ground floor, with upper floors also configured for those uses or for residences.
7. **Flex Block:** A building that is one to three stories tall and designed for occupancy by retail, service, and/or office uses on the ground floor; and when present the upper floors are also configured for those uses or for dwelling units. May contain horizontal mixed uses.

Source: East Los Angeles 3rd Street Plan (2014)

B.6 Los Angeles County Bicycle Master Plan (2012)

The Plan guides the development and maintenance of a comprehensive bicycle network and set of programs throughout the unincorporated communities of the County of Los Angeles for 20 years (2012 to 2032). The Plan is an update to the 1975 County Bikeway Plan. The Plan provides direction for improving mobility of bicyclists and encouraging more bicycle ridership within the County by expanding the existing bikeway network, connecting gaps, addressing constrained areas, providing for greater local and regional connectivity, and encouraging more residents to bicycle more often. This Plan is a sub-element of the Mobility Element of the Los Angeles County General Plan.

Summary of Recommendations

To improve mobility for cyclists the plan proposes a network of complete streets, improving safety for bicyclists, and increasing public awareness of and support for cycling in the County of Los Angeles. The County-wide recommendations include bicycle infrastructure improvements, bicycle-related programs, implementation strategies, and policy and design guidelines for the unincorporated communities of the County of Los Angeles and where the County owns property or has jurisdictional control.

Metro Planning Area Existing Bicycle Network, Major Transit Stations and Bicycle Crashes

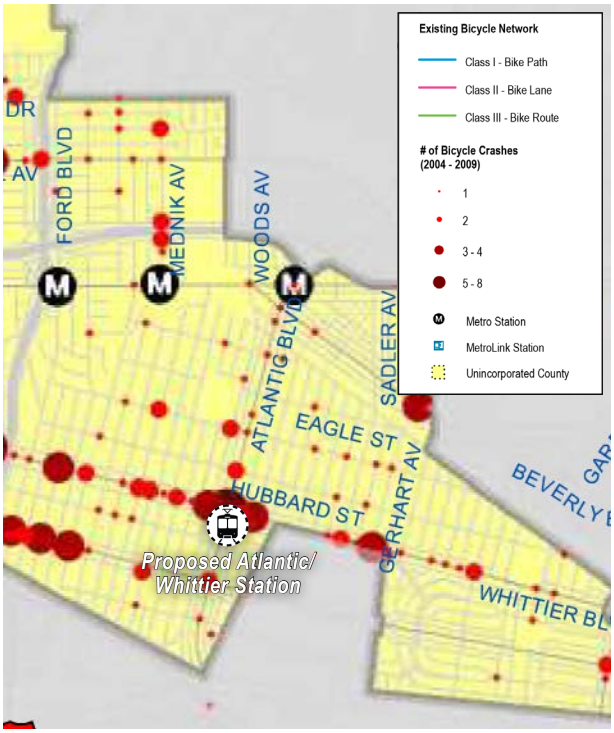
The proposed Atlantic/Whittier station in East Los Angeles is within the General Plan's Metro Planning Area which has some of the highest bicycle crash rates in a LA County UA, as shown on Figure B.11 for East Los Angeles. The high crash rates are attributed to the high ridership within the planning area and a corresponding urgent need for improved bicycle infrastructure. Policy 2.1, under Goal 2 - Safety, prioritizes improvements at locations with high crash rates.

Metro Planning Area Proposed Bicycle Facilities

Bicycle facilities do not currently exist on Atlantic Boulevard. Figure B.12 shows that there are no proposed bicycle facilities planned for Atlantic Boulevard. A Class III Bike Route is planned for Whittier Boulevard, and within the proposed the station area, Woods Avenue (north-south corridor) and Hubbard Street (east-west corridor) are planned as Bicycle Boulevards.

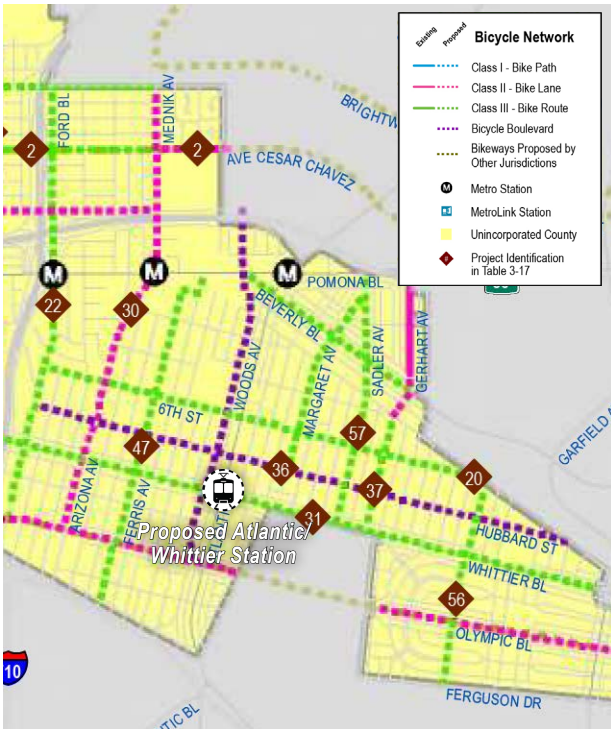
Figure B.13 shows the Bikeway Facilities Types as defined in the Master Plan.

Figure B.11: Existing Bicycle Network, Transit Stations, and Bicycle Crashes (2004-2009)



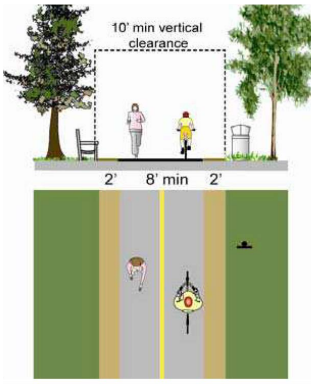
Source: Los Angeles County Bicycle Master Plan (2012)

Figure B.12: Metro Planning Area Proposed Bicycle Facilities

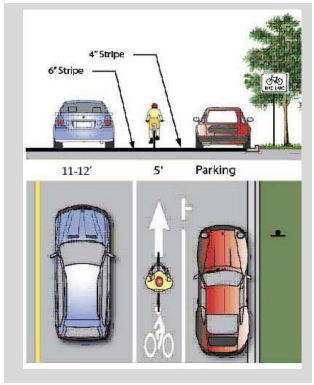


Source: Los Angeles County Bicycle Master Plan (2012)

Figure B.13: Bicycle Facilities Types

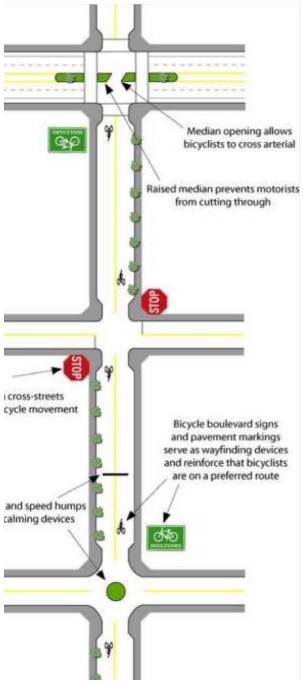


Class I - Bicycle Path



Class II - Bicycle Lane

Class III - Bicycle Route



Bicycle Boulevard

Source: Los Angeles County Bicycle Master Plan (2012)

B.7 Los Angeles County TOD Access Study (2013)

The purpose of this study is to assess the station access capacity and needs within nine proposed TODs in Los Angeles County. The proposed stations are part of the A Line (Blue), C Line (Green), and L Line (Gold) transit lines with the Sierra Madre Villa Station being the only L Line station studied.

This document assesses the state of the public amenities that facilitate and support pedestrian, bicycle, and transit access to the transit stations. The report also includes conceptual bicycle and pedestrian infrastructure plans and recommendations, such as bike parking as outlined on Table B.1, that address the existing and needed infrastructure to support the TODs.

The intent of these recommendations is to provide preliminary guidance, which will inform the DRP's forthcoming specific plans for the TODs.

Guiding Principles and Assumptions

Pedestrian Improvements

- Shorten pedestrian crossings.
- Reduce curb radii.
- Send pedestrians in the direction of travel.
- Create and add buffers to sidewalks.
- Provide refuges.
- Slow traffic speeds.
- Create public space.
- Intersection Improvements.

All recommended corner modifications—bulb-outs and reduced curb returns—assume the inclusion of perpendicular curb ramps with truncated domes. Proposed designs create a small curb radius, in order to constrain the speed of turning vehicles.

Recommendations for placing bus bulbs consider the following factors, among others, as appropriate:

- Driveways
- Bus turning movements
- Presence of on-street parking
- Number of buses using stop

Bicycle Improvements

- Assume an 11-foot preferred lane width for all through travel lanes. This is the County standard. 10-foot lanes may be considered on a case-by-case basis upon a review of the existing geometric design, accident history, and traffic volumes
- Assume a minimum width of 10-feet for a center-turn lane
- Assume a preferred width of 8-feet for parking lanes, which may be reduced to 7-feet where conditions necessitate a narrower parking lane to accommodate a bike lane
- The minimum width of a bike lane is 5 feet, but 6 feet is preferred as the standard wherever possible. 7 feet is recommended if space permits.
- If bike lanes fit with the existing roadway configuration using the assumed travel lane widths above, the road configuration will remain constant
- Recommend colored bike lanes on major boulevards where existing vehicle volumes are comparatively high, and in retail corridors
- On quiet local streets that provide routes to the station, recommend sharrows and signs
- On busier roadways or in more urban areas where there is on-street parking on both sides and bike lanes do not fit with the above assumptions, recommend more frequent and prominent Type B sharrows
- Bike paths may be recommended to create connections in the network across undeveloped land areas
- Bike paths are also recommended along other rights of way, such as rivers and rail lines
- Where there is excess road space for at least one half-mile, this report recommends the inclusion of a painted buffer with the bike lane

Source: Los Angeles County TOD Access Study (2013)

Source: Los Angeles County TOD Access Study (2013)

Table B.1: Bike Parking

	Bike Stations	Bike Lockers: Subscription	Bike Lockers: Shared System	Bike Lids	Self-Service Bike Cage	Automated Parking
Description	Provides valet-attended parking. Other services (lockers, changing rooms, showers, bicycle repair, etc.) optional	Metal or plastic crates for storing bicycles. Self-serve	Metal or plastic crates for storing bicycles. Self-serve	Plastic shell that covers 1-2 bicycles and is secured by the user's padlock	Bicycle racks behind a locked door. Free-standing cages, or fenced-in room	Large device that stores bicycles, often underground, and moves and retrieves them by mechanical means
Method of Access	Electronic key access, must purchase membership	Subscribers assigned a specific locker	Electronic key accesses network of lockers on first-come, first-served basis	First-come, first-served	Electronic or other entry through door for subscribers	A card swipe system tags and retrieves bikes
Typical Fees	Monthly/annual subscription	Deposit and monthly/annual fee	Fees charged electronically by use (several cents per hour)	None	Monthly/annual subscription in some, but not all	Monthly/annual subscription
Benefits	High level of service and security.	Users guaranteed a spot. More secure than racks	Higher utilization than subscription lockers. Users pay only for what they use. More secure than racks	Nearly as secure as lockers. No advance registration required	Lower operating costs than attended parking. More secure than open racks. High potential utilization	Space-efficient, high level of service and security
Cons	High capital and operating costs. Additional agency owned infrastructure	Potential for patrons to store items other than bicycles. Waitlists for subscriptions common. Low utilization	Potential for patrons to store items other than bicycles. Electronic payment system increases operating costs	Operating and maintenance costs unknown. User must have a padlock and U-lock	Additional agency-owned infrastructure. Lower security and service to patrons than attended parking	High capital and operating costs. Additional agency-owned infrastructure

Source: Modified from TCRP Report 153: Guidelines for Providing Access to Public Transportation Stations

Source: Los Angeles County TOD Access Study (2013)

B.8 Metro Complete Streets Policy (2014)

The policy demonstrates Metro's ongoing commitment to ensuring that streets form a comprehensive and integrated transportation network promoting safe and convenient travel for all users while preserving flexibility, recognizing community context, and using design guidelines and standards that support best practices. The Policy is intended to maximize, benefit and improve on the following **goals:**

- Transit service and improve access to public transit by making it convenient, safe, and attractive for users;
- Multi-modal benefits and efficiencies;
- Safety for all users;
- Multi-jurisdictional coordination and leverage partnerships and incentive programs to achieve a complete" and integrated transportation system;
- Active transportation improvements as integral elements of the county wide transportation system;
- Healthy, equitable, and economically vibrant communities with greater mobility choices.

Complete Streets Policy Statement

Principles

- **Complete Streets Serving All Users and Modes.** Plan and fund Complete Streets that provide safe, comfortable, and convenient travel along and across streets through a comprehensive, integrated transportation network that serves all categories of users, including pedestrians, users and operators of public transit, bicyclists, persons with disabilities, seniors, children, motorists, users of green modes, and movers of commercial goods.
- **Context Sensitivity**. Sensitivity to local conditions in both residential and business districts as well as urban, suburban, and rural areas, and will work with the community for a strong sense of place, and be consistent with best practices, such as the Metro First/Last Mile Strategic Plan, NACTO Urban Street Design Guide, NACTO Urban Bikeway Design Guide, Los Angeles County Model Design Manual for Living Streets, or equivalent.
- **All Projects and Phases.** Complete Streets infrastructure sufficient to enable reasonably safe travel along and across the right of way for each category of users will be incorporated into all planning, funding, design, approval, and implementation processes for any transit and highway planning and design, new construction, reconstruction, retrofits, rehabilitations, and capital grant programs.

Implementation

- **Design.** Design and evaluate projects using the latest design standards and innovative design options, with a goal of balancing user needs.
- **Network/Connectivity.** Incorporate Complete Streets infrastructure into transit and highway planning and design, new construction, reconstruction, retrofits, rehabilitations, and Metro capital grant programs with the particular goal of creating a connected network of facilities accommodating each category of users, and increasing connectivity and for anticipated future transportation investments.
- **Implementation/Next Steps.** Next steps to implement this Complete Streets Policy:
  - » Plan Consultation and Consistency
  - » Stakeholder Consultation
  - » As identified in Table B.2
- **Performance Measures.** Develop additional performance metrics and track progress toward achieving sustainability policies and priorities, including Complete Streets implementation, which will be included in the annual Sustainability Report developed by the Countywide Planning and Development Department.

Table B.2: Complete Streets Implementation Policies

Category
1. **Education and Technical Assistance**
1.1 Provide education and training for policy makers, elected officials, planners, engineers, and the general public on the benefits, needs, and implementation of Complete Streets.
1.2 Encourage the use of best practices in Complete Streets design, such as NACTO Urban Street Design Guide, NACTO Urban Bikeway Design Guide, Los Angeles County Model Design Manual for Living Streets, and other guidelines and standards that promote a standard of excellence for multimodal design.
1.3 Develop and maintain Complete Streets website to provide agencies and interested stakeholders with relevant information, resources, and best-practices to implement Complete Streets. Provide information on local, state, and federal grant opportunities related to Complete Streets promotion, planning, design and construction. Provide access to timely and informative data, information, and research.
1.4 Create and publish performance metrics that can be used to help local jurisdictions prioritize projects for funding, and to evaluate projects once they have been completed.
1.5 Explore strategies to provide technical assistance to low-resourced cities, including providing applicable templates, exploring partnership opportunities, pursuing grant opportunities, and connecting agencies to other local organizations and expert sources, where applicable.
1.6 Metro will highlight best practices to assist local jurisdictions in the development of design guidelines and policies.
1.7 Metro recognizes the potential for transportation infrastructure to support a variety of sustainability goals, including reducing water and energy impacts, as established in the Sustainable Design Program in the Call for Projects. In implementing Complete Streets, local jurisdictions may wish to consider and incorporate storm water management and other components supporting environmental function. Metro is currently completing an Urban Greening Plan and Toolkit along with opportunity analysis and research. Metro will compile the results of this effort, along with other informational resources, to provide guidance on incorporating green infrastructure into roadway improvements. Metro's Plan and Toolkit will be complete by January 2016, and guidance pertinent to this policy will be compiled by July 2016.
1.8 Assemble Complete Streets Working Group, which may consist of experts with Complete Streets knowledge and expertise, local agency representatives, Metro representatives, and other stakeholders who can provide technical assistance and input for planning and development of Complete Streets.
1.9 Assist local agencies to seek opportunities and partnerships to implement demonstration projects to showcase best practices and case studies and to highlight Complete Streets implementation in a variety of context.
1.10 Developing a Transit Oriented Development (TOD) Toolkit to serve as a resource for local jurisdictions interested in implementing transit supportive land use regulatory changes. The TOD Toolkit will include an assessment of best practices for sustainable, transit-oriented land use planning. Best practices related to land use, density, diversity of uses, parking (vehicle and bicycle), bicycle/pedestrian amenities and linkages, public facilities and infrastructure, and general principles of sustainable neighborhood design will be developed. In addition, the TOD Toolkit will include a review of best practices for community engagement, as well as tools for assessing the economic and environmental benefits of transit supportive development.
2. Joint Development
2.1 Include appropriate text in Requests for Proposals to ensure excellence in multimodal design and access.
2.2 Work with local jurisdictions to incentivize developer mitigations to address first and last mile solutions, consistent with the First Last Mile Strategic Plan.
3. System Connectivity, Integration, and Performance
3.01 Develop Active Transportation Strategic Plan to identify strategies to improve and expand the active transportation network and improve first/last mile access to transit; provide guidance to Metro and partner organizations in setting regional active transportation policies and guidelines to meet transportation goals and targets in support of the Regional Transportation Plan/Sustainable Community Strategies and other future planning efforts; engage local government and other stakeholders to identify key regional active transportation projects and programs within Los Angeles County through a collaborative stakeholder process and explore strategies to expedite implementation.
3.02 Better design street treatments around freeway on and off ramps in highway corridor projects to facilitate safer and convenient access for pedestrians and bicyclists who must cross these corridors. Ensure project team members have staff skilled and experienced to address multimodal and complete streets planning and design by providing training to Metro staff members involved in project and/or as part of criteria during consultant team selection.
3.03 Seek opportunities to implement first and last mile connections to transit.
3.04 Seek opportunities to include transit improvements, pedestrian and bicycle facilities, and other first and last mile components onto new or retrofit Metro capital projects, transit and highway corridor planning and design, and Metro facilities to maximize efficiencies, when appropriate.
3.05 Conduct periodic bicycle and pedestrian counts at various locations to determine needs and opportunities for improving pedestrian and bicycle travel and access to transit.
3.06 Partner with local jurisdictions and agencies to expedite implementation of high priority active transportation projects.
3.07 Expand bicycle parking at Metro stations and stops, including creating bicycle hubs, increasing bicycle parking, implementing bike share, and providing other bicycle facilities.
3.08 Develop online interactive map to facilitate countywide network planning and coordination. The map(s) will provide overview of priority routes for various modes, as identified through local and regional plans, including local bicycle, pedestrian, transit, multimodal, goods movement and other relevant plans.

