




DUARTE TOWN CENTER

greening and traffic calming plan

OCTOBER 2019





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ACKNOWLEDGEMENTS

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CHAPTER 1 INTRODUCTION

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INTRODUCTION AND PLANNING CONTEXT

INTRODUCTION

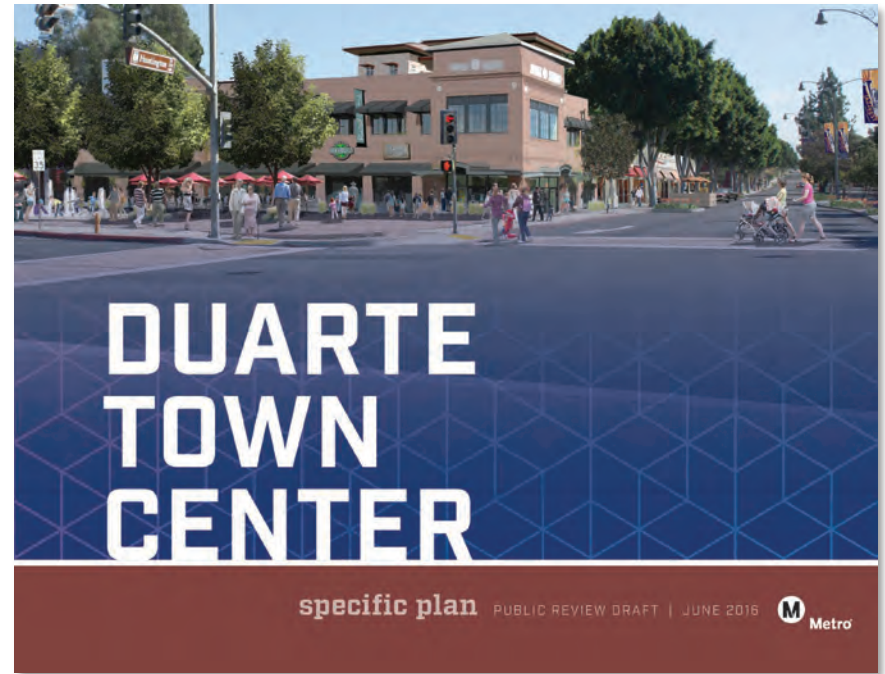
City of Duarte adopted the **Duarte Town Center Specific Plan** in 2016. This forward-thinking plan provides incentives for new, high-quality development and sets a high standard for public realm improvements that will enhance pedestrian safety and user experience, storm water quality, and multi-modal access.

Through traffic calming efforts on Huntington Drive—including curb bulbouts, additional street crossings, and parklets—as well as additional bicycle and pedestrian improvements along Buena Vista Street and Highland Avenue, the overall pedestrian experience will be enhanced, and walking to new shops, restaurants, and the Metro Gold Line Duarte Station will become a much more pleasant and safer experience.

The **Greening and Traffic Calming Plan** is a direct implementation measure of the Specific Plan. Building on current and past planning efforts, this Plan addresses existing constraints to create complete streets for Duarte residents, to leverage existing assets and work to date, and to develop a clear path toward an interconnected network of green open spaces that provide safe, healthy, and identifiable public realm improvements in the Duarte Town Center.

PLANNING CONTEXT

The foundational planning context for the Duarte Town Center Greening and Traffic Calming Plan is the **Duarte Town Center Specific Plan**, described in the Introduction above. In addition, this section describes other local and regional planning measures that influence transportation and greening decisions in Duarte.



General Plan (2007)

The Duarte General Plan was adopted in 2007 (the Housing Element was last updated in 2014). The General Plan provides a citywide approach to planning for future development and includes eight elements: Safety, Open Space and Conservation, Noise, Land Use, Housing, Historic Preservation and Public Safety. The General Plan identifies a set of goals, objectives and policies related to each of the elements.

Duarte Station Specific Plan

Located directly adjacent at the southern boundary of the Town Center Specific Plan, the Duarte Station Specific Plan, adopted in 2013, provides the framework for development and streetscape improvements around the Metro Gold Line Duarte Station. The area surrounding the station will become a vibrant, mixed-use transit village that has a focus on residential uses, office, hospitality, and urban green space. The City initiated an

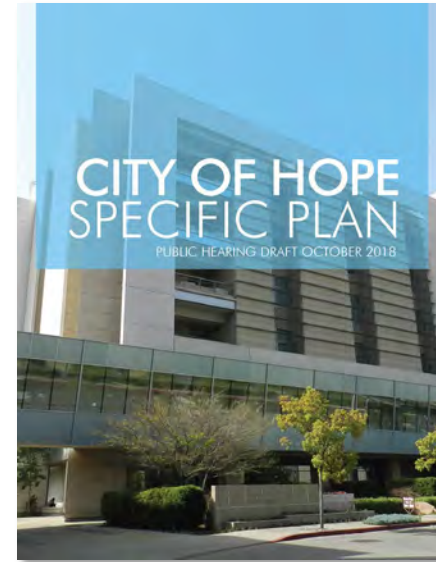
amendment to the Duarte Station Specific Plan in 2019 to allow additional residential uses, adaptive reuse of existing buildings, and strengthen policies to associated with the public realm. The Duarte Station Specific Plan envisions a pedestrian promenade along Highland Avenue, extending north from the Metro Gold Line Duarte Station and linking the Town Center to the Duarte Station area.



City of Hope Campus Plan (2018)

Located immediately south of the Duarte Station Specific Plan area, City of Hope is an independent research and treatment center for cancer, diabetes, and other life-threatening diseases. The cornerstone campus for the institution is located in the City of Duarte and neighboring Irwindale. The City of Hope Campus Plan is a blueprint for the evolution and improvement of the main campus over the next 20 years. The vision for the City of Hope campus is to create a walkable and compact campus core that builds upon and enhances existing inpatient and outpatient facilities, research, office, assembly, parking, and open spaces uses. Pedestrian improvements along

Highland Avenue will be important to facilitate comfortable access from the campus to the Town Center.



Duarte Energy Action Plan (2012)

The Energy Action Plan demonstrates the City's commitment to pursue energy efficiency and reduce greenhouse gas emissions. The City is committed to conserve and reduce energy use and greenhouse gas emissions and will continue to partner with the San Gabriel Valley Council of Governments (SGVCOG) and other regional entities to ensure collaboration.

City-Wide Bicycle Master Plan

The City-Wide Bicycle Master Plan identified a Class II bicycle lane on Buena Vista Street and Highland Avenue. The bicycle lane was installed on Buena Vista Street between Central and Huntington Drive. On Highland Avenue, existing right-of-way width and the need to retain parking has precluded new bicycle lanes here. Instead, Class III sharrows have been installed. Class III Bike Routes are installed along Central Avenue, consistent with the Bicycle Master Plan, and connect to the Metro Gold Line Duarte Station. Bicycle lanes were not included on Huntington Drive.

Types of Bikeways

- “Class I Bike Path” is a completely separated right-of-way for bicycles and pedestrians, with minimal cross traffic from motorists.
- “Class II Bike Lane” is a striped lane for one-way bike travel on a street.
- “Class III Bike Route” is a shared use route, marked with signs or on-street symbols (sometimes referred to as “sharrows,” but no dedicated lane.