Source: Metro Complete Streets Policy (2014)

B.9 Los Angeles County Model Design Manual for Livable Streets (2011)

The Los Angeles County Model Design Manual is based on complete streets principles that design streets for people of all ages and physical abilities and accommodate all travel modes. Common direct outcomes of existing manuals include:

- Streets that are not safe to cross
- Streets that are not safe to bicycle on
- Streets that encourage high speeds
- Narrow sidewalks to walk along
- Inconvenient street crossings for people in wheelchairs
- Unsightly and uninviting streets
- Auto-oriented land uses that are uninviting
- Street water runoff systems that funnel rainwater to the storm drains and directly to waterways

The Manual's Living Streets Policies also promote economic vibrancy as shown on Table B.3. Topics include equity, environmental sustainability, aesthetics, and more. The Manual provides guidance for those municipalities that decide to adopt these principles. The result is aimed at having more livable neighborhoods with healthier residents due to opportunities for active transportation.

Vision, Goals, Policies, and Benchmarks

Vision

This Manual aims to design streets that adhere to a vision of living streets. Any changes or improvements to streets should add value to the adjacent land and neighborhoods. The vision for livable streets is outlined through the following **goals:**

- Integrate income, racial, and social equity into their design and function
- Are designed for people of all ages and physical abilities whether they walk, bicycle, ride transit, or drive
- Integrate connectivity and traffic calming with pedestrian-oriented site and building design to create safe and inviting places
- Connect people through interaction
- Are inviting places with engaging architecture, street furniture, landscaping, and public art that reflect the diversity and cultures of the neighborhood
- Strengthen and enhance neighborhoods as envisioned by community members without displacing current residents
- Encourage active and healthy lifestyles
- Integrate environmental stewardship, water management, energy conservation, and preservation of plant life
- Vary in character by neighborhood, density, and function

Policies

Policies implement the vision and goals. Table B.3 aligns living streets policies with the 10 elements for complete streets established by the National Complete Streets Coalition. Local jurisdictions may follow this template, or adopt other similar policies. Cities (or counties) should enact these policies through a living streets ordinance or resolution.

Benchmarks

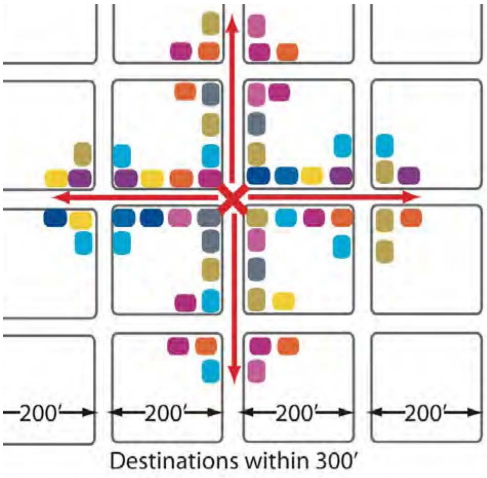
- Walking and cycling is comfortable along every street and within every neighborhood.
- Every child can walk or bike to school safely.
- Seniors, children, and disabled people can cross all streets safely and comfortably.
- An active way of life is available to all.
- There are zero traffic fatalities.
- No unfiltered streetwater flows into local waterways or the ocean.
- Retail streets become one of the most popular destinations for tourists in the country.

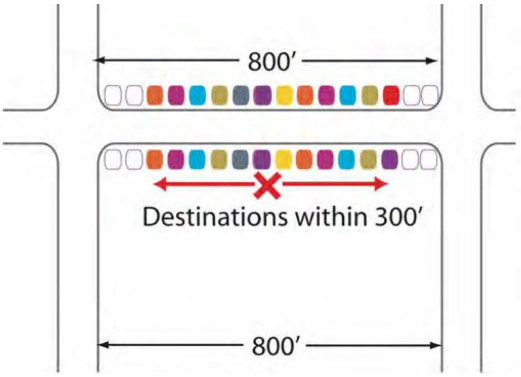
Table B.3: Living Streets Policies

Complete Streets Elements	Living Streets Policies
Design	Cities will adopt new living streets design guidelines to guide the planning, funding, design, construction, operation, and maintenance of new and modified streets while remaining flexible to the unique circumstances of different streets where sound engineering and planning judgment will produce context-sensitive designs. Cities will incorporate the street design guidelines' principles into all city plans, manuals, rules, regulations, and programs as appropriate. As new and better practices evolve, cities will incorporate those as well. Cities will keep street pavement widths to the minimum necessary. Cities will provide well-designed pedestrian accommodation in the form of sidewalks or shared-use pathways on all arterial and collector streets and on local streets. Cities will provide frequent, convenient and safe street crossings. These may be at intersections designed to be pedestrian friendly, or at mid-block locations where needed and appropriate. Cities will provide bicycle accommodation along all avenues, boulevards, and connector streets. Where physical conditions warrant, cities will plant trees and manage streetwater whenever a street is newly constructed, reconstructed, or relocated.
Context Sensitivity	Cities will plan their streets in harmony with the adjacent land uses and neighborhoods. Cities will design their streets with full input from local stakeholders. Cities will design their streets in harmony with natural features such as waterways, slopes, and ravines. Cities will design their streets with a strong sense of place. They will use architecture, landscaping, streetscaping, public art, signage, etc. to reflect the community, neighborhood, history, and natural setting. Cities will coordinate with merchants along Main Street corridors to develop vibrant retail districts.

Source: Los Angeles County Model Design Manual for Livable Streets (2011)

Figure B.14: Destinations by Block Scale





Many more destinations can be reached walking 300' within a network of short blocks than in one with long blocks (Credit: Marty Bruinsma)

Source: Los Angeles County Model Design Manual for Livable Streets (2011)

B.10 Los Angeles County Draft Vision Zero Action Plan (2019)

The County of Los Angeles has released a draft Vision Zero Action Plan which is expected to be adopted in 2020. This Plan will guide a new traffic safety initiative focused on eliminating traffic-related deaths on unincorporated County roadways by 2035. As shown on Figure B.15, the proposed station at Atlantic and Whittier Boulevards is affected by traffic safety concerns. Within the station area, collision concentration segments have been identified for Whittier Boulevard, Atlantic Boulevard, and Olympic Boulevard.

Objectives

A set of actions has been developed for the next five years to move closer to the goal of eliminating traffic fatalities and severe injuries. These actions include efforts to update, expand, and establish new processes, policies, trainings, projects, and programs.

The actions are organized into five objectives. These objectives represent the County's priorities and help put the guiding principles into action.

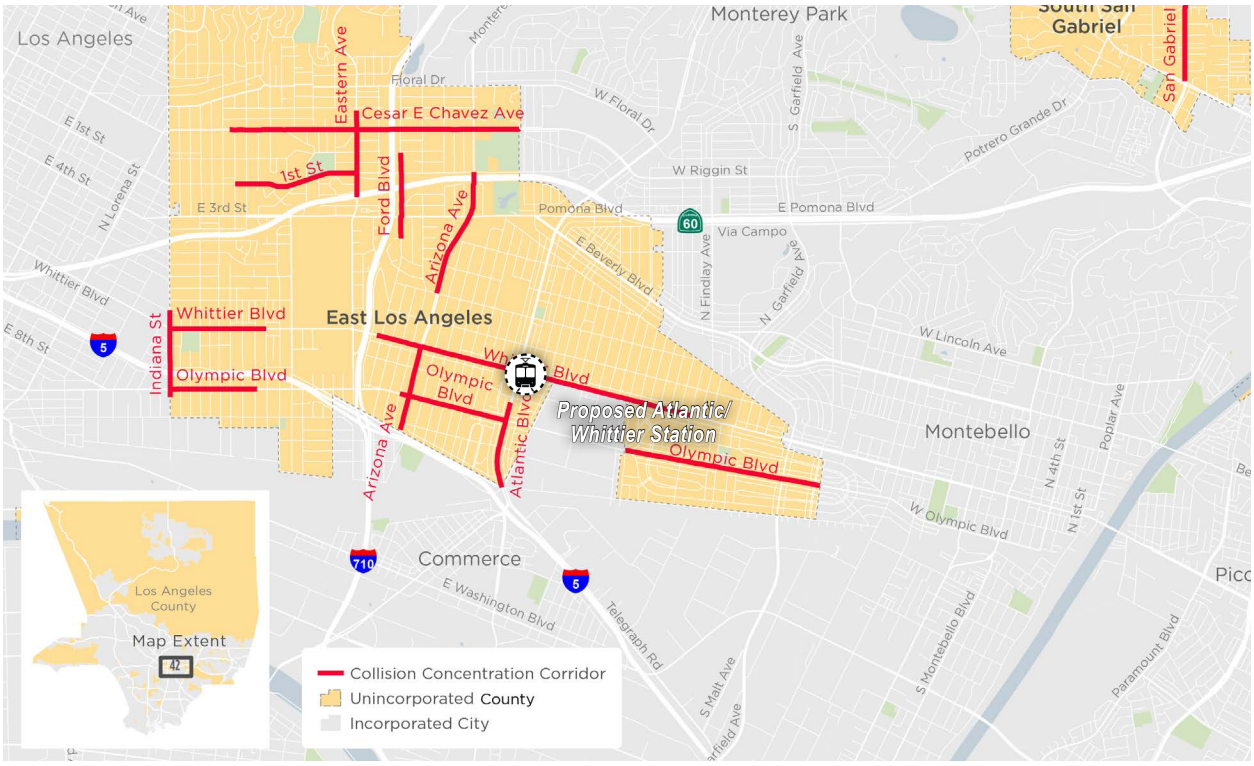
- Enhance County Processes and Collaboration
- Address Health Inequities and Protect Vulnerable Users
- Collaborate with Communities to Enhance Street Safety
- Foster a Culture of Traffic Safety
- Be Transparent, Responsive, and Accountable

Actions

Each action, as shown on Table B.4 for the fourth objective, includes details on the benchmarks and/or metrics for evaluating success; and identifies which agency will lead implementation. The County will report on each of these actions annually and revise them as necessary if objectives are not being met.

Achieving the Vision Zero goals and objectives in the time frames specified and implementation of any future engineering projects to achieve the goals and objectives of this Plan are contingent upon multiple factors including obtaining community support of the proposed engineering projects and securing sufficient funding to finance all phases of a project including installation, operation, on-going maintenance, appropriate environmental analysis, and engagement.

Figure B.15: Collision Concentration Corridors



Source: Los Angeles County Draft Vision Zero Action Plan (DRAFT 2019)

Table B.4: Action Plan for Fostering a Culture of Traffic Safety

Action	Partners	Year 1	Years 2-5
D-13: Focus CHP community-centered traffic safety education programs through data analysis and relationship building.	**Lead:** CHP **Support:** Public Works, DPH	Number of people trained Number of trainings provided Number of areas served	Ongoing action
Strengthen County staff and public knowledge of traffic safety engineering best practices			
D-14: Train Public Works staff on traffic calming features.	**Lead:** Public Works	Establish traffic safety design training program, secure funding	Update training materials as necessary where funding has been secured
D-15: Update traffic calming informational materials on the benefits of various features and guidelines for implementation.	**Lead:** Public Works	Materials updated and translated into dominant languages of unincorporated communities, secure funding	Materials updated as needed where funding has been secured
D-16: Educate and empower community members about Vision Zero during community and area planning efforts.	**Lead:** DRP **Support:** Public Works, DPH	Initiate action	Ongoing action

Source: Los Angeles County Draft Vision Zero Action Plan (DRAFT 2019)

B.11 SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS)

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that integrates land use and transportation, and balances future mobility and housing needs with economic, environmental and public health goals. The Plan was prepared through a collaborative process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

The 2016 RTP/SCS is a living document and is amended when necessary.

Major Initiatives

The 2016 RTP/SCS, which includes $556.5 billion in transportation investments, has proposed several major initiatives to strive toward the 2040 vision. Figure B.16 shows the effects of these initiatives using the year 2012 as a baseline and Figure B.18 categorizes the performance results.

Preserving the Transportation System Already In Place (Fix-it-First)

- $275.5 billion towards preserving existing system
- Expenditures includes the transit and passenger rail systems, the State Highway System, and regionally significant local streets and roads.

Expanding the Regional Transit System to Give People more Alternatives to Driving Alone

- The 2016 RTP/SCS includes $56.1 billion for capital transit projects and $156.7 billion for operations and maintenance
- Implementing first/last mile strategies to extend the effective reach of transit
- Supports implementing and expanding transit signal priority
- New Bus Rapid Transit (BRT) routes will expand higher-speed bus service regionally

Expanding Passenger Rail

- Investment in passenger rail of $38.6 billion for capital projects and $15.7 billion for operations and maintenance

Improving Highway and Arterial Capacity

- Investing $54.2 billion in capital improvements and $103.0 billion in operations and maintenance of the State Highway System and regionally significant local streets and roads throughout the region.

Managing Demands on the Transportation System

- Investing $6.9 billion toward Transportation Demand Management (TDM) strategies throughout the region
- Reducing the number of drive-alone trips and overall vehicle miles traveled (VMT) through ridesharing
- Redistributing or eliminating vehicle trips from peak demand periods through incentives for telecommuting and alternative work schedules
- Reducing the number of drive-alone trips through increased use of transit, rail, bicycling, walking and other alternative modes of travel

Optimizing the Performance of the Transportation System

- Expansion and integration of the traffic signal synchronization network
- Intelligent Transportation System (ITS) improvements

Promoting Walking, Biking and Other Forms of Active Transportation

- Assumes all local active transportation plans will be implemented, and

dedicates resources to maintain and repair thousands of miles of dilapidated sidewalks
- Invests $12.9 billion in active transportation strategies
- To promote longer regional trips, these strategies include developing a regional greenway network and continuing investments in the regional bikeway network and access to the California Coastal Trail.
- Increasing access to 224 rail, light rail and fixed guideway bus stations

Focusing New Growth around Transit

- Identifying regional strategic areas for infill and investment
- Developing "Complete Communities"
- Planning for additional housing and jobs near transit
- Support High Quality Transit Areas (HQTAs)
- Support Livable Corridors
- Support Neighborhood Mobility Areas (NMAs)

Figure B.16: Transit

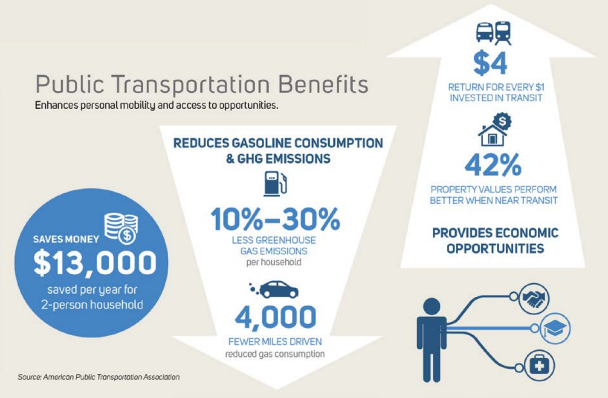


Figure B.17: Active Transportation

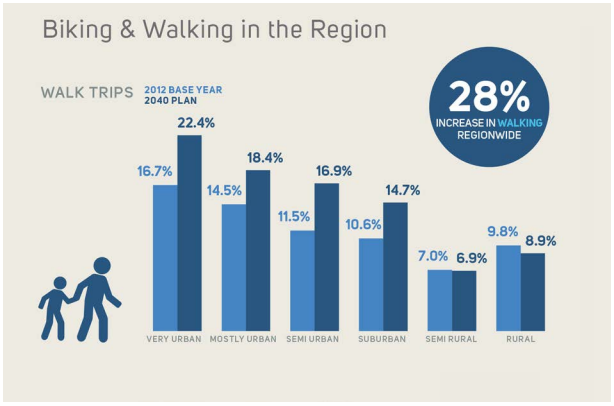


Figure B.18: Plan Performance Results

Source: SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

B.12 East LA Community Plan (1988)

In 1978 the East Los Angeles Community Plan was adopted by the Board of Supervisors. This document presents the 1978 plan incorporating changes and implementation programs proposed in 1988. These recommendations are intended to ensure that the community plan is up-to-date and that plan policies will be implemented.

The community plan establishes a framework of goals, policies and programs that is designed to provide guidance to those making decisions affecting the allocation of resources and the pattern, density, and character of development in East Los Angeles.

Community Plan Policies

Land Use

- Encourage rehabilitation of existing commercial uses and development of new commercial infill along the major corridors (Whittier, Olympic and Atlantic Boulevards) and where transportation and other municipal services can support development.
- Maintain and enhance the quality and stability of residential neighborhoods.
- Allow intensification of land uses only if it does not adversely impact existing uses, and the existing character and density of the East Los Angeles Community.
- Provide for new development which is compatible with existing uses.
- Limit new development to the densities designated on the Land Use Plan map by establishing zones and standards.
- Develop a specific plan for the Whittier Boulevard corridor to address land use, parking, design and development criteria.
- Designate appropriate areas where mixed uses are permitted, ensure compatibility of adjacent uses through careful design.
- Apartment buildings should be separated from single family areas and channeled into higher density areas near shopping and transportation.
- New development should discourage crowding and encourage single family detached homes, twin homes, and townhomes, and apartments.

Housing

- Establish a density bonus program allowing max densities of 50 units per acre for private and/or public developments for low- and medium-income and senior citizen housing.
- Encourage preservation, rehabilitation and maintenance of existing residential.
- Provide increased opportunities for a variety of residential densities, concentrating on development at low medium and medium densities.

Circulation & Transportation

- Require new commercial development to provide parking compatible with adjoining businesses and residences.
- Encourage existing commercial uses to provide common parking areas, improve automobile and truck access, and to establish attractive and unifying architectural elements and themes.
- Improve the local public transit to more closely serve the needs of the people.
- Improve the most seriously deficient roads as a first priority using existing rights of way whenever possible.

Economic Development

- Provide incentives to encourage land assembly.
- Improve the image of the major corridors by use of landscaping, lighting, graphics, and/or other streetscape treatments.
- Encourage the creation of jobs in industrial and commercial areas and give priority to jobs accessible to public transportation and available to residents.
- Promote and encourage the improvement of the residential environment to attract all income groups.

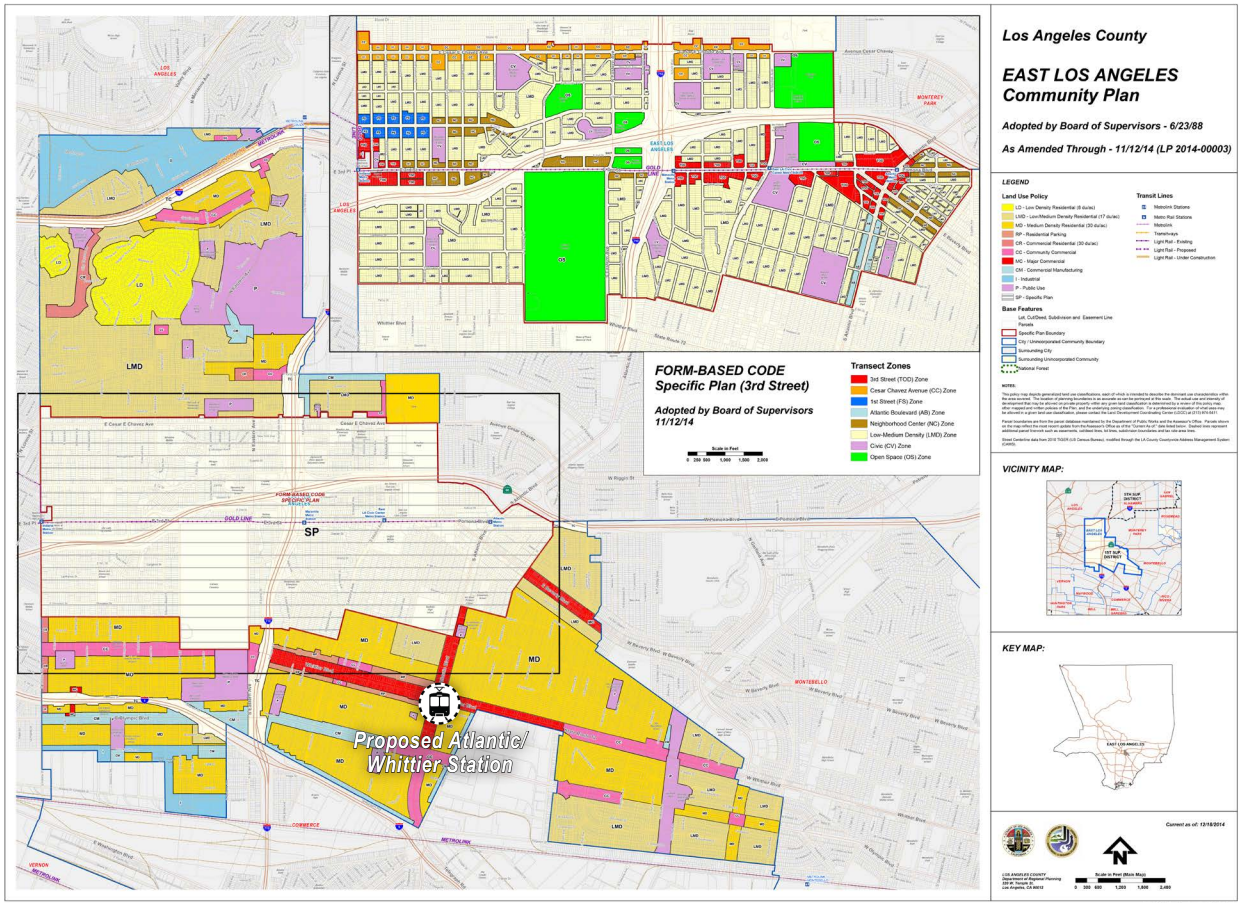
Land Use Categories

Figure B.19 shows the East Los Angeles Community Plan land use with the proposed

Atlantic/Whittier station surrounded by the following land use categories as defined per the Community Plan:

- **Low-Medium-Density Residential (LMD)**: Areas suited for predominantly single-family housing, duplex and townhouse development on moderately sized lots with some low-rise garden apartments on consolidated lots. The maximum density is 17 du/ac net.
- **Medium-Density Residential (MD)**: Areas suited for apartments and other multi-family housing, generally not exceeding three stories in height. The maximum density is 30 du/ac net.
- **Residential Parking (RP)**
- **Community Commercial (CC):** Areas with mostly small businesses in centers or along strips. These businesses are basically oriented to serving the needs of surrounding neighborhoods and have little regional attraction.
- **Major Commercial (MC):** Areas containing mixtures of small and large businesses in major areas.
- **Commercial Manufacturing (CM):** Areas containing businesses mixed with small warehousing, light manufacturing, assembly plants, wholesaling, and other uses that do not generate large amounts of traffic, noises, congestion or odors.
- **Public Use (P):** Areas containing schools, parks/open space, public buildings and hospitals.

Figure B.19: East Los Angeles Community Plan



Source: East LA Community Plan (1988)

B.13 Parks Needs Assessment (2016)

The Countywide Parks Needs Assessment was designed to quantify the need for parks and recreational resources. To achieve this goal, the Parks Needs Assessment incorporated the following objectives:

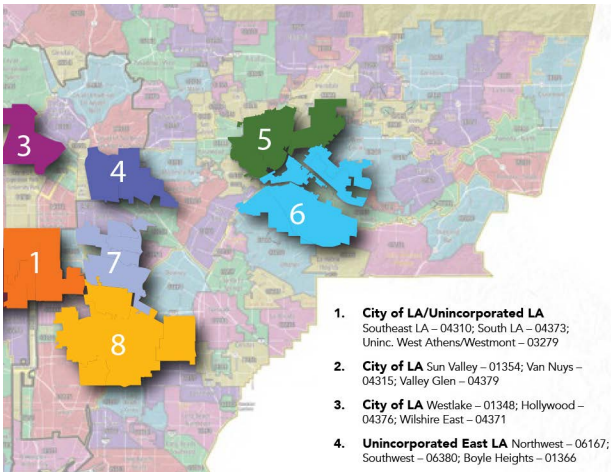
- Conduct a comprehensive assessment of the park, infrastructure, and recreational needs and opportunities
- Establish a list of priority projects for each study area
- Outline costs for project opportunities
- Establish a best-practices approach
- Inform future decision-making regarding funding for parks and recreation

The Parks Needs Assessment identified High Priority Areas, as shown on Figure B.21, and proposes a new way to understand and think about parks, recreation, and open space by:

- Considering parks as key infrastructure needed to maintain and improve the quality of life for all County residents
- Using a new series of metrics to determine park need
- Supporting a need-based allocation of funding for parks and recreation
- Emphasizing both community priorities and deferred maintenance projects

Figure B.21 and Table B.5 shows the analysis for a portion of East Los Angeles. The analysis shows that the area surrounding the proposed station at Atlantic/Whittier falls under the "Very High" need category for park space and related amenities.

Figure B.20: High Priority Areas



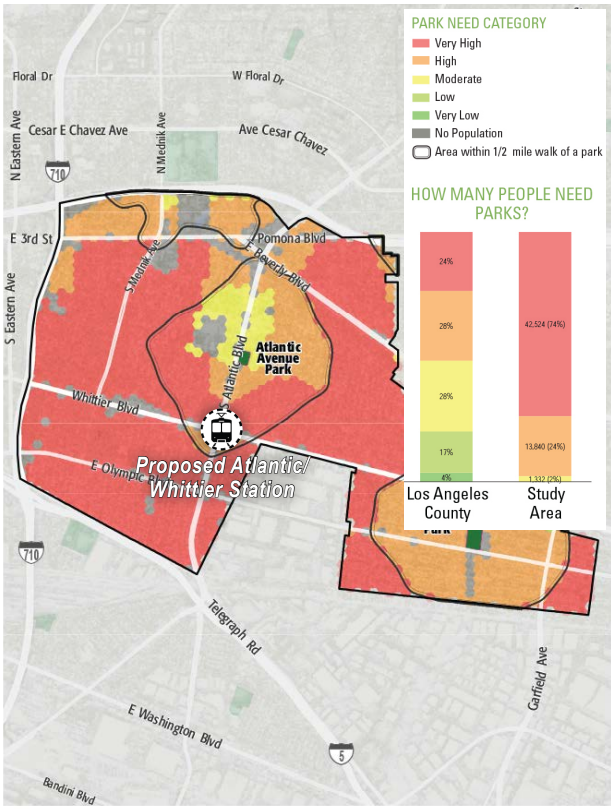
Source: Parks Needs Assessment (2016)

Table B.5: Amenity Quantities and Conditions

Park Name	Condition	General Infrastructure Condition	Open Lawn/Turf Area	Amenities									
				Tennis Courts	Basketball Courts	Baseball Fields	Soccer Fields	Multipurpose Fields	Fitness Zones	Skate Parks	Picnic Shelters	Playgrounds	Swimming Pools
Atlantic Avenue Park	Good								1		2	1	
	Fair												
	Poor												

Source: Parks Needs Assessment (2016)

Figure B.21: East Los Angeles Park Needs



Source: Parks Needs Assessment (2016)

B.14 National Association of City Transportation Officials (NACTO) Urban Street Design Guide

NACTO is an association of 68 major North American cities and 11 transit agencies formed to exchange transportation ideas, insights, and practices and cooperatively approach national transportation issues.

The Urban Street Design Guide provides the blueprint to NACTO's mission of making streets safer, more livable, and more economically vibrant. The Guide outlines a clear vision for complete streets and placemaking which is sustainable and accessible to all. Guidance for street design includes street design elements, interim design strategies, and intersections as shown on Figure B.22.

Figure B.22: Neighborhood Main Street Example

Source: National Association of City Transportation Officials (NACTO) Urban Street Design Guide

B.15 On-Demand Personal Mobility Devices Pilot Program (2019)

The County of Los Angeles will be implementing the On-Demand Personal Mobility Devices (Devices) Pilot Program to support transportation alternatives, reduce greenhouse gases, and connect to transit. Devices will allow on-demand shared personal mobility companies to operate on unincorporated County streets which will assist the County in the management of its transportation network. The future of the program will be evaluated on a data-driven basis.

Some of the primary objectives of the Pilot Program, which will be governed by specifications, include:

- Providing mobility options;
- Protecting public health and safety for residents, employees, and visitors of County Unincorporated Areas;
- Reducing emissions from motorized vehicles' short trips;
- Maintaining the proper Americans with Disabilities Act (ADA) path of travel in the applicable public right-of-way;
- Providing connections to transit;
- Maximizing Customer awareness of safe and legal behaviors for operating the Devices;
- Creating an enforceable regulatory framework for allowing and managing shared mobility services;
- Ensuring that the equitable use of public right-of-way benefits public mobility;
- Ensuring that all Operators respond quickly and appropriately to issues and service complaints;
- Complying with the goals and objectives of County's Vision Zero Initiative; and
- Managing the County's risk of liability related to the use, rental, and deployment of Devices.

Source: On-Deman Personal Mobility Devices Pilot Program (2019)

LA COUNTY TRANSIT ORIENTED DISTRICT DESIGN GUIDELINES

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Appendix B – Photos of Maps from Community Meeting

Appendix C – Farmers Market Displays

COMMUNITY MEETING #1 AND EAST LA FARMERS MARKET SUMMARY
NOVEMBER 14, 2019

Introduction

The County of Los Angeles Public Works and Regional Planning departments held Community Meeting #1 on Thursday, November 7, 2019 from 6 – 8 pm at the Centro Maravilla Service Center in East Los Angeles. The purpose of the meeting was to collect input from community members for the Transit-Oriented District Design Guidelines project. There were approximately twenty-five persons in attendance. Participants included Martin Reyes, Transportation Deputy from the Office of County Supervisor Hilda L. Solis who represents Supervisorial District 1. Attendees included key community stakeholders such as members of the East LA Chamber of Commerce, the Maravilla Community Advisory Committee (MCAC), and the bike-riding community.

The meeting began with a PowerPoint presentation which provided an overview of the design guidelines including the goals, objectives and benefits. Key considerations were discussed such as building types, mobility improvements, and urban design elements. Senior Planner Brian Marchetti, AICP at KOA Corporation and Planning Director Adam Maleitzke, AICP, with Gruen Associates, conducted the presentation

After the presentation, meeting participants were invited to join informal, interactive group discussions. Community members indicated on maps their areas of concern and their ideas about improvements that would enhance their neighborhoods and encourage walking and transit use. The half- mile radius around transit stations is defined as the transit-oriented district (TOD) areas, generally defined as walkable distance. For discussion purposes at this meeting, the potential Atlantic-Whittier transit station was used as a pilot study and maps and toolbox graphics enabled the community to visualize how guidelines could possibly be developed and applied.

Project team members who attended the community meeting included Hank Hsing Project Manager from LA County Department of Public Works; Kamille Parks and Orlando Gonzalez of Gruen Associates; and Katherine Padilla Otanez and Thelma Herrera from KPA.

Outreach Conducted

The County of Los Angeles mailed meeting notices promoting attendance at both the community meeting and the Farmers Market event to residents and businesses located within the half-mile radius surrounding the proposed Atlantic-Whittier transit station. KPA e-blasted meeting notices to over 700 community members which included key community-based organizations located in East Los Angeles and Northeast Los Angeles. KPA also distributed meeting notices to 32 locations throughout the half-mile radius as well as at public counters and business locations in East Los Angeles. The locations included public libraries, community centers, elected officials, community organizations including the

East Los Angeles Chamber of Commerce, and a wide range of mom-and-pop businesses and restaurants. The Project Team also staffed a booth at the East Los Angeles Farmers Market on Saturday, November 1, 2019, from 9 am – 2 pm, and interacted with community members in Spanish and English. Using displays to describe Transit-Oriented District Design Guidelines and the project area, the team invited community members to express their opinions via "sticky" notes and dots on maps about key considerations involving mobility, land use, urban design elements, community values, opportunities and concerns. The team also distributed meeting flyers and collected contact information to maintain communication with interested individuals. The results of the input obtained at the day-long farmers market are presented in this Summary Report.

The project team also conducted presentations to key organizations to promote awareness and attendance at the community meeting. The presentations were delivered by Hank Hsing, Brian Marchetti and Katherine Padilla Otanez on Friday, November 1, 2019 to the Health Innovative Community Partnership (HICP) at their well-attended regular monthly meeting at LAC+USC Medical Center. The LA County TOD Design Guidelines was placed on the HICP agenda. The project team also delivered a presentation at the regularly scheduled monthly meeting of the Maravilla Community Advisory Committee (MCAC) on November 5, 2019 where the project appeared on their agenda. Ms. Padilla Otanez also attended the regularly scheduled meeting of the East LA Chamber of Commerce at Juan's Pollo on October 29, 2019 and distributed community meeting flyers.

It should be noted that the project team conducted a series of key stakeholder interviews in July 2019. Interviewees included representatives of East LA Chamber, Whittier Merchants Business Association, Maravilla Business Association and the Maravilla Community Advisory Committee. Input obtained from the interviews helped shape the Draft TOD Design Guidelines which were presented at the November 7th community meeting. Katherine Padilla & Associates (KPA) contacted key organizations and stakeholders by phone and sent follow-up emails inviting them to the community meeting and asked them to promote attendance through their social networks.