Roadway and Pedestrian Improvements Under Development

The City has received two grants to implement the visions of the Duarte Town Center Specific Plan, this Greening and Traffic Calming Plan, and the Duarte Station Specific Plan. In particular, the City received an Active Transportation Planning (ATP) Grant to complete sidewalk enhancement, underpass illumination, and bicycle improvements proximate to Gold Line station and to improve connectivity to Buena Vista Street and Highland Avenue. The City was also recently awarded a grant using Measure M funds that will facilitate pedestrian movement to Buena Vista and the Town Center and help create a pedestrian promenade in front of the Duarte Station Plan area.

CalTrans Connected Corridors

To help achieve its new multi-modal, multi-agency collaborative vision, Caltrans developed the Connected Corridors program in early 2012. The Connected Corridors Program seeks ways to improve how freeways, arterials, transit, and parking systems work together. A pilot system deployment on the I-210 corridor in the San Gabriel Valley region (including the portion of the I-210 in Duarte) implements Integrated Corridor Management (ICM) to identify and leverage underutilized capacity in the form of parallel roadways, single-occupant vehicles, and transit services.

Rail Transit: Metro Gold Line

Metro is expanding light rail services throughout the region. The Gold Line Foothill Extension reached Duarte in 2016 with service to the Metro Gold Line Duarte Station. As part of a second phase of rail construction, the Foothill Gold Line intends to extend to Montclair, an additional 12.3 miles, and add stations in the cities of Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair. When the regional connector in Downtown Los Angeles is constructed, the Gold Line will transition to become an extension of the existing Blue Line, linking Montclair to Long Beach.



Bus Transit: Foothill Transit and Metro

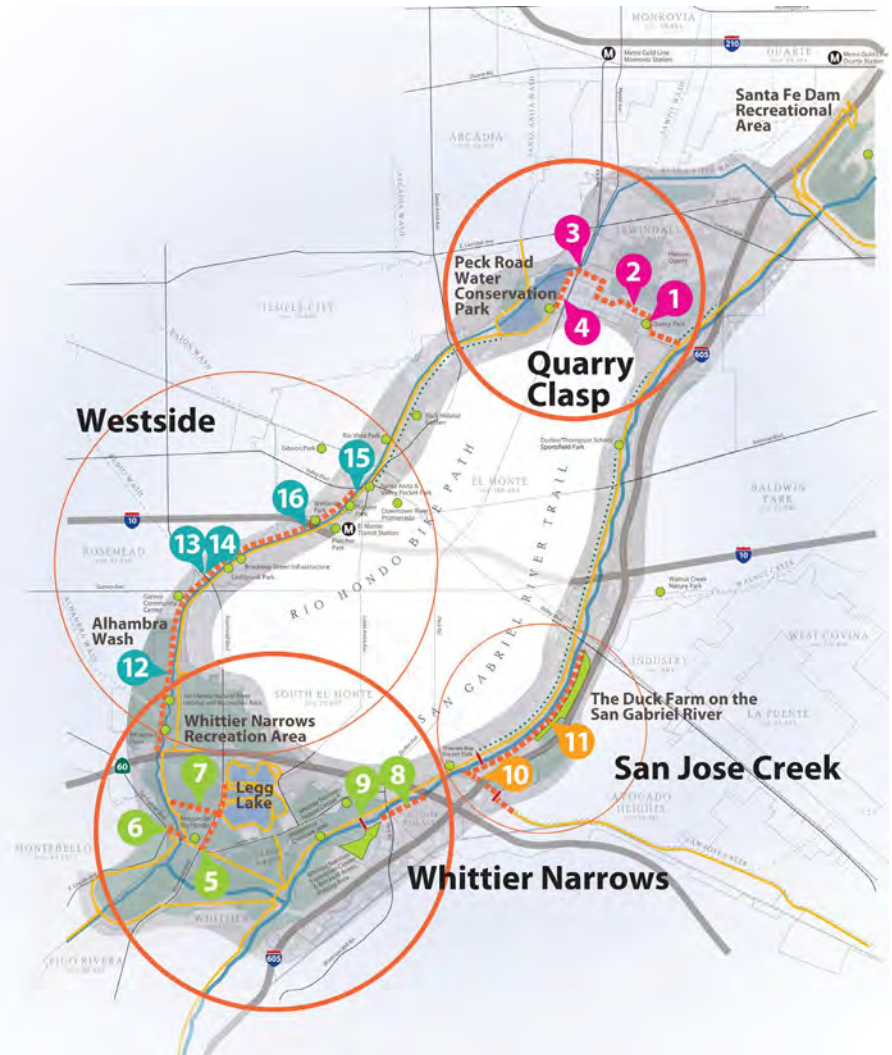
In addition to the Metro Gold Line Duarte Station light rail service, Duarte is served by Foothill Transit for fixed route bus transit services. In 2019, the City partnered with Foothill Transit to introduce a fleet of new, 35-foot electric buses that will operate on transit routes previously supported by Duarte Transit. Metro Local 264 also travels from Altadena to City of Hope Medical Center at the edge of Duarte.

San Gabriel Valley Bike Master Plan

The San Gabriel Valley Regional Bicycle Master Plan provides a broad vision, as well as strategies and actions, to improve conditions for bicycling throughout the region as well as in each partner city. The partner cities included Baldwin Park, El Monte, Monterey Park, San Gabriel, and South El Monte. The plan is intended to better the biking environment and provides direction for expanding the existing bikeway network, closing key gaps within the project cities, and connecting to bicycle facilities in adjacent cities and unincorporated Los Angeles County communities.

Emerald Necklace


The Emerald Necklace is a regional initiative to create a 17-mile loop of interconnected parks, trails, and recreational areas along the San Gabriel River and the Rio Hondo, connecting to the Santa Fe Dam Recreational Area located just outside of Duarte in the City of Irwindale. The Watershed Conservation Authority conducted a Feasibility Study, Implementation Plan, and Environmental Impact Report to implement the Emerald Necklace vision in 2017. The proposed plan includes 15 projects that will close gaps in the Emerald Necklace's regional trails network and increase access to the trails.



Emerald Necklace Projects
Source: Watershed Conservation Authority

CHAPTER 2 FRAMEWORK

DUARTE TOWN CENTER
greening and traffic calming plan



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FRAMEWORK

OVERARCHING PLAN GOALS

The following overarching plan goals are foundational to the Greening and Traffic Calming Plan and are intended to guide future implementation decisions:

- Implement the Town Center Specific Plan
- Prioritize traffic calming measures that reduce vehicle speed and enhance pedestrian experience and safety
- Develop a distinctive, unified streetscape design for Huntington Drive, Highland Avenue, and Buena Vista Street
- Connect transit users from the Metro Gold Line Duarte Station to the Town Center with enhanced freeway underpasses
- Create space for public life and activation through creative use of parking lanes on Huntington Drive
- Improve street ecology through streetscape design
- Incorporate universal design and accessibility in planned improvements
- Integrate existing bicycle improvements into plans
- Identify attainable solutions and prioritize cost-effective measures to enhance economic development

To achieve these goals, this plan presents concepts for the three primary corridors: Huntington Drive, Buena Vista Street, and Highland Avenue, with additional emphasis on the I-210 freeway underpass areas located at Highland and Buena Vista. This plan represents an ongoing and long-term effort to reimagine these primary corridors and will be implemented in phases as project funding is available.

OBJECTIVES

The following pages outline objectives for this plan, with a critical path forward for Huntington Drive, Highland Avenue, and Buena Vista Avenue. Detailed concept plans are provided in Chapter 3.