COMMENTS FROM GROUP DISCUSSIONS

Group 1. Key Themes

Parking. The need for more parking, and current lack of parking must be considered. There was no consensus on support for above or underground parking structures. We don't want the aesthetics of the community to change. Use (the many) vacant lots on Atlantic for parking lots or structures.

"Put parking lots or parking structures on Atlantic where there are many vacant lots."

Whittier Blvd. Consider that one end of Whittier has a different identity with streetscape improvements that encourage walking….while, at the other end, there is a need to improve the lighting and environment. This is especially vital because there is a busy Rapid Bus stop in that area.

Preserve businesses on Whittier Blvd. There is widespread support for local business….there is concern that new businesses could come in (with the arrival of TOD) at the expense of local businesses. Regarding building types…leave it as it is so we can preserve local businesses… we don't want people who just want to come in to make money."

Most important - focus on public spaces, green spaces. Park spaces and streetscape improvements are highly desired, shade trees, parklets, linear parks plazas, areas to sit and rest and simply gather. Fix broken sidewalks, make it safe for everyone, improve lighting. Parklets needed so people can wait for the train in a green environment. "There is a lack of park space in our community"

Put the Metro train underground and invest money in homes in the area.

Preserve the character of single-family neighborhoods. "Don't waste money on Metro if that messes up the streets."

Bike Lanes. There were some community members in support of more bike lanes on Atlantic and others were not because they feel as though the bike lanes are not used enough and are perceived to cause more congestion.

Group 2.

Bike improvements are needed to improve pedestrians' and cyclists' safety. Consider protected bike lanes, curb extensions, striping to make peds more visible for a more livable, walkable and safe environment….right turns are especially dangerous for bicyclists in this area. "Small improvements can make a big change."

Put in parklets, amenities so that community can hang out, refresh, recharge, tighten up a few things on your bike….bike riders need a place to fix bikes, a functional space so you're not blocking streets…. as an alternative, imagine larger parks and plaza space as destinations—could be inviting, refreshing, and unique.

Alleyways (on Amalia, for example) can be more functional, improve pedestrian lighting, provide easily accessible pathways, plantings, planters…make alleyways more inviting, safer, more visible….

Extend (existing) **Whittier Blvd streetscape improvements** all the way to Atlantic.

Beautify with planting, plazas, public art, murals. "East LA and surrounding area is already known for our beautiful murals. We need more."

Traffic calming is needed. Narrow view shed to make drivers slow down, curb extensions, increase the visibility of pedestrians so cars will slow down without increasing congestion…. make them safe, walkable, and beautify the environment…. address traffic concerns on Atlantic and Whittier.

Consolidate parking throughout the area….maybe a parking structure with a grocery store where lots can be used.

Group 3.

Develop pedestrian pathways to our local restaurants/icons… we're known for our good local food and restaurants. We want lighting, trees, plantings, plazas, murals. . .

Preserve landmark buildings. "Lost the theatre and now it's a CVS… at least the building was saved."

Make it a walkable community but help businesses survive.

Vending. Get rid of taco trucks going east on Whittier towards City of Commerce where vendors appear to congregate… street vending needs to be enforced so it's safe (especially for elderly, wheelchairs) and accessible to walk on sidewalks that are currently obstructed by vending…. vending needs to be enforced if you are striving for walkable communities.

Mixed Use/Micro businesses. On Atlantic, where there are vacant lots (around 4th and Eagle) north of St. Alphonse Church…use the lots for parking structures, mixed use, micro businesses on the bottom and housing on top.

Promote our local businesses and we need parking, parking, parking… third Street has been difficult….lack of parking killed businesses."

If businesses are dilapidated and want to sell, good! They can be used for mixed use, commercial on bottom and housing on top. . .perhaps affordable housing or senior housing."

"**Bike Lanes, no!** Group 3 doesn't support bike lanes because there is a perceived lack of usage and the cause of increased congestion. ..look for economic benefits for us and for our future. Improvements that benefits the whole community are valued! It doesn't feel like bike lanes do that. We want a survey to tell us when bike lanes are really used. Instead of bike lanes, we want trees, beautification, not more congestion."

Building Types. We don't want high-rises in East LA. (instead). We like smaller-scale multiple family housing, especially Spanish-style and bungalow-style which fits East LA better.

Mobility Improvements. Bike lanes and transit lanes--not for East LA.

Yes! Scrambled crosswalks are good for ELA.

Yes! Speed tables are desired to slow down traffic.

Yes! Curb extensions are desired.

COMMENTS RECEIVED AT EAST LA FARMERS MARKET

On Saturday, November 2, 2019, from 9 – 2 pm, the project team conducted a pop-up event at East LA Farmers Market at the East LA Civic Center to inform community members about the TOD design guidelines and elicit their ideas and suggestions. Participants viewed displays depicting TOD Design Guidelines' background and information, Opportunity Sites, and Building Types and offered their comments on "sticky notes. Several project team members were bilingual which was helpful as many community members were most comfortable offering their opinions in Spanish. The team interacted

with approximately 30 community members. The pop-up event, along with the November 7th Community Meeting was promoted through mass mailers to approximately 3,500 residents and businesses within ½ mile radius of the proposed Atlantic and Whittier transit station.

Following are the comments offered by the community.

WHAT ARE THE KEY ISSUES WITHIN THE ATLANTIC/WHITTIER STATION AREA?

- Underground is key. Please review Metro on 1st/Beverly. It has hurt business and makes driving hell. Visit around 2-7pm.
- More trees with shade coverage. Oak Trees!
- More parking areas that includes green infrastructure improvements.
- Development within the area should be affordable housing.
- Put the train underground. Otherwise it will close the businesses. We already had a bad experience.
- A cultural space that is accessible to the community. A community hub.
- Ruben Salazar. Look him up!
- Would like to see better fronts on commercial areas.
- Historical information on Chicano Moratorium.
- Put the station underground.
- Acknowledgement of land. Indigenous people need to be recognized.

WHICH BUILDING TYPES ARE APPROPRIATE IN THE ATLANTIC/WHITTIER STATION AREA?

- Cultural space with housing.
- We can't afford city work.
- You'll kick us out and our parents.
- Single Family should stay!
- Incentive accessory dwelling units. Allow for existing ADU's to be approved. Technical Assistance programs.
- Memorials at Plazas Unsung Heroes. David Sanchez, Raza Unida, Raul Ruiz, Important, belated community leaders.
- More parks. More open space benefit families more especially low income.
- More daycare. Children's education is necessary.
- More coffee shops. Not Starbucks!
- Would like to have everything centralized in LA. So we don't have to go out of the area to go shopping etc.
- This may push out people who can't afford to own the live/work option.
- There are many alleys that could be fixed and used for walking. We don't want to encourage new people to come and live here. It's already too dense. We want people to come and visit and shop.

- Change is good but feels put upon (sic). Missing sense of urgency.
- I prefer Triplex/Fourplex (housing types). The mixed use brings more people to an area that is already too dense.
- Linear parks (desired) and shade for bus stops.

WHICH SHOULD BE PRESERVED OR IMPROVED IN THE ATLANTIC/WHITTIER STATION AREA?

- Business on 1st St are suffering due to the 3rd St. train lane.
- Support long time local businesses (Moms & Pops)
- County departments need to support future development, but sustain local business.
- Vacant properties have squatters which can have drug problems.
- Include local churches and schools in decision making.
- Have more bike lanes been considered on Whittier?
- Underground the Whittier Atlantic station.
- (More) Bike lanes on Whittier Blvd.
- Programs to incentives worker co-operatives and community land trust for community stability.
- Avoid dead business along rail.
- Don't wipe out parking.
- Cesar Chavez/ Lorena: Create (recognitions) dedications for Chicano/Chicana leaders
- The city should beautify all the businesses' fronts in all commercial areas to make it safe. Add art and create a pleasant atmosphere.

APPENDIX A

Community Meeting PowerPoint

Los Angeles County

Transit-Oriented District Design Guidelines

Community Meeting

November 7, 2019

Partially funded by SB1 Caltrans Sustainable Transportation Planning Grant Program.

Contents

- Project Overview
- Transit-Oriented Development
- Atlantic/Whittier Station Area
- Workshop Format
- Questions & Answers

Project Overview

LA County Transit-Oriented District (TOD) Program

LA County TOD Program

- Enable **transit-supportive uses and infrastructure** in unincorporated communities near existing and new transit facilities.

TOD Study Areas

- Half-mile radius around each potential new transit station
- 10 planned transit corridors and stations:

Eastside Transit Corridor Phase 2

- Atlantic/Whittier
- Santa Anita
- Peck
- The Shops at Montebello
- Norwalk
- Lambert
- Commerce

Purple Line Extension

- Westwood/VA Hospital
- Westwood/UCLA

West Santa Ana Branch

- Florence/Salt Lake

Outcomes of this Project

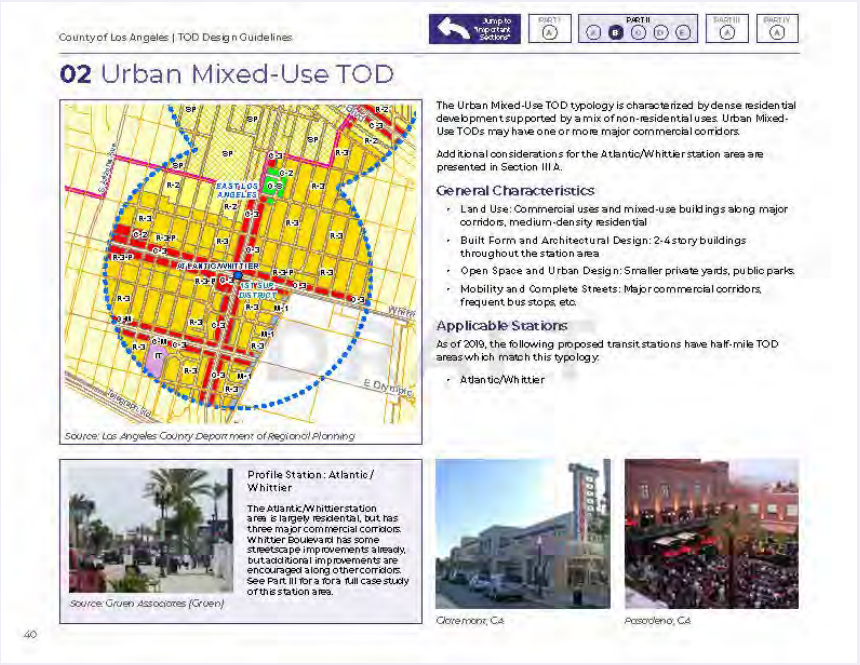
This project is **not a Vision Plan.**

The guidelines are advisory and intended to be a resource for **businesses, community organizations, and residents** as each station area develops.

The guidelines will include **best practices** for encouraging transit-oriented development, station connectivity, and access to transit.

Visions for each station area will be developed by the County with the community as part of future TOD Specific Plans.

Working within the proposed **Atlantic & Whittier Gold Line** station area, this process will demonstrate how the **guidelines** can be used by the community and County staff.



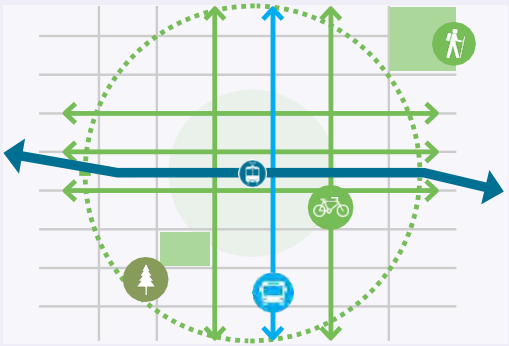
Transit-Oriented Development

Transit-Oriented Development Components

Benefits of Transit-Oriented Development

Environment

- Increased **transit ridership**
- Reduce **vehicle utilization**
- Improved **Air Quality**
- **Conservation of land** and open space

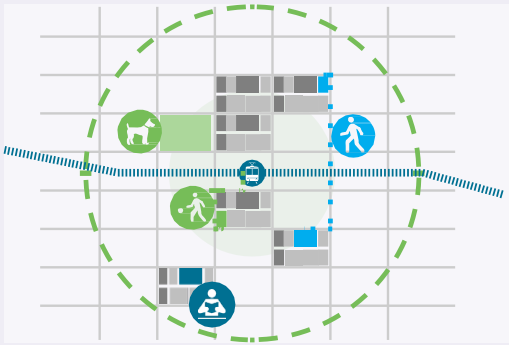


Economic

- Catalyst for **economic development** and increased property values
- Redevelopment of **vacant and underutilized properties**
- **Reduced household spending** on transportation
- Increase in **affordable housing**

Social

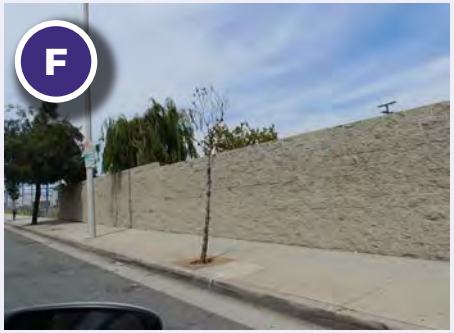
- Increased **housing and employment choices**
- Greater **mobility choices**
- Health benefits and **increased quality of life**
- Enhanced **public safety**



Atlantic/Whittier Station Area

Urban Design Opportunities and Constraints

Installed parklet along Whittier Blvd.



Atlantic Boulevard streetscape

Multi-family housing with historic character

Historic building with simple color palette

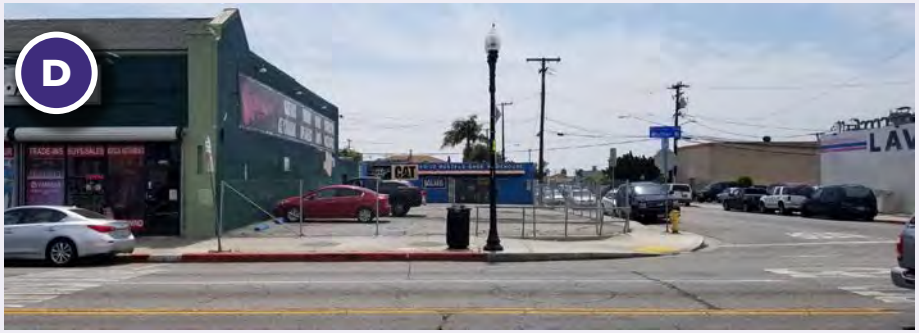
Whittier Boulevard streetscape

Sidewalk cluttered with outdoor displays

Land Use Opportunities and Constraints

Vacant car dealership along Atlantic Boulevard

Narrow storefronts along Whittier Boulevard



Shared parking potential

Vacant parcel along Atlantic Boulevard

Multi-family housing with additional units in rear

Underutilized parking lot at rear of commercial property

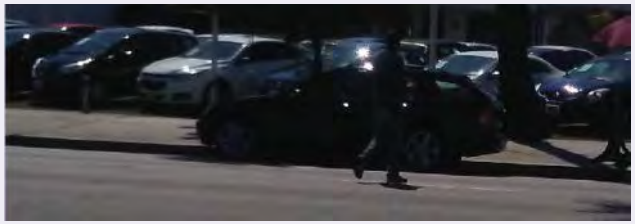
Mobility Opportunities and Constraints

Barriers to Walking and Biking in East LA

Cars creating backflow on the intersection of Atlantic Blvd & Whittier Blvd in East Los Angeles

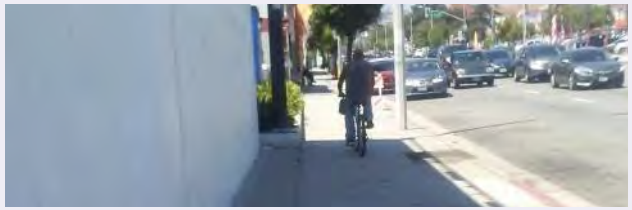
Vehicle Speeds

Pedestrian Connectivity

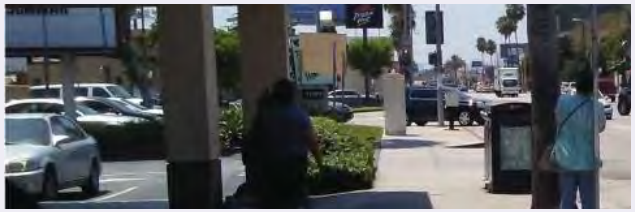


Pedestrian Obstruction

Bike Infrastructure



Transit Accessibility



Landscaping and Shade

Roadway Conditions

Accessibility

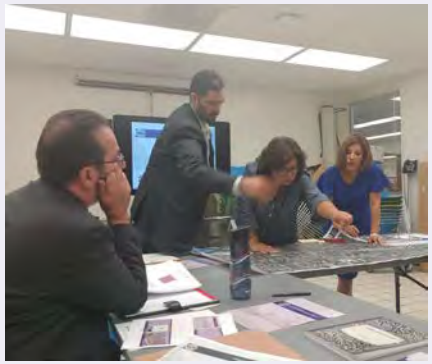
Outreach Activities

Recent Outreach Activities:

- Interviews with ELA Chamber, Whittier Blvd. Merchants Association, Maravilla Businesspersons Association, and other key stakeholders
- Maravilla Community Advisory Committee Members and Presentations
- HICP Presentations
- East LA Farmers Market

Upcoming Outreach Activities:

- Later this Fall/Winter – Community-wide survey to be conducted
- Spring 2020 – Community Meeting #2 for Final TOD Design Guidelines Review