Town Center Specific Plan - Concept Plaza Design

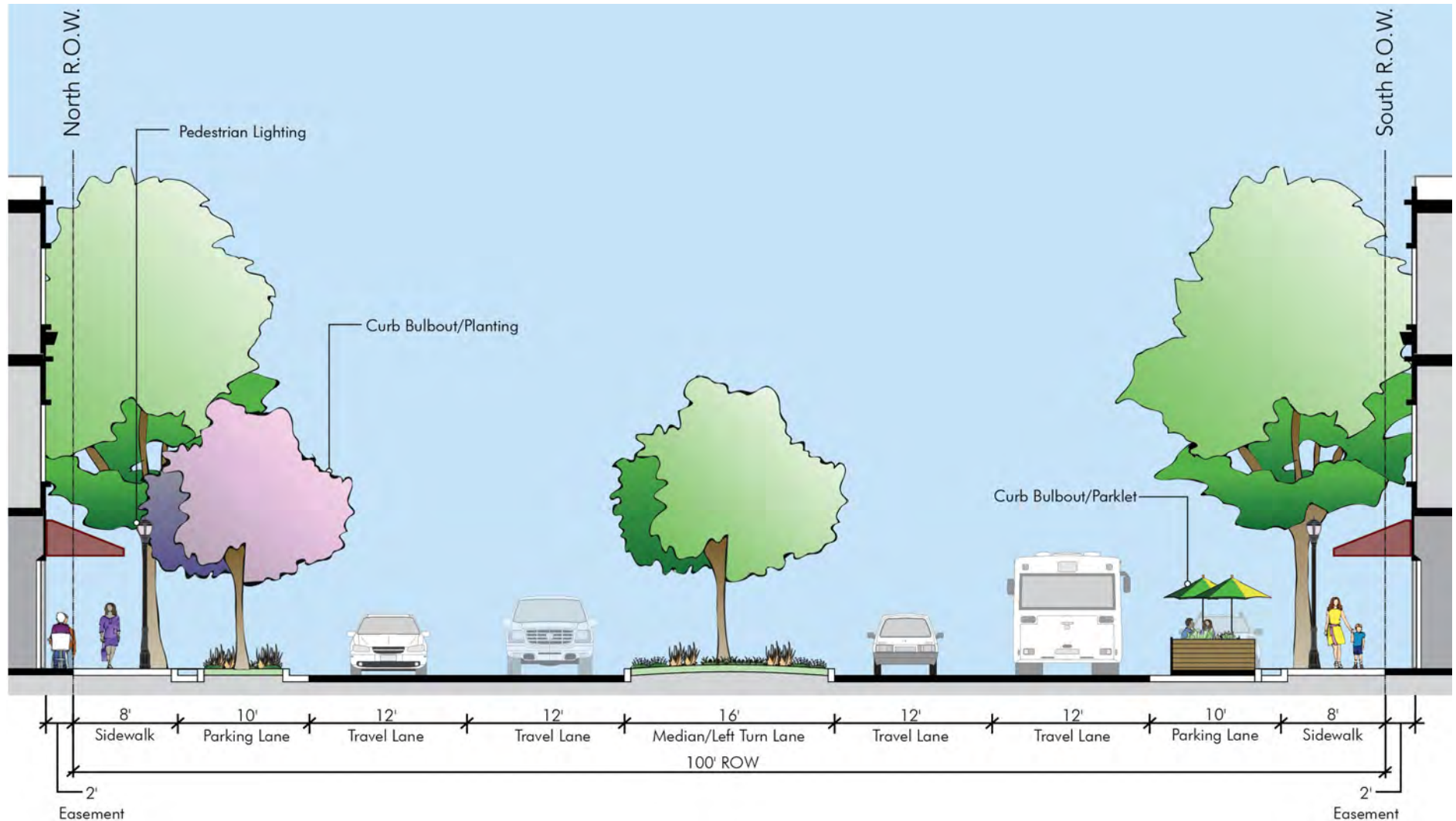
Huntington Drive

Objective: Implement traffic calming measures and create a pleasing pedestrian experience that enhances safety and economic vitality along Huntington Drive.

Strategies:

- Modify parking lane to implement curb bulbouts
- Modify parking lane to add parklets in appropriate locations
- Add pedestrian amenities, including lighting

Proposed Improvements for Huntington Drive



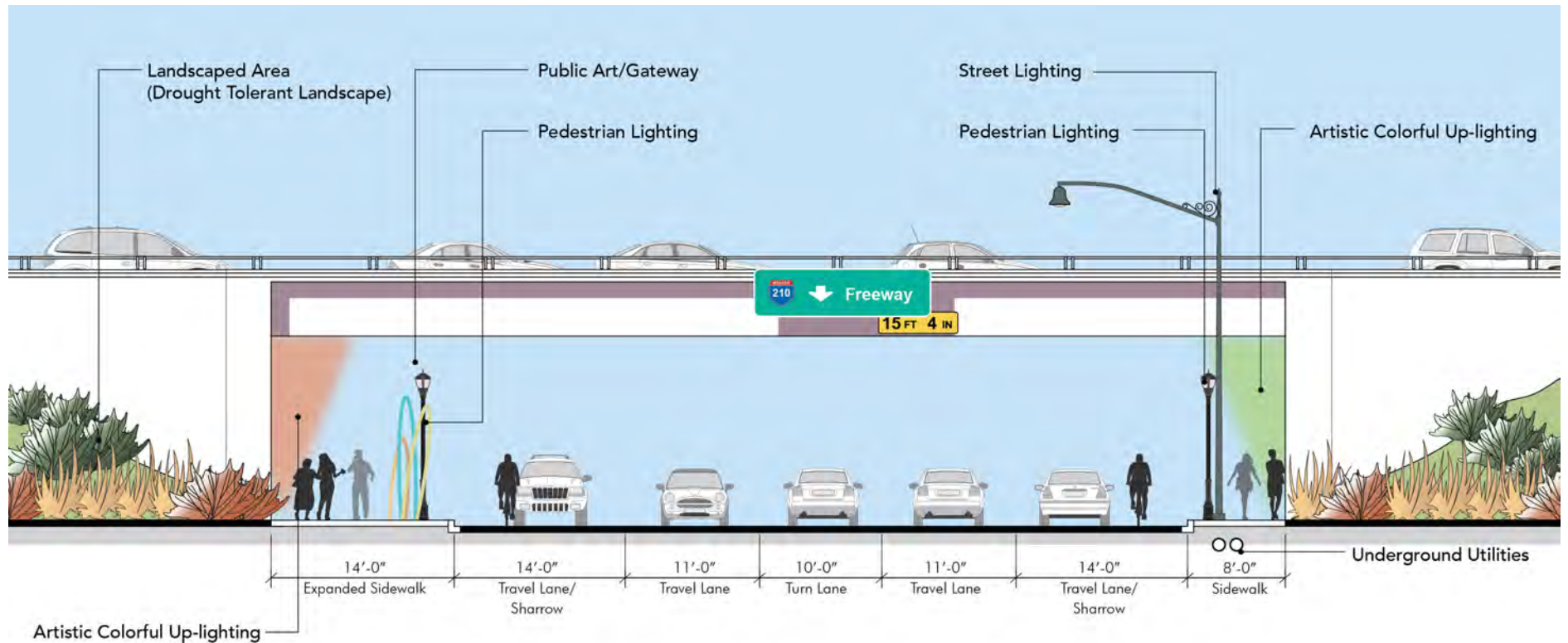
Freeway Underpass at Highland Avenue

Objective: Design the freeway underpass at Highland Avenue to foster pedestrian access to and from the Metro Gold Line Duarte Station, make an artistic statement, and enhance safety.