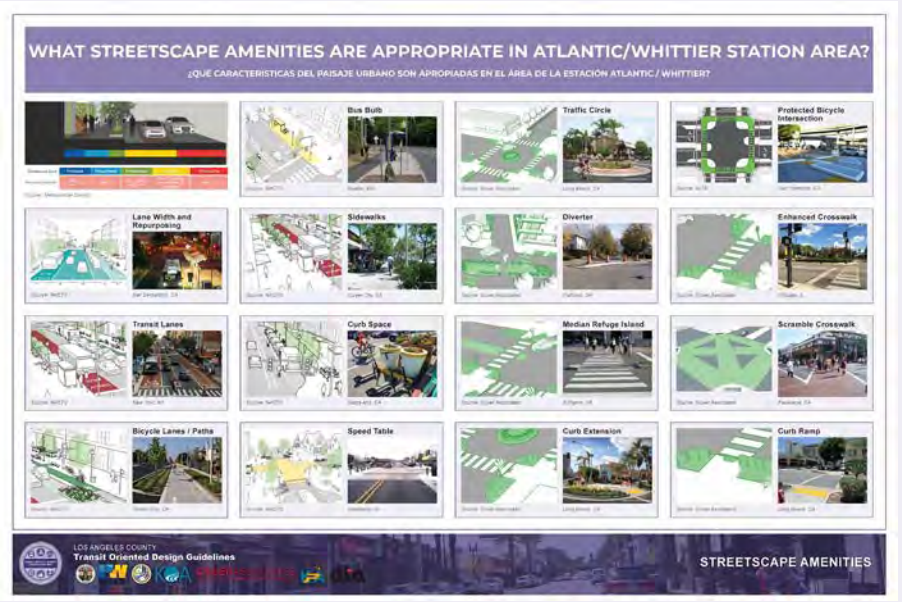
November 7 Community Workshop Format

Community Workshop Format

Welcome & Introductions	**6:10 – 6:20** *10 minutes*
Overview of Guidelines, Goals and Objectives	**6:20 – 6:30** *10 minutes*
Roundtable Discussions	**6:30 – 7:30** *1 hour*
Topic A: Mobility Improvements	
Topic B: Land Use and Urban Design	
Reconvene for Each Group's Summary	**7:30 – 7:55** *25 minutes*
Wrap-up & Next Steps	**7:55 – 8:00** *5 minutes*
Close	**8:00**

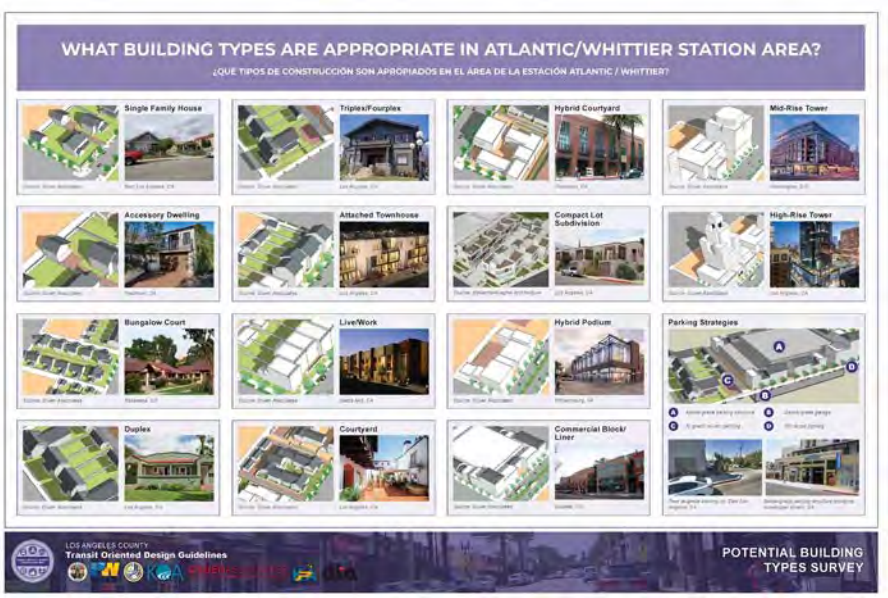
Mobility Improvements

- New Pedestrian Path
- New / Enhanced Crosswalk
- Curb Extension
- Seating / Benches
- Urban Recreation
- Street Trees
- Park / Open Space
- Bioswale / Environment
- Bicycle Lane / Path
- Bicycle Parking / Facilities



Land Use and Urban Design

- Issues to Discuss:
- Architectural Design
- Density
- Land Use Mix
- Appropriateness of Building Types
- Opportunity Sites



Key Issues that will be Addressed Through this Workshop and the Design Guidelines

- Cultural Resiliency
- Local Business Character & Building Types
- Traffic & Parking Conditions
- Amenities for Pedestrians, Cyclists, and Transit Users
- Pedestrian Safety & Streetscape Improvements
  Public Spaces
- Housing Types and Scale
- Barriers to Development and Potential Resources

- *Think creatively*
- *Be constructive*
- *Listen to your neighbors*
- *Have fun!*

Your Opinion Matters!

For more information:
Kpadilla@katherinepadilla.com

Visit our site:
pw.lacounty.gov/go/toddg

APPENDIX B

Photos of Maps from Community Meeting

WHAT BUILDING TYPES ARE APPROPRIATE IN ATLANTIC/WHITTIER STATION AREA?

¿QUÉ TIPOS DE CONSTRUCCIÓN SON APROPIADOS EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER?

Community services → Types → Family service Bldg Types

Single Family House

Source: Gruen Associates — East Los Angeles, CA

Triplex/Fourplex

Source: Gruen Associates — Los Angeles, CA

Hybrid Courtyard

Source: Gruen Associates — Pasadena, CA

Mid-Rise Tower

Source: Gruen Associates — Washington, D.C.

★ Programs to Improve Single family parades

Accessory Dwelling

Source: Gruen Associates — Piedmont, CA

Attached Townhouse

Source: Gruen Associates — Los Angeles, CA

Compact Lot Subdivision

Source: ateliermarkvaghei architecture — Los Angeles, CA

High-Rise Tower

Source: Gruen Associates — Los Angeles, CA

Bungalow Court

Source: Gruen Associates — Pasadena, CA

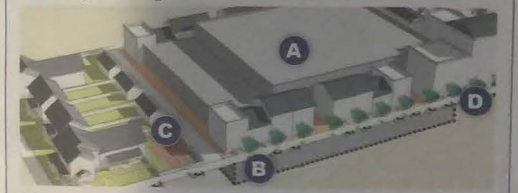
Live/Work

Source: Gruen Associates — Santa Ana, CA

Hybrid Podium

Source: Gruen Associates — Williamsburg, VA

Parking Strategies



A Above-grade parking structure
B Below-grade garage
C At-grade on-site parking
D On-street parking

Rear at-grade parking lot, East Los Angeles, CA

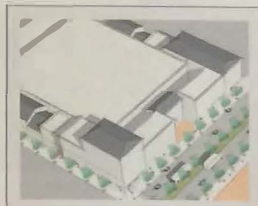
Below-grade parking structure entrance, Huntington Beach, CA

Duplex

Source: Gruen Associates — Los Angeles, CA

Courtyard

Source: Gruen Associates — Los Angeles, CA



Commercial Block/ Liner

Source: Gruen Associates — Boulder, CO

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East Los Angeles, CA

Triplex/Fourplex

Source: Gruen Associates

Los Angeles, CA

Hybrid Courtyard ✓

Source: Gruen Associates

Pasadena, CA

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Washington, D.C.

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Los Angeles, CA

Compact Lot Subdivision ✓

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Los Angeles, CA

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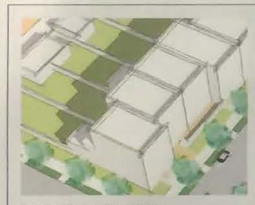
Los Angeles, CA

Bungalow Court

Source: Gruen Associates

Pasadena, CA

Live/Work



Source: Gruen Associates

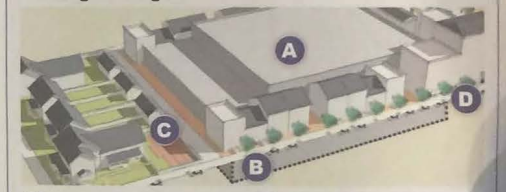
Santa Ana, CA

Hybrid Podium

Source: Gruen Associates

Williamsburg, VA

Parking Strategies



- A — Above-grade parking structure
- B — Below-grade garage
- C — At-grade on-site parking
- D — On-street parking

Rear at-grade parking lot, East Los Angeles, CA

Below-grade parking structure entrance, Huntington Beach, CA

Duplex

Source: Gruen Associates

Los Angeles, CA

Courtyard ✓

Source: Gruen Associates

Los Angeles, CA

Commercial Block/ Liner ✓

Source: Gruen Associates

Boulder, CO

LOS ANGELES COUNTY

Transit Oriented Design Guidelines

ATLANTIC/WHITTIER STATI

OPPORTUNITY S

setbacks from
street to alleviate
graffiti.

materials, building codes
to reduce graffiti

parking structures to
provide for metro station,
and for local businesses.

Job creation through
new commercial uses/infill.


LACK OF PARKING IS A CONCERN. AN AGREED
S MCDONNELL AVE
ARIZONA AVE
S KERN AVE
S FERRIS AVE
S LA VERNE AVE
FRASER AVE
CLELA AVE
S VANCOUVER AVE
S WOODS AVE
AMALIA AVE
S HILLVIEW AVE
S OAKFORD DR
S MARGARET AVE
MARGARET AVE
BELDEN AVE
EASTMONT AVE
HOEFNER AVE
S SADLER AVE
S WILLIAMSON AVE
S GERHART AVE
E 6TH ST
HASTINGS ST
EAGLE ST
HUBBARD ST
WHITTIER BLVD
PERCY ST
LOUIS PL
VERONA ST
OLYMPIC BLVD
CAROLINA PL
GRACE PL
BOSWELL PL
PACIFIC PL
GOODRICH BLVD
ATLANTIC BLVD
UNION PACIFIC AVE
TELEGRAPH RD
MORROW PL
E OLYMPIC BLVD
Legend
½ Mile Radius from a Potential Transit Station
Potential Atlantic/Whittier Station
0' 150' 300'
N

KEY ISSUES WITHIN THE ATLANTIC/WHITTIER STATION AREA

PROBLEMAS PRINCIPALES DENTRO DEL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER

Mobility

The major corridors within the half-mile station area form relatively short blocks with frequent bus transit service. While these factors make the station area walkable, sidewalks along connector streets are generally too narrow for comfortable pedestrian passage. In addition, there are multiple instances along Whittier Boulevard where retail businesses have added merchandise to the sidewalk which impedes pedestrian traffic.

Land Use

Empty storefronts along Whittier Boulevard and vacant/underutilized lots along Atlantic Boulevard are the primary locations for potential redevelopment. Additionally, the several commercial lots with parking located in the rear pose as additional opportunities for targeted infill development in conjunction with shared parking strategies.

Urban Design

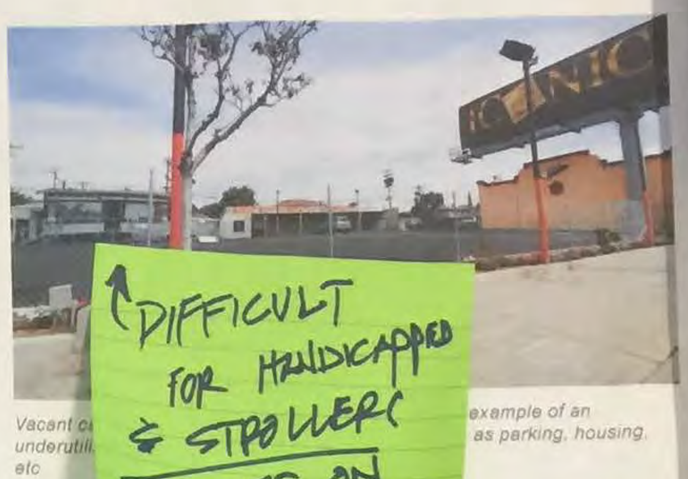
Whittier Boulevard generally has more streetscape improvements than Atlantic Boulevard or Olympic Boulevard. Continuing these streetscape improvements to all major corridors and implementing a uniform pattern of shade-providing street trees will provide the station area with a defined sense of place. There are limited opportunities for streetscape improvements along residential streets, which have far more narrow sidewalks.

½ Mile Radius from a Potential Transit Station

Potential Atlantic/Whittier Station

Rail Line

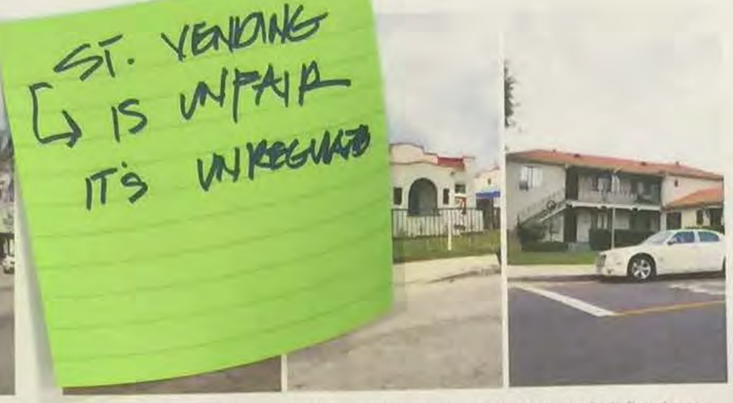
Commerce / Unincorporated County Boundary



Vacant c... underutili... etc

...example of an ...as parking, housing,

Whittier Blvd. has several unique building facades between 1- and 2-stories

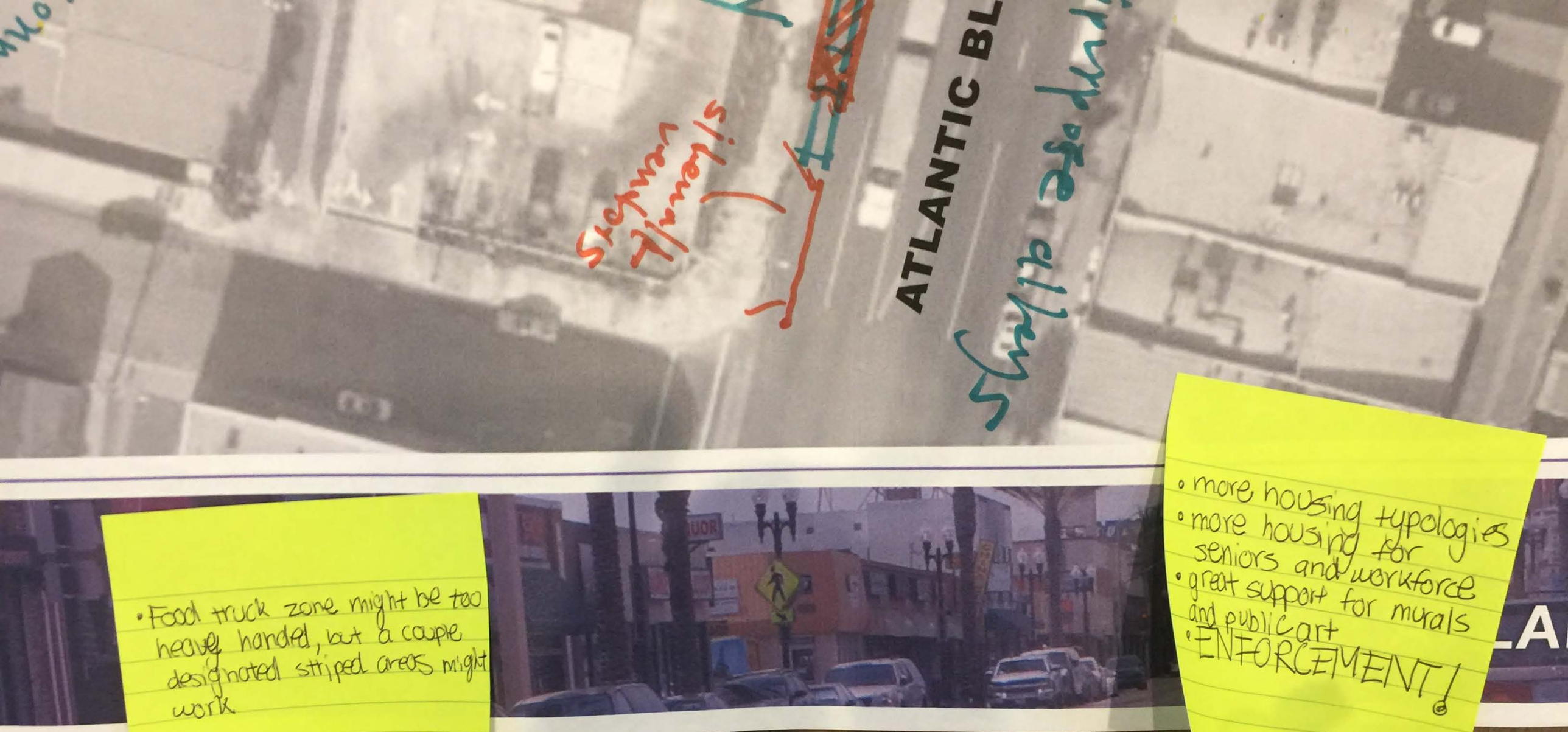


Typical residential throughout half-mile station area. Multiple building types are found, primarily in the low- and medium-density range.

Sidewalks cluttered with outdoor displays pose as obstacles for pedestrians, making it difficult to pass.

- buildings w/ parking on rear
- open space - need a place to just sit and hangout
- zone for food trucks (not work, but might be common)

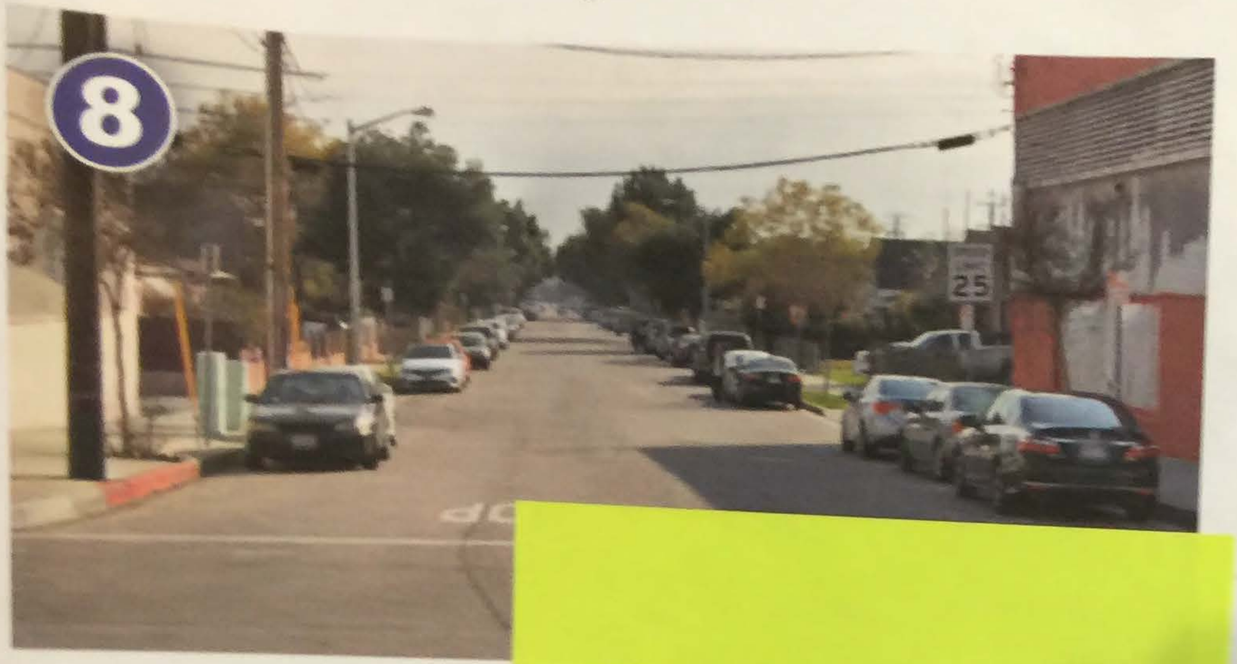
Atlantic Blvd, looking north
Atlantic Blvd, looking south
Whittier Blvd, looking east
Whittier Blvd, looking west
Woods Ave, looking north
Woods Ave, looking south
Amalia Ave, looking north
WOODS AVE
ATLANTIC BLVD
WHITTIER BLVD
AMALIA AVE
~90'
~100'
Multi-purpose plaza/open space
• dining
• recreation
scramble
facade improvements
Activate the building as a community resource
multipurpose alleys
0' 25' 50'
• Biking isn't safe with the truck
• landscaped medians ✓
• protected bicycle intersections would improve safety
• Food truck zone might be too heavy handed, but a couple designated striped areas might
• more housing typologies
• more housing for seniors and workforce
• great support for murals and public art
Design Guidelines
GRUENASSOCIATES
ATLANTIC/WHITTIER STA
ATLANTIC/WHITTIER INTERSECTION A



- Food truck zone might be too heavy handed, but a couple designated striped areas might work.
- planters but not bollards!
  - poorly received

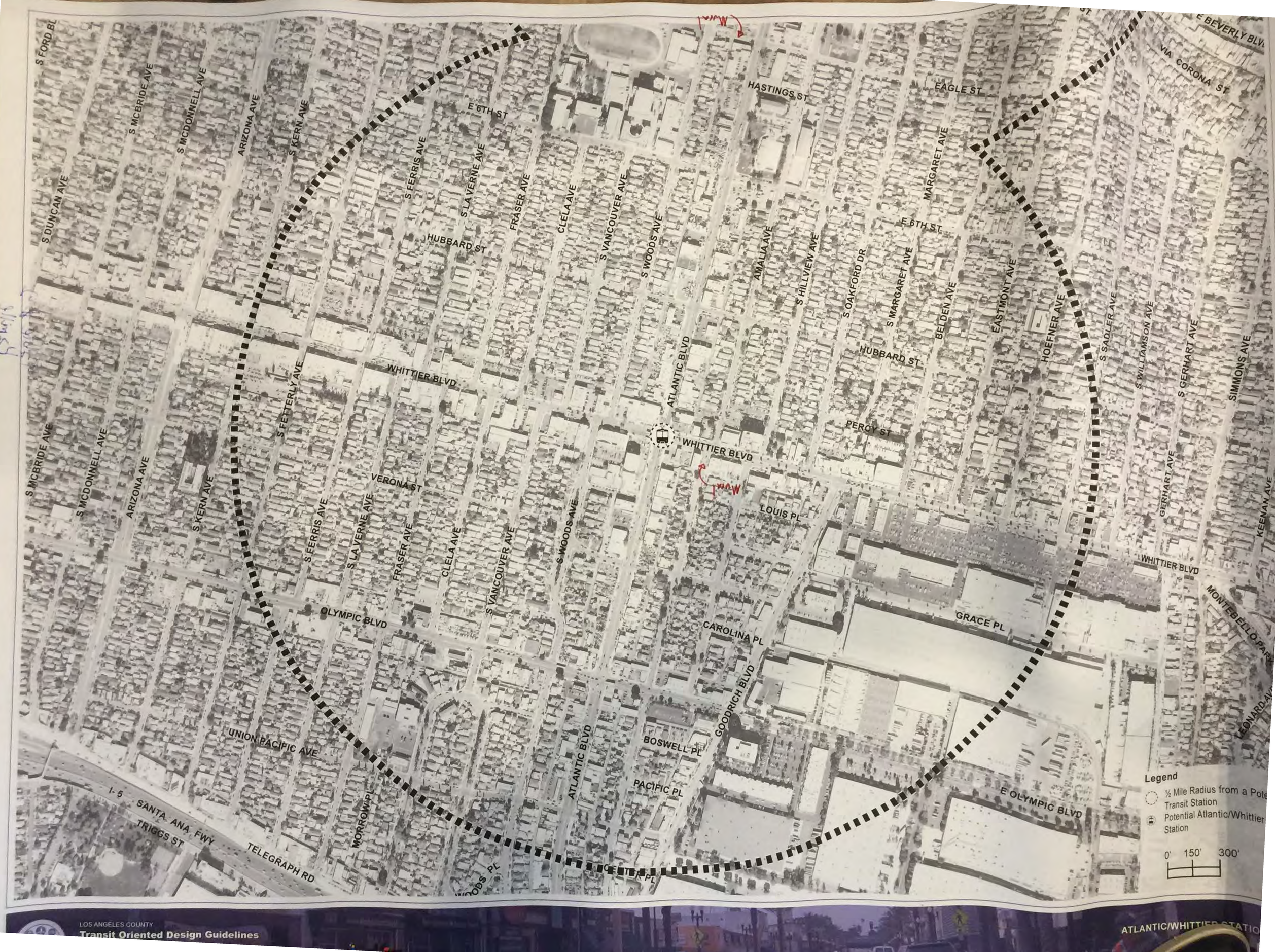
- more housing typologies
- more housing for seniors and workforce
- great support for murals and public art
- ENFORCEMENT!

Amalia Ave, looking north



Amalia Ave, look

- Biking isn't safe with the trucks
- landscaped medians ✓
- protected bicycle intersections would improve safety


S FORD BL
S DUNCAN AVE
S MCBRIDE AVE
S MCDONNELL AVE
ARIZONA AVE
S KERN AVE
S FERRIS AVE
S LA VERNE AVE
FRASER AVE
CLELA AVE
S VANCOUVER AVE
S WOODS AVE
ATLANTIC BLVD
AMALIA AVE
S HILLVIEW AVE
S OAKFORD DR
S MARGARET AVE
BELDEN AVE
EASTMONT AVE
HOEFNER AVE
S SADLER AVE
S WILLIAMSON AVE
S GERHART AVE
SIMMONS AVE
KEENAN AVE
MARGARET AVE
E BEVERLY BLVD
VIA CORONA ST
HASTINGS ST
EAGLE ST
E 6TH ST
HUBBARD ST
WHITTIER BLVD
VERONA ST
PERCY ST
LOUIS PL
OLYMPIC BLVD
CAROLINA PL
GRACE PL
GOODRICH BLVD
BOSWELL PL
PACIFIC PL
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UNION PACIFIC AVE
MORROW PL
I-5 SANTA ANA FWY
TRIGGS ST
TELEGRAPH RD
Legend
½ Mile Radius from a Pote
Transit Station
Potential Atlantic/Whittier
Station
0' 150' 300'

APPENDIX C

Farmers Market Displays

WHAT ARE THE KEY ISSUES WITHIN THE ATLANTIC/ WHITTIER STATION AREA?

¿CUÁLES SON LOS PROBLEMAS CLAVE DENTRO DEL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER?

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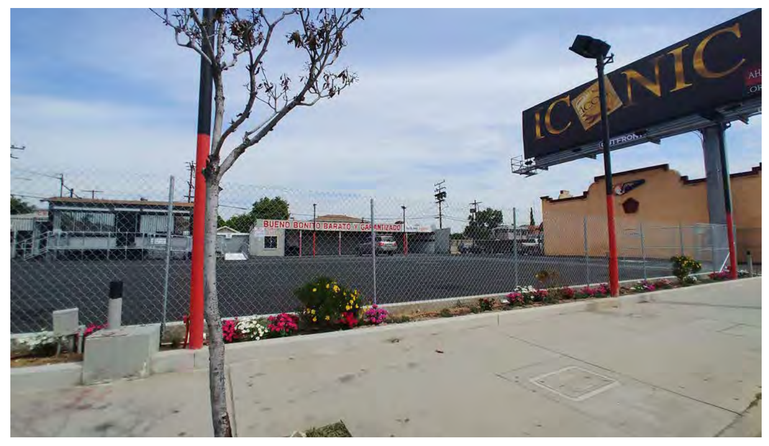
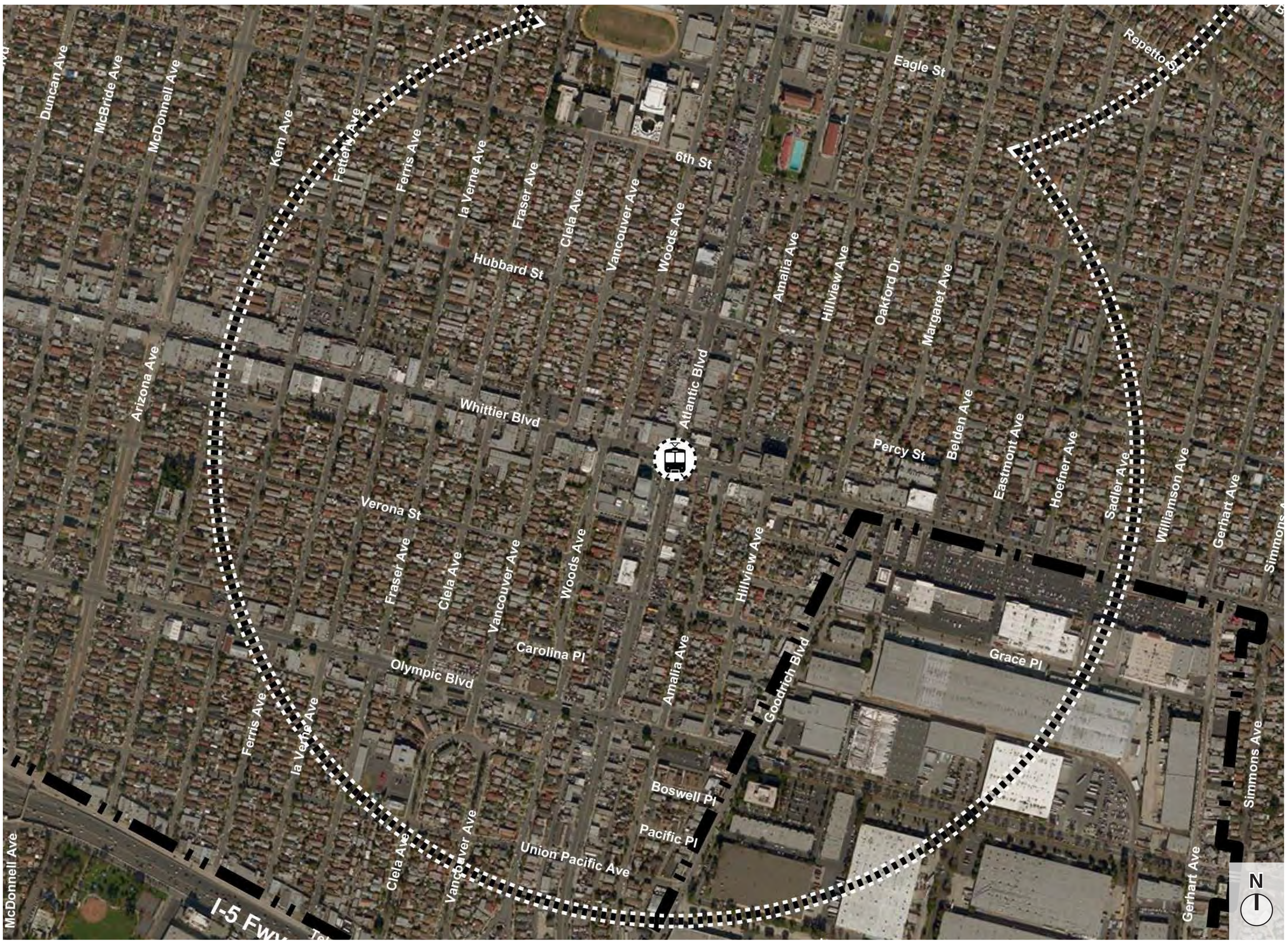


Vacant car dealership along Atlantic Blvd. This is an example of an underutilized lot which could serve another use such as parking, housing, etc.

Whittier Blvd. has several unique building facades between 1- and 2-stories.

Typical residential throughout half-mile station area. Multiple building types are found, primarily in the low- and medium-density range.

Sidewalks cluttered with outdoor displays pose as obstacles for pedestrians, making it difficult to pass.



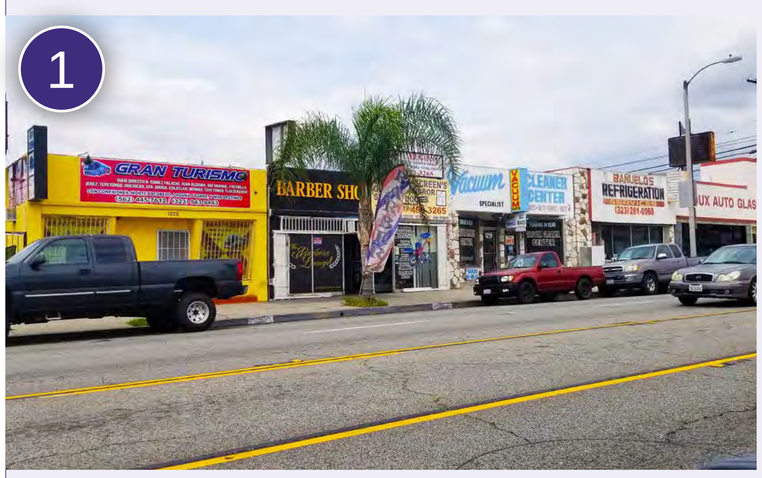
WHAT SHOULD BE PRESERVED OR IMPROVED IN THE ATLANTIC/WHITTIER STATION AREA

QUÉ DEBE CONSERVARSE O MEJORARSE EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER

PRESERVE

ENHANCE/IMPROVE

1



Multiple adjoined commercial tenants along Atlantic Blvd.