Strategies:

- Widen sidewalk
- Add artistic lighting
- Install pedestrian lighting
- Install streetlights with new poles and mission bell feature
- Underground utilities
- Consider landscaping and gateway art installation

Proposed Improvements for Highland Avenue Underpass



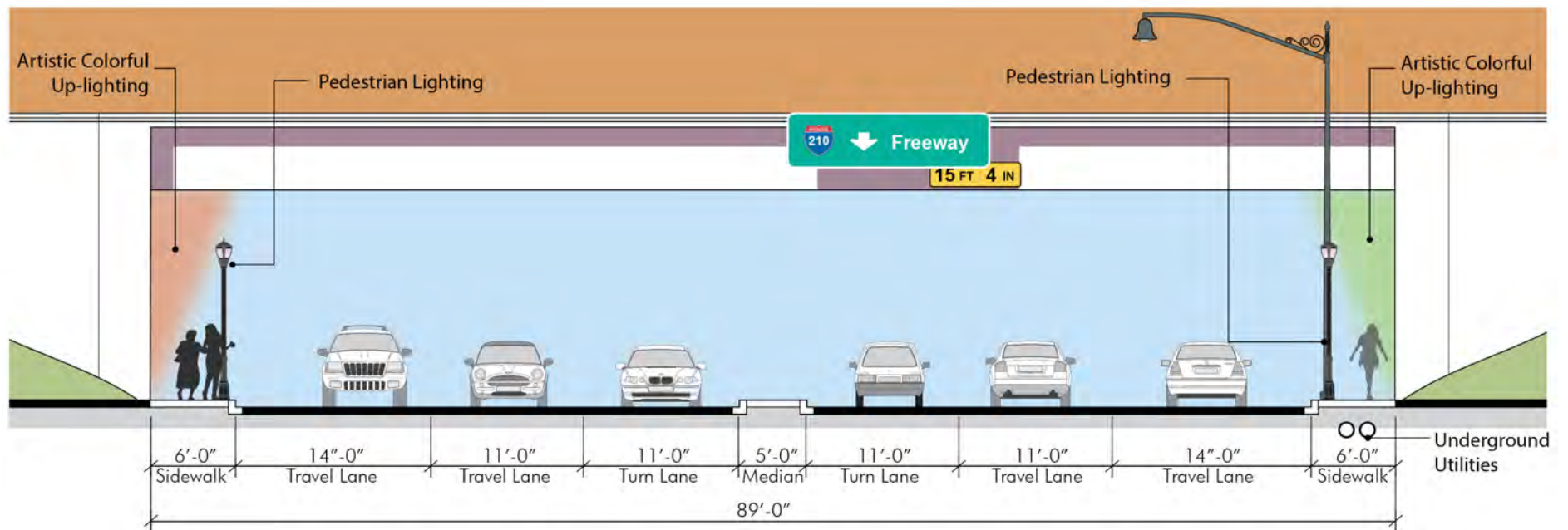
Freeway Underpass at Buena Vista Avenue

Objective: Design the freeway underpass at Buena Vista Avenue as a gateway to Duarte with an artistic statement and enhanced safety.

Strategies:

- Add artistic lighting
- Install pedestrian lighting
- Install streetlights with new poles and mission bell feature
- Underground utilities
- Consider landscaping and gateway art installation

Proposed Improvements for Buena Vista Avenue Underpass



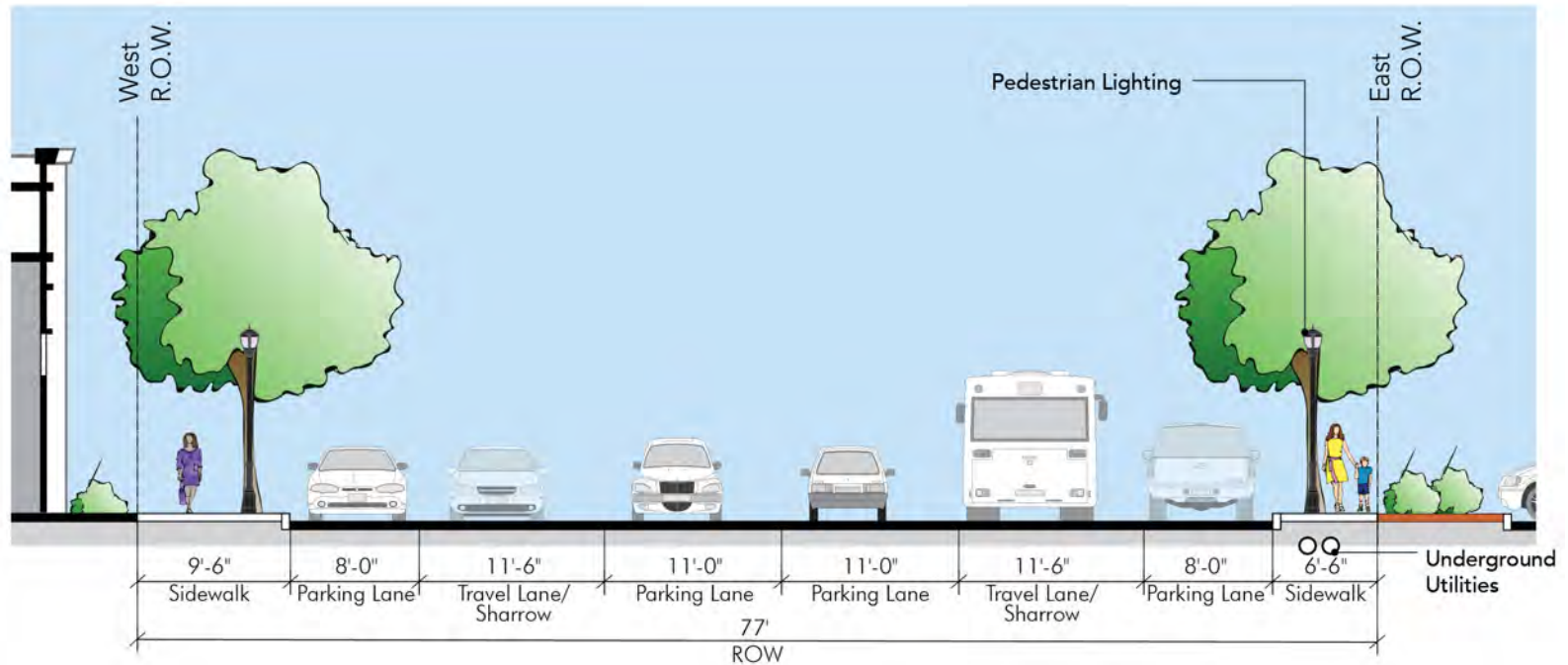
Highland Avenue

Objective: Design Highland Avenue to facilitate an enjoyable pedestrian experience and linkages between the Metro Gold Line Duarte Station and the Town Center.

Strategies:

- Widen sidewalk
- Install pedestrian lighting
- Increase street tree planting

Proposed Improvements for Highland Avenue (Central Avenue to Huntington Drive)



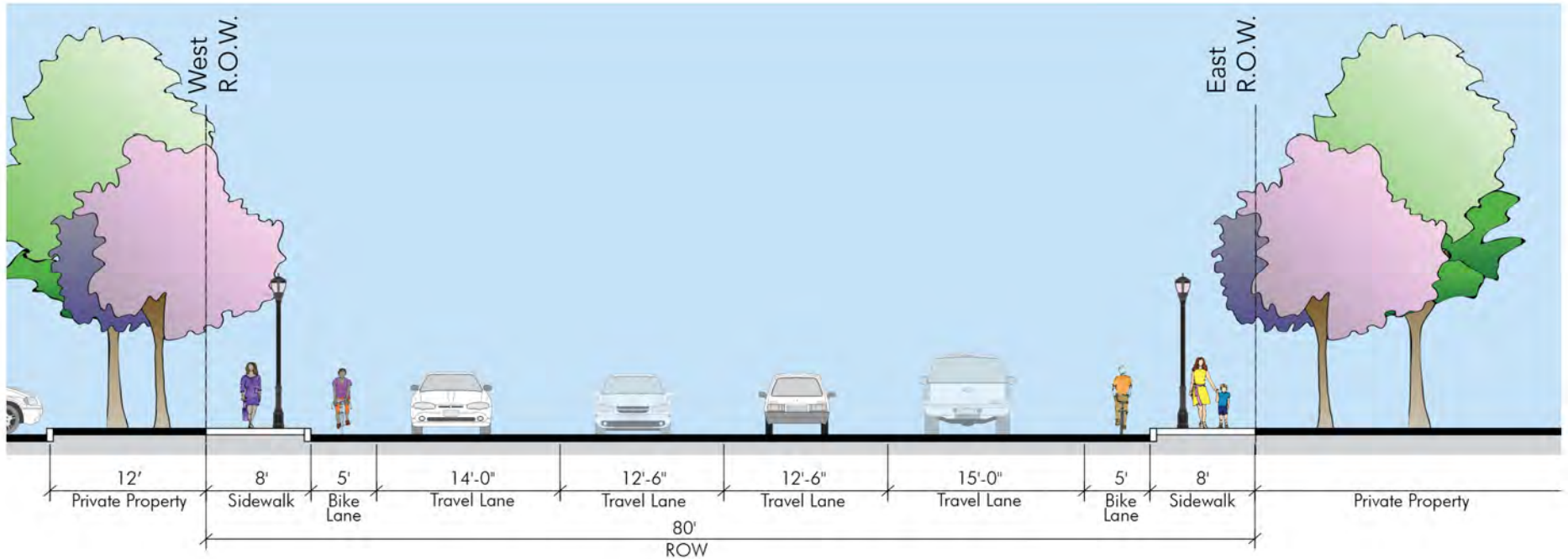
Buena Vista Avenue

Objective: Establish Buena Vista Avenue as the gateway corridor and entryway to Duarte Town Center.

Strategies:

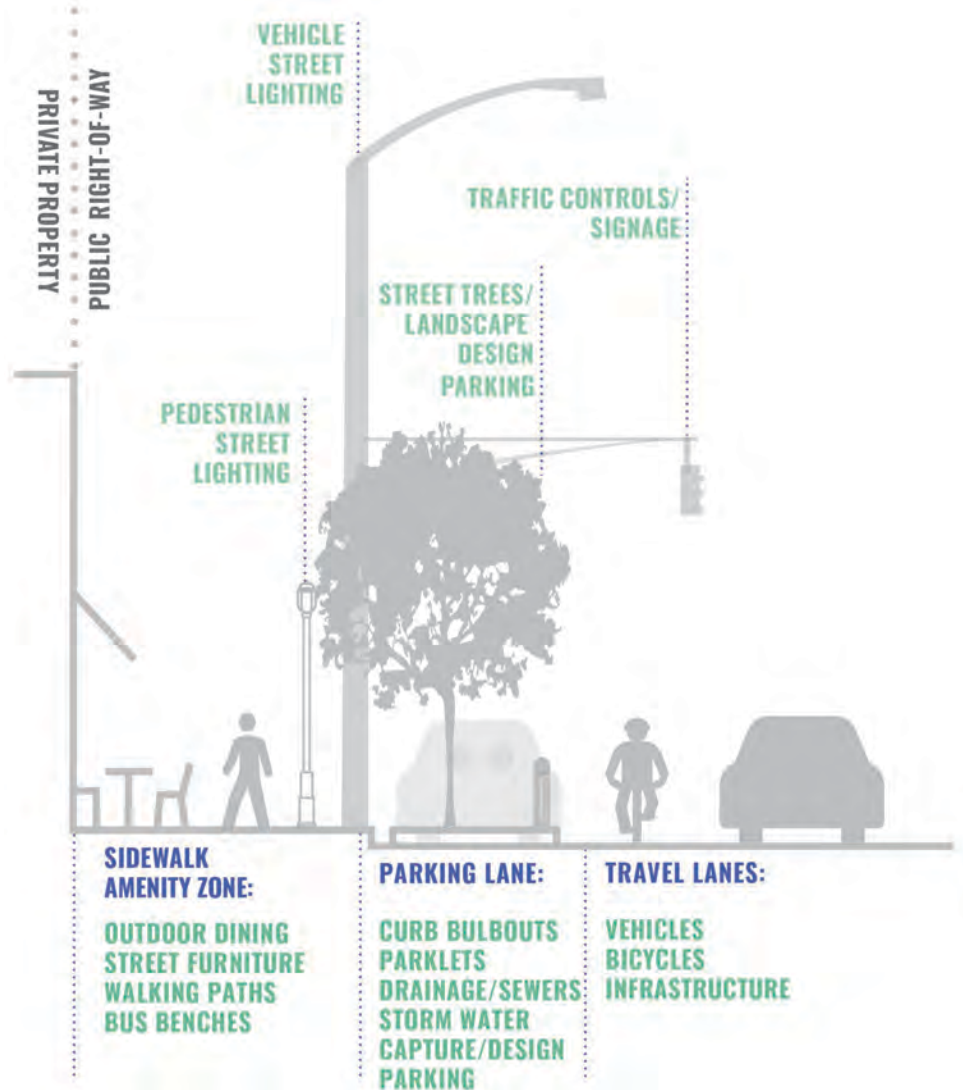
- Increase tree planting in private property setback areas
- Add pedestrian lighting

Proposed Improvements for Buena Vista Avenue (Central Avenue to Huntington Drive)



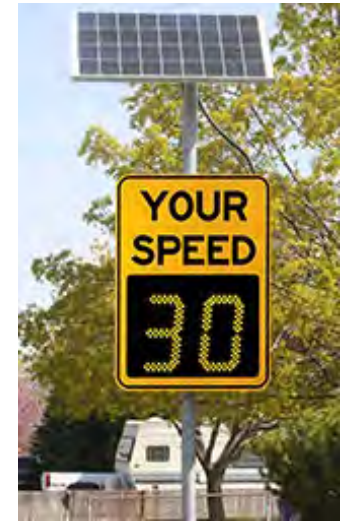
Traffic Calming in the Town Center

Objective: Implement a variety of traffic calming measures to enhance the Town Center, including roadway design, technology, and street safety education.



Strategies:

- Implement strategies identified for Huntington Drive, Buena Vista Avenue, and Highland Avenue, including narrowing of vehicle travel lanes, curb bulbouts and parklets, and widened sidewalks
- Modify crosswalks with concepts such as high-profile visual treatments and leading pedestrian intervals
- Continue to educate the community about traffic safety and pedestrian enhancements
- Periodically reevaluate measures to assess effectiveness and evolving best practices






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CHAPTER 3 CONCEPTS

DUARTE TOWN CENTER
greening and traffic calming plan



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PROJECT CONCEPTS

OVERVIEW

City streets are not just thoroughfares for motor vehicles; they serve as public spaces where people walk, shop, meet, and participate in activities that make urban living enjoyable. An enhanced streetscape where pedestrian movement is comfortable is instrumental in economic development as well as quality of life for local residents and visitors.

The Duarte Town Center Greening and Traffic Calming Project will be a long-term strategy for revitalizing central Duarte and creating a more downtown-like environment through streetscape improvements. This section outlines concept designs for improvements and programs to enhance the pedestrian experience and traffic safety within the Duarte Town Center. **These concepts represent an inventory of key pedestrian and roadway design treatments and provide guidance for their development** and represent the tools for creating a pedestrian and bicycle-friendly, safe, accessible Town Center. The guidelines are not, however, a substitute for a more thorough evaluation by a landscape architect or engineer upon implementation of facility improvements. Nor are they a requirement for exact design specifications. The recommendations provide guidance but are general in nature and further analysis and professional engineering judgement will be required to accommodate local conditions, including topography, cost issues, soil conditions, utilities, and funding opportunities.

As described in Chapter 2: Framework, planned projects and programs are organized under the following six key program components, which are further detailed in this chapter:

- Huntington Drive Improvements
- Highland Avenue Underpass Improvements
- Buena Vista Street Underpass Improvements
- Streetscape Improvements on Highland Avenue
- Streetscape Improvements on Buena Vista Street
- Traffic Calming in the Town Center



Town Center Specific Plan - Concept Streetscape and Development Design

The Duarte Town Center Greening and Traffic Calming Plan, when implemented, will result in a safer and more attractive Town Center that improves the bicycling and walking experience without sacrificing vehicular operations. The map on the next page describes the extents of the proposed six key program components. These concepts may be adjusted as needed based on immediately adjacent local conditions, City priorities and as opportunities arise, but set the stage for implementation.

Implementation Framework



Town Center Boundary



GREENING AND TRAFFIC CALMING IMPROVEMENT PROJECTS

Huntington Dr. Improvements

- Modify parking lane and install landscaped bulbouts
- Install pedestrian lighting
- Upgrade pedestrian crosswalks and equipment

I-210 Underpass Improvements at Highland Ave.

- Widen sidewalk
- Install pedestrian lighting
- Install artistic uplighting
- Consider future terraced landscaping and gateway art installation

I-210 Underpass Improvements at Buena Vista Ave.

- Install pedestrian lighting
- Install artistic uplighting
- Consider future terraced landscaping and gateway art installation

Highland Ave. Improvements North of I-210

- Widen sidewalk
- Install pedestrian lighting
- Plant new street trees
- Update crosswalks to high visibility
- Add north and south left turn pockets at Huntington Dr.

Buena Vista Improvements North of I-210

- Install pedestrian lighting
- Increase/encourage tree planting in private property setback areas
- Update crosswalks to high visibility

General Traffic Calming Improvements

- Add leading pedestrian interval signals
- Community education
- Periodically re-evaluate measures to assess effectiveness and evolving best practices

HUNTINGTON DRIVE IMPROVEMENTS

The Town Center Specific Plan re-imagines Huntington Drive as the backbone of the Town Center and the true heart of the city, Huntington Drive is the historic Route 66 and traverses Duarte. During non-peak hours, traffic is very light on Huntington Drive. However, during peak hours, the flow of traffic is highly unbalanced and much higher in one direction than the other due to the flow of commuter traffic. Much of this traffic is “pass-through” traffic using Huntington Drive as an alternative to the I-210 freeway and not stopping to spend time at local businesses. Pass-through traffic on Huntington Drive provides little benefit to the community while creating impacts of congestion and traffic delays.

The Town Center Specific Plan articulated a vision for Huntington Drive that would managing neighborhood cut-through traffic, enhance pedestrian safety and contribute to the aesthetic quality of the streetscape. The key components of that strategy are:

- Modify parking lane to narrow travel lanes and implement curb bulbouts
- Modify parking lane to add parklets in appropriate locations
- Add pedestrian amenities, including lighting
- Upgrading pedestrian crosswalks and equipment

Huntington Drive Improvements Process

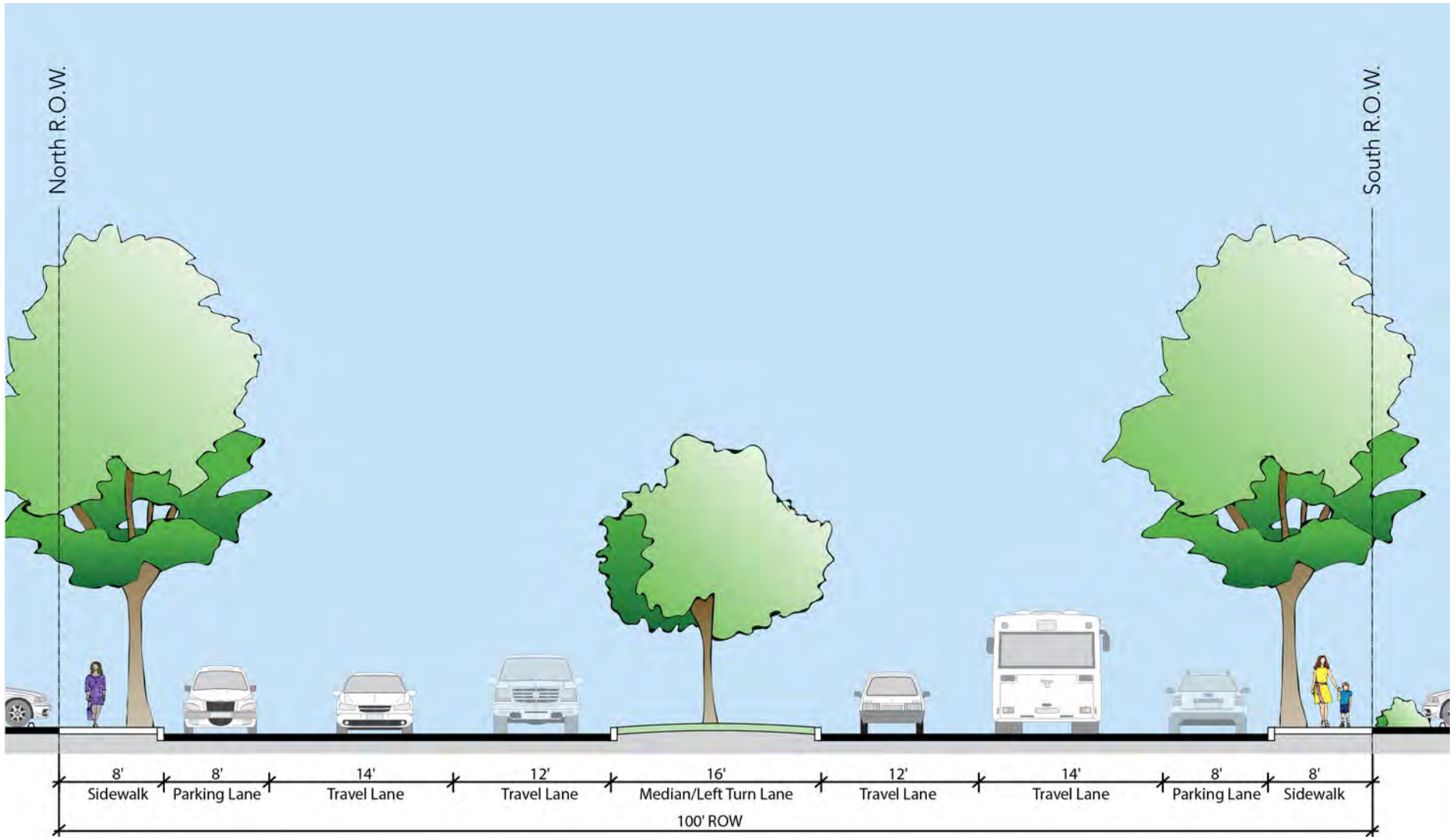
- **Flexible Implementation.** The design concept improvements presented here for Huntington Drive are far-reaching and expansive. Many options are presented, including three different types of curb bulbouts: landscape bulbouts, parklets, and stormwater bulbouts. It is anticipated that the vast majority of bulbouts will be implemented as landscape bulbouts, especially in the near term. As opportunities present themselves, the City may use additional strategies presented herein for implementation.

- **Incremental Change.** Either by virtue of funding, phasing associated with other projects, or site-specific issues, the improvements on Huntington Drive may occur incrementally over time.
- **Timing and Funding.** The City encourages the installation of curb bulbouts for new adjacent property improvements. The City will also continue to seek funding sources for larger scale implementation.
- **Pilot Project.** There is a strong correlation between lane width and speed (narrower lanes encourage lower vehicle speeds), although it varies based on factors such as time of day, amount of traffic, and the character of adjacent land uses. Lane widths should not exceed 12 feet in width to avoid unintended speeding. As lane widths are narrowed, the parking lane width is increased, allowing additional space for curb bulbouts. As a first phase improvement, the parking lane should be striped parallel to the curb to indicate the lane division and ensure the narrowing of the driving lane. Pilot projects can be an effective way to communicate to the community about upcoming streetscape improvement changes. The City should undertake a pilot project that paints the roadway to indicate locations for potential new curb bulbouts. This can be part of a larger educational campaign.

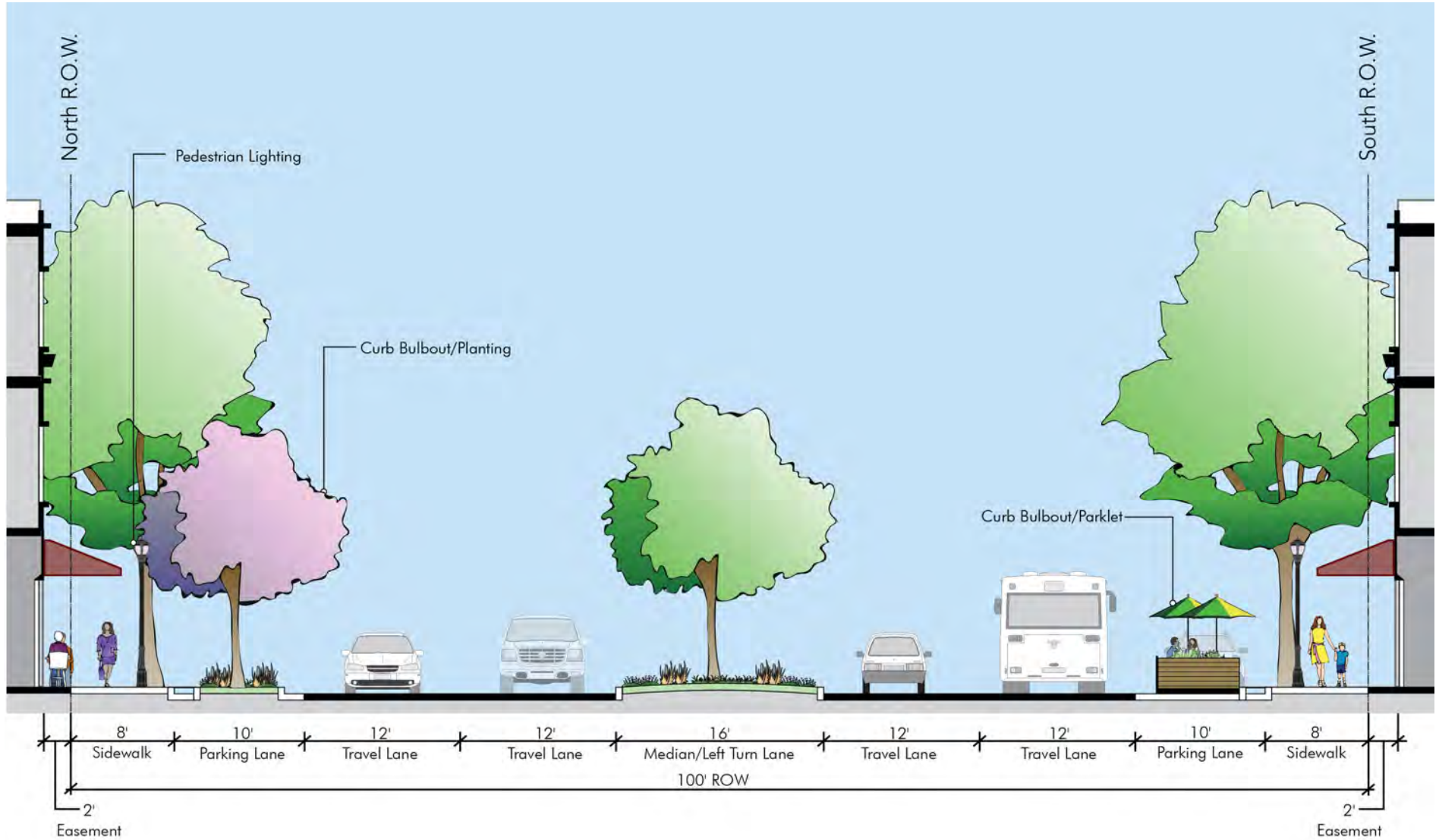


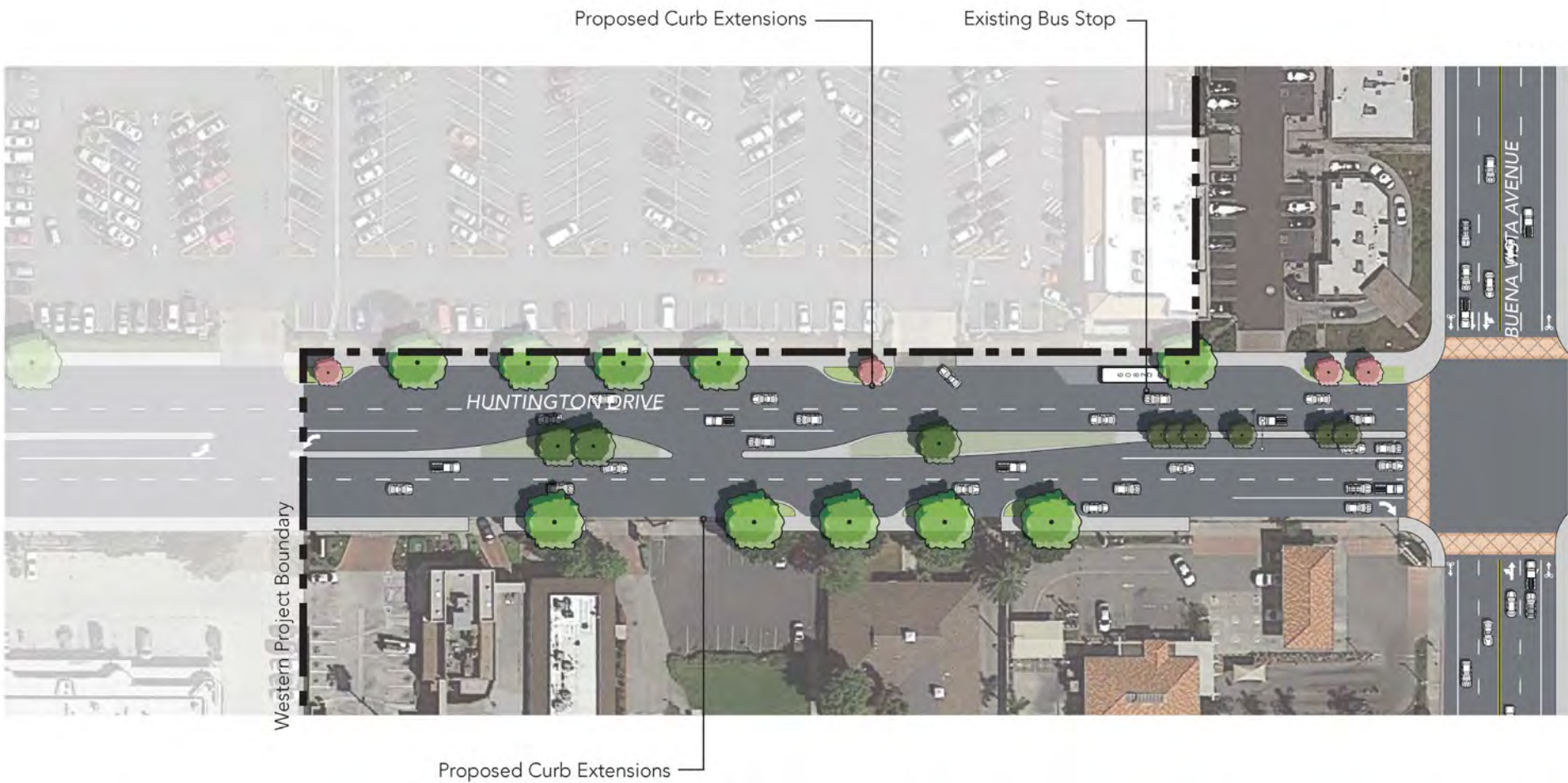
Huntington Drive, Existing Condition

EXISTING HUNTINGTON DRIVE STREETScape



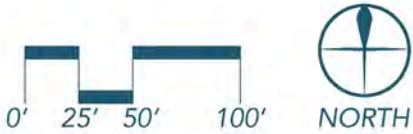
PROPOSED STREETScape IMPROVEMENTS ON HUNTINGTON DRIVE





HUNTINGTON DRIVE CONCEPT PLAN

DUARTE TOWN CENTER SPECIFIC PLAN





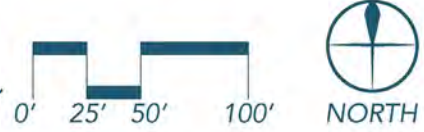
Potential Plaza Development

Potential Retail Development (1-2 Story)

Proposed Curb Extensions

Existing Bus Stop

BUENA VISTA AVENUE

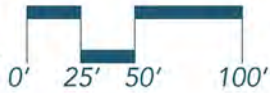




Existing Bus Stop

New Signal and Crosswalks

Proposed Curb Extensions





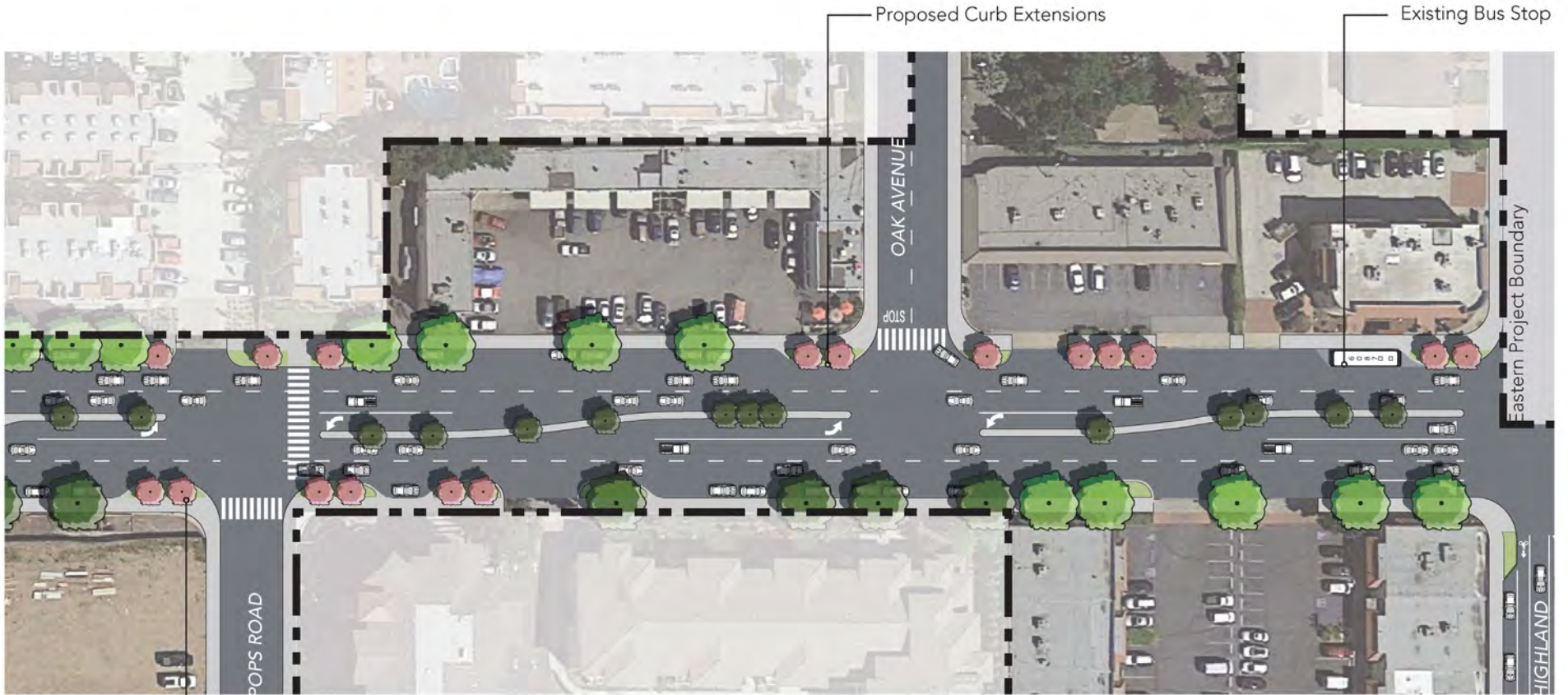
Existing Plaza

Proposed Curb Extensions

Existing Civic Center

Existing Bus Stop





Proposed Curb Extensions

Proposed Curb Extensions

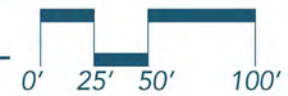
Existing Bus Stop





Existing Bus Stop

Proposed Curb Extensions



HUNTINGTON DRIVE STREET TREE SELECTIONS

Street Trees



Eucalyptus sideroxylon
Red Iron Bark



Fraxinus angustifolia 'Raywood'
Raywood Ash



Olea europaea 'Swan Hill'
Swan Hill Olive



Pinus canariensis
Canary Island