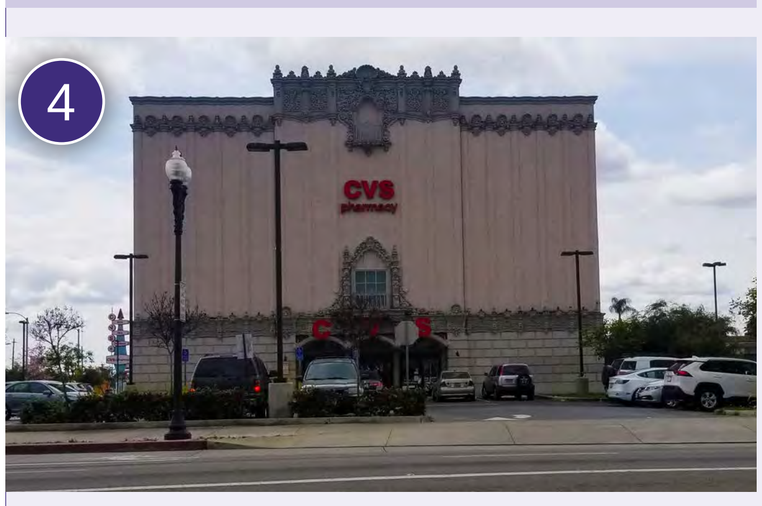
2

Atlantic Park

3

One of several car dealerships along Atlantic Boulevard

4



CVS / The Golden Gate Theater

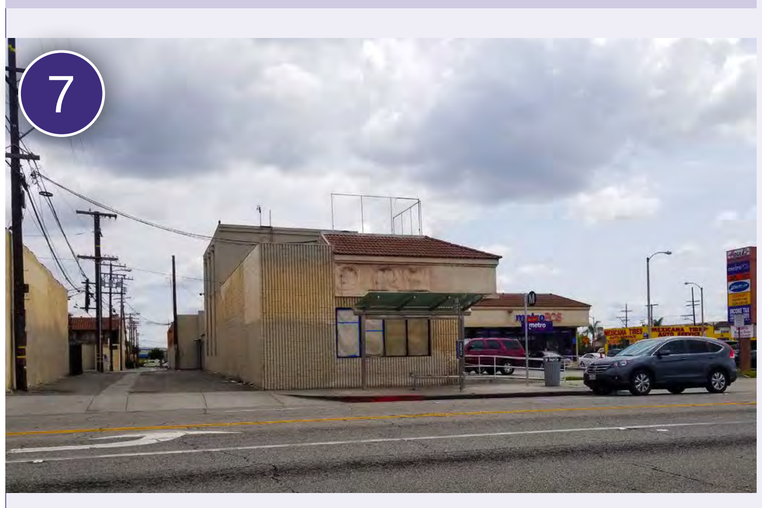
5

Multi-family residential within neighborhood

6

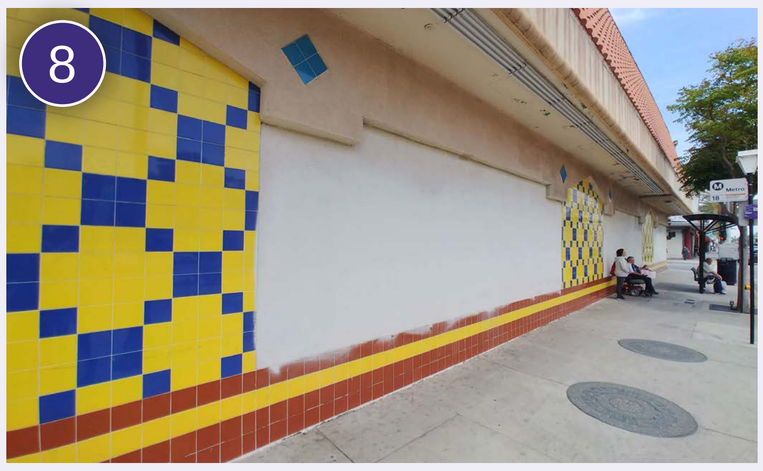
Single-family residential within neighborhood

7



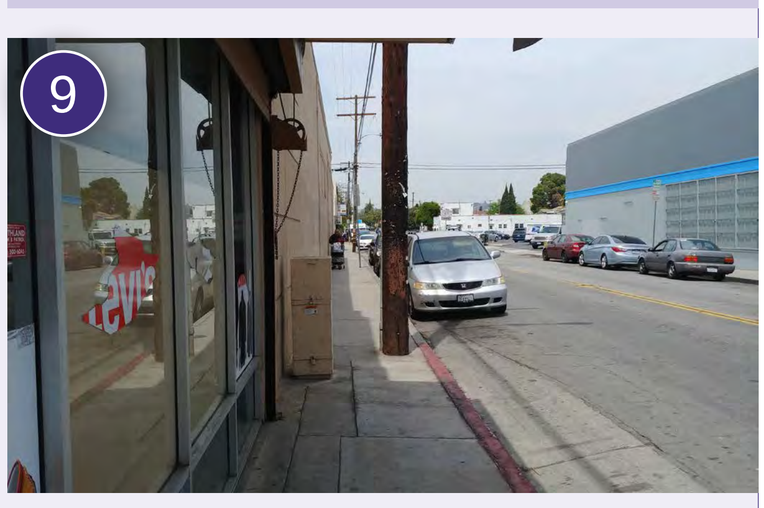
Atlantic Boulevard bus shelter, alleyway and commercial

8



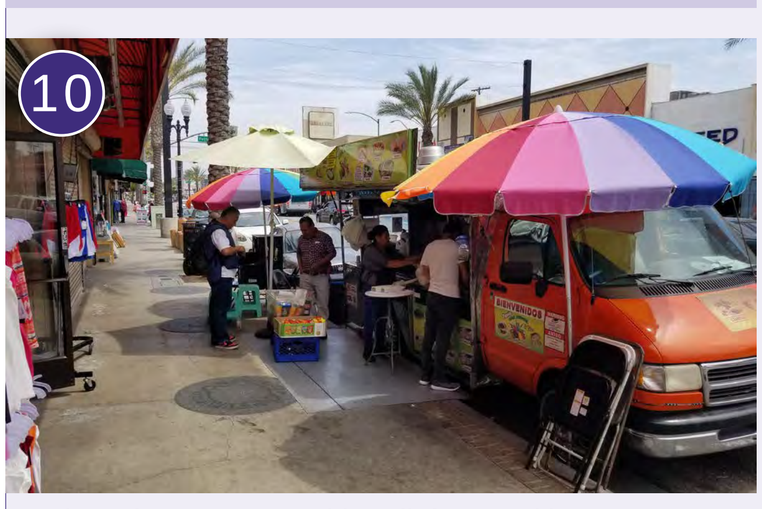
Whittier Boulevard building face

9



Side streets connecting with Whittier Boulevard

10



Food vendors set up on sidewalk from parking space

11

Cultural identity within neighborhood

12

Whittier Boulevard businesses using sidewalks & street

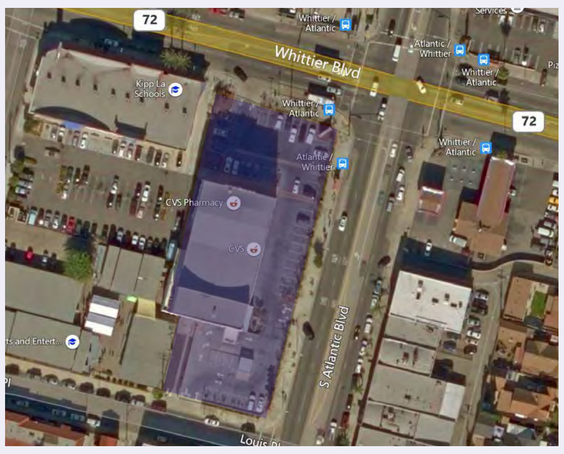
WHAT SHOULD BE PRESERVED OR IMPROVED IN THE ATLANTIC/WHITTIER STATION AREA

QUÉ DEBE CONSERVARSE O MEJORARSE EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER

PRESERVE ENHANCE/IMPROVE

OPPORTUNITY SITE 1

Street view looking northwest



Aerial view

OPPORTUNITY SITE 2

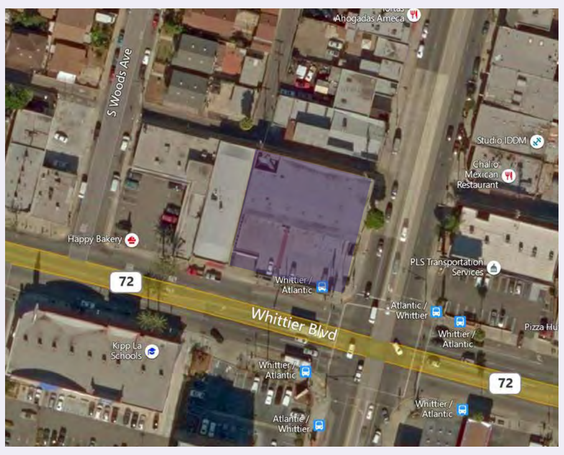
Street view looking northeast

Source: Gruen Associates

Aerial view

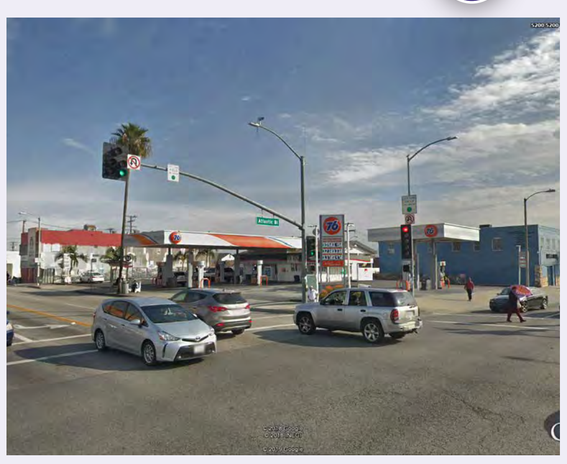
OPPORTUNITY SITE 3

Street view looking northwest



Aerial view

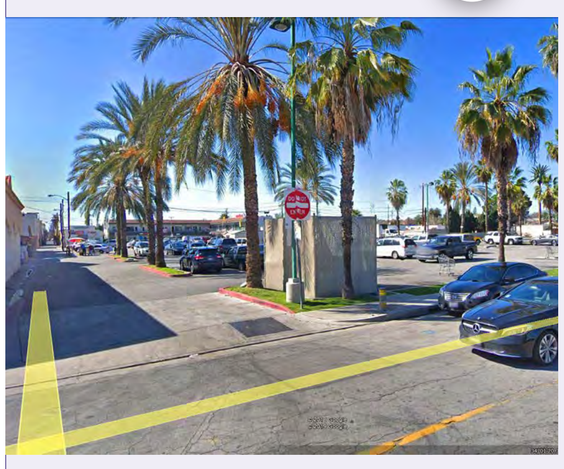
OPPORTUNITY SITE 4



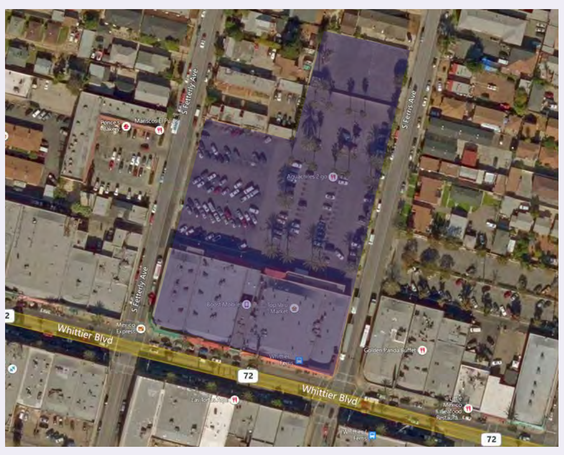
Street view looking southeast

Aerial view

OPPORTUNITY SITE 5



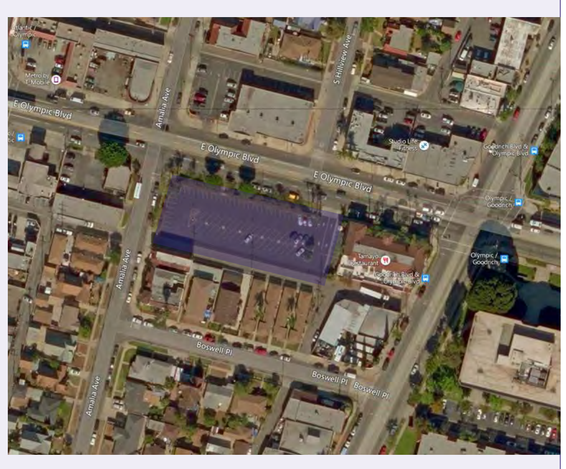
Street view looking northwest



Aerial view

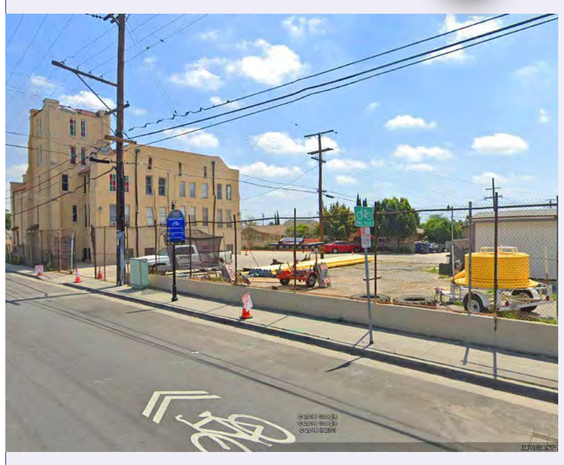
OPPORTUNITY SITE 6

Street view looking southwest



Aerial view

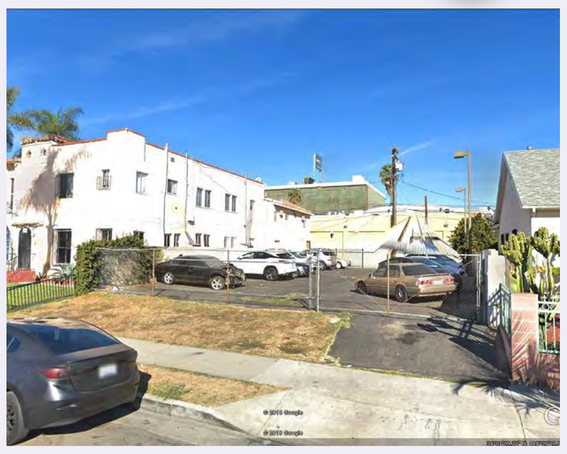
OPPORTUNITY SITE 7



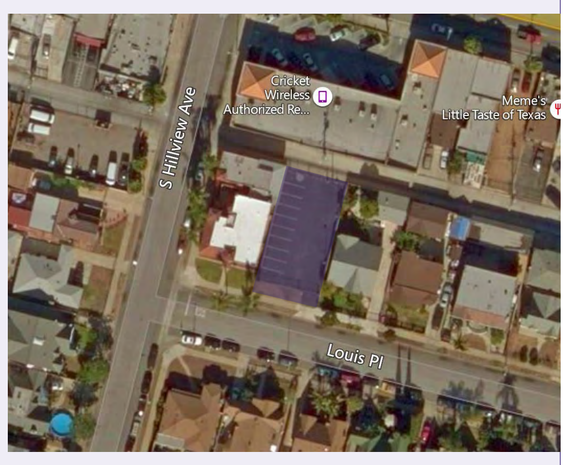
Street view looking southeast

Aerial view

OPPORTUNITY SITE 8



Street view looking north



Aerial view

WHAT BUILDING TYPES ARE APPROPRIATE IN ATLANTIC/WHITTIER STATION AREA

QUÉ TIPOS DE CONSTRUCCIÓN SON APROPIADOS EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER

PRESERVE ENHANCE/IMPROVE

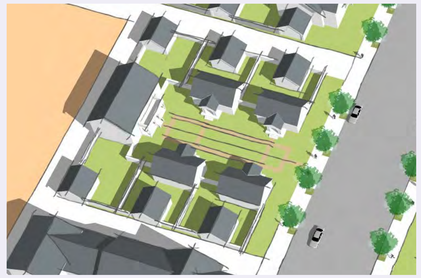
Source: Gruen Associates

Single Family House

Characteristics

- Accessibility
- Massing
- Height

East Los Angeles, CA



Source: Gruen Associates

Bungalow Court

Characteristics

- Accessibility
- Massing
- Height

Pasadena, CA

Source: Gruen Associates

Triplex/Fourplex

Characteristics

- Accessibility
- Massing
- Height

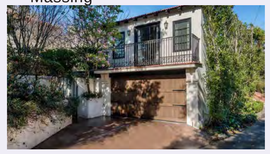
Los Angeles, CA

Source: Gruen Associates

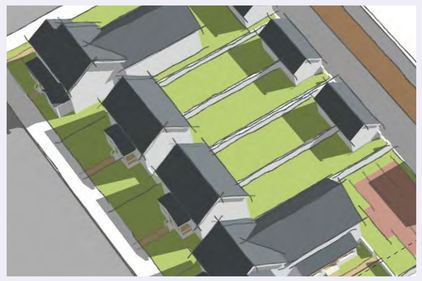
Accessory Dwelling Unit

Characteristics

- Accessibility
- Massing



Piedmont, CA



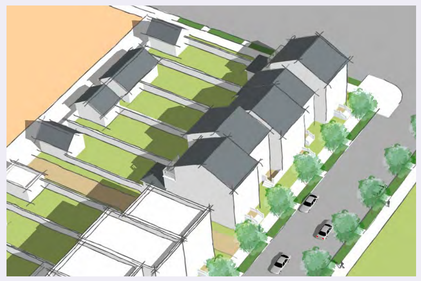
Source: Gruen Associates

Duplex

Characteristics

- Accessibility
- Massing
- Height

Los Angeles, CA



Source: Gruen Associates

Attached Townhouse

Characteristics

- Accessibility
- Massing
- Height

Los Angeles, CA

LOS ANGELES COUNTY
Transit Oriented Design Guidelines

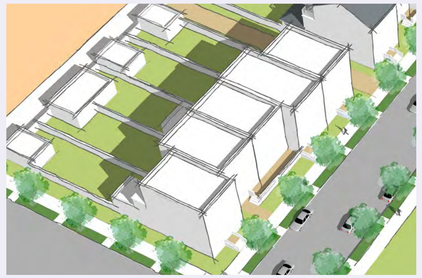
GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS LANDSCAPE

POTENTIAL BUILDING TYPES SURVEY

WHAT BUILDING TYPES ARE APPROPRIATE IN ATLANTIC/WHITTIER STATION AREA

QUÉ TIPOS DE CONSTRUCCIÓN SON APROPIADOS EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER

PRESERVE ENHANCE/IMPROVE



Source: Gruen Associates

Live/Work

Characteristics

- Accessibility
- Massing
- Height

Santa Ana, CA

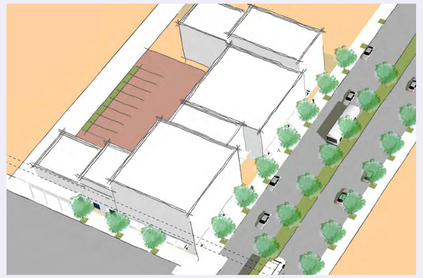
Source: Gruen Associates

Hybrid Courtyard

Characteristics

- Accessibility
- Massing
- Height

Pasadena, CA



Source: Gruen Associates

Flex Mixed-use

Characteristics

- Accessibility
- Massing
- Height

Williamsburg, VA

Source: Gruen Associates

Courtyard

Characteristics

- Accessibility
- Massing
- Height

Los Angeles, CA

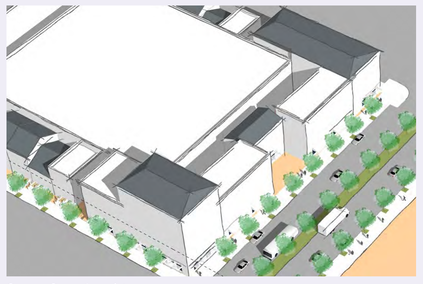
Source: ateliermarkvaghei architecture

Small Lot Subdivision

Characteristics

- Accessibility
- Massing
- Height

Los Angeles, CA



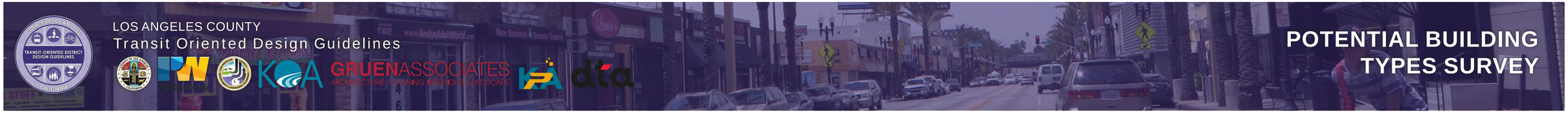
Source: Gruen Associates

Commercial Block/Liner

Characteristics

- Accessibility
- Massing
- Height

Boulder, CO



LOS ANGELES COUNTY
Transit Oriented Design Guidelines

GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS LANDSCAPE

POTENTIAL BUILDING TYPES SURVEY

WHAT ARE THE KEY ISSUES WITHIN THE ATLANTIC/ WHITTIER STATION AREA?

CUÁLES SON LOS PROBLEMAS CLAVE DENTRO DEL ÁREA DE LA ESTACIÓN ATLÁNTICA / BLANCA?

WHAT ARE THE KEY ISSUES WITHIN THE ATLANTIC/ WHITTIER STATION AREA?

CUÁLES SON LOS PROBLEMAS CLAVE DENTRO DEL ÁREA DE LA ESTACIÓN ATLÁNTICA / BLANCA?

Mobility

The major corridors within the half-mile station area form relatively short blocks with frequent bus transit service. While these factors make the station area walkable, sidewalks along connector streets are generally too narrow for comfortable pedestrian passage. In addition, there are multiple instances along Whittier Boulevard where retail businesses have added merchandise to the sidewalk which impedes pedestrian traffic.

Land Use

Empty storefronts along Whittier Boulevard and vacant/underutilized lots along Atlantic Boulevard are the primary locations for potential redevelopment. Additionally, the several commercial lots with parking located in the rear pose as additional opportunities for targeted infill development in conjunction with shared parking strategies.

Urban Design

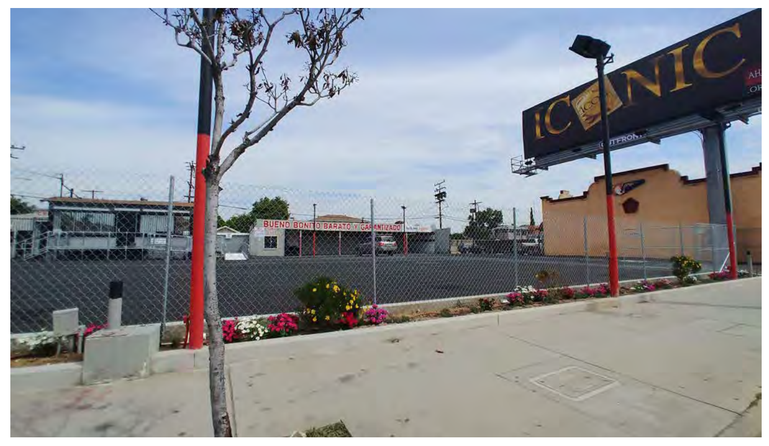
Whittier Boulevard generally has more streetscape improvements than Atlantic Boulevard or Olympic Boulevard. Continuing these streetscape improvements to all major corridors and implementing a uniform pattern of shade-providing street trees will provide the station area with a defined sense of place. There are limited opportunities for streetscape improvements along residential streets, which have far more narrow sidewalks.

½ Mile Radius from a Potential Transit Station

Potential Atlantic/Whittier Station

Rail Line

Commerce / Unincorporated County Boundary

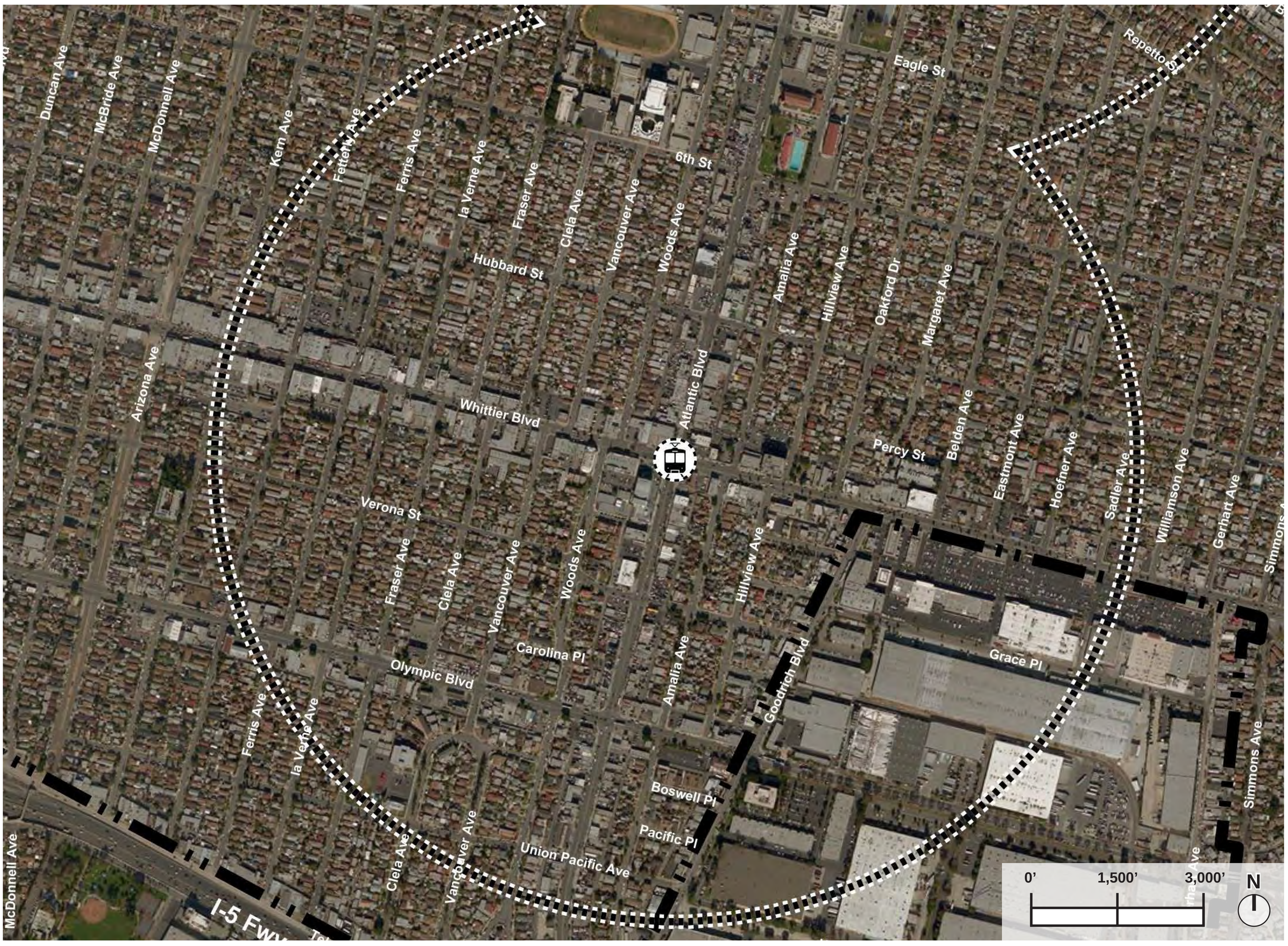


Vacant car dealership along Atlantic Blvd. This is an example of an underutilized lot which could serve another use such as parking, housing, etc.

Whittier Blvd. has several unique building facades between 1- and 2-stories.

Typical residential throughout half-mile station area. Multiple building types are found, primarily in the low- and medium-density range.

Sidewalks cluttered with outdoor displays pose as obstacles for pedestrians, making it difficult to pass.



WHAT BUILDING TYPES ARE APPROPRIATE IN ATLANTIC/WHITTIER STATION AREA?

¿QUÉ TIPOS DE CONSTRUCCIÓN SON APROPIADOS EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER?

Single Family House

Source: Gruen Associates

East Los Angeles, CA

Triplex/Fourplex

Source: Gruen Associates

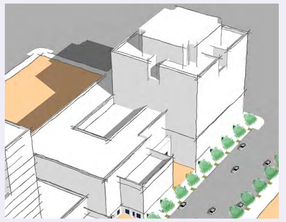
Los Angeles, CA

Hybrid Courtyard

Source: Gruen Associates

Pasadena, CA

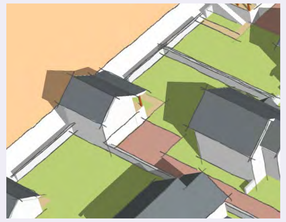
Mid-Rise Tower



Source: Gruen Associates

Washington, D.C.

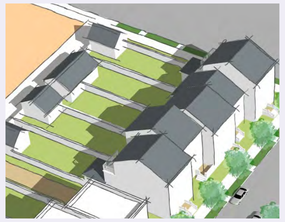
Accessory Dwelling



Source: Gruen Associates

Piedmont, CA

Attached Townhouse



Source: Gruen Associates

Los Angeles, CA

Compact Lot Subdivision

Source: ateliermarkvaghei architecture

Los Angeles, CA

High-Rise Tower

Source: Gruen Associates

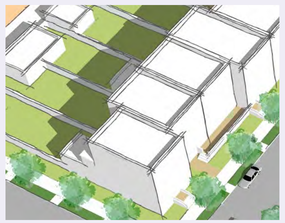
Los Angeles, CA

Bungalow Court

Source: Gruen Associates

Pasadena, CA

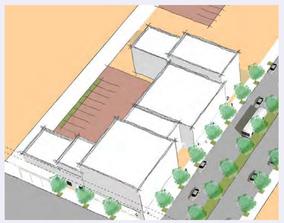
Live/Work



Source: Gruen Associates

Santa Ana, CA

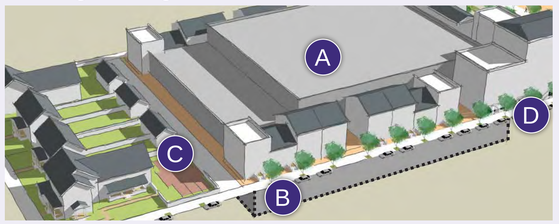
Hybrid Podium



Source: Gruen Associates

Williamsburg, VA

Parking Strategies



A *Above-grade parking structure*

B *Below-grade garage*

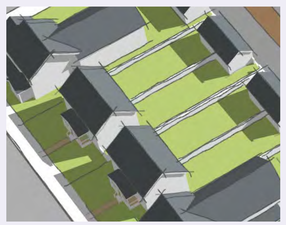
C *At-grade on-site parking*

D *On-street parking*

Rear at-grade parking lot; East Los Angeles, CA

Below-grade parking structure entrance; Huntington Beach, CA

Duplex



Source: Gruen Associates

Los Angeles, CA

Courtyard

Source: Gruen Associates

Los Angeles, CA

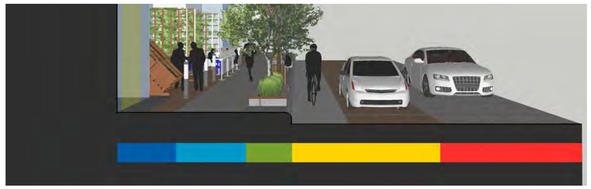
Commercial Block/ Liner

Source: Gruen Associates

Boulder, CO

WHAT STREETSCAPE AMENITIES ARE APPROPRIATE IN ATLANTIC/WHITTIER STATION AREA?

¿QUÉ CARACTERÍSTICAS DEL PAISAJE URBANO SON APROPIADAS EN EL ÁREA DE LA ESTACIÓN ATLANTIC / WHITTIER?



Streetscape Zone	Frontage	Throughway	Furnishings	Extension	Drive Lane
Recommended Width	*Min. 2' Max. 10'*	*Min. 6'*	*Min. 4' with 2' edge zone*	*Max. 8' parking lane and min. 5' bike lane*	*Max. 11'*

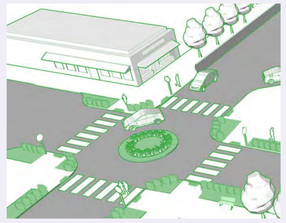
Source: Metropolitan Council

Bus Bulb

Source: NACTO

Seattle, WA

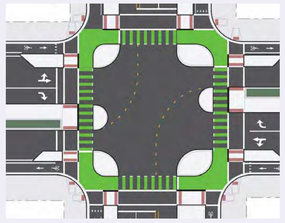
Traffic Circle



Source: Gruen Associates

Long Beach, CA

Protected Bicycle Intersection



Source: ALTA

San Francisco, CA

Lane Width and Repurposing

Source: NACTO

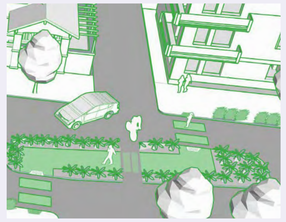
San Bernardino, CA

Sidewalks

Source: NACTO

Culver City, CA

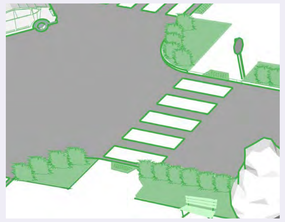
Diverter



Source: Gruen Associates

Portland, OR

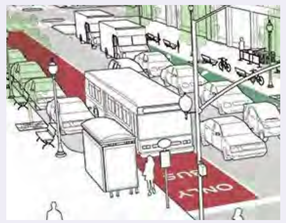
Enhanced Crosswalk



Source: Gruen Associates

Chicago, IL

Transit Lanes



Source: NACTO

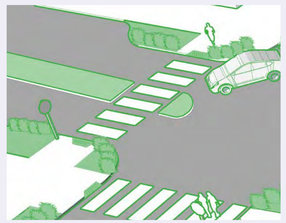
New York, NY

Curb Space

Source: NACTO

Santa Ana, CA

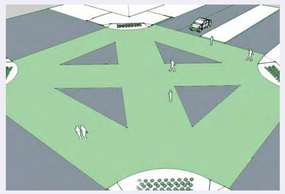
Median Refuge Island



Source: Gruen Associates

Arlington, VA

Scramble Crosswalk

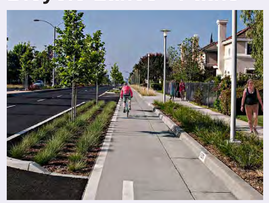


Source: Gruen Associates

Pasadena, CA

Bicycle Lanes / Paths

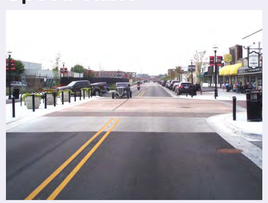
Source: NACTO



Temple City, CA

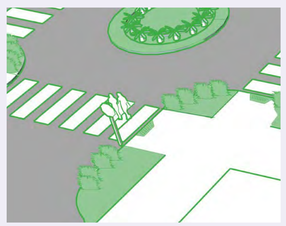
Speed Table

Source: NACTO



Speedway, IN

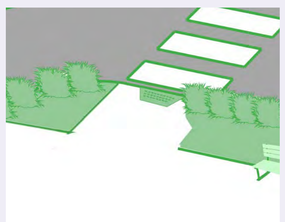
Curb Extension



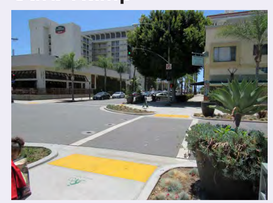
Source: Gruen Associates

Long Beach, CA

Curb Ramp



Source: Gruen Associates



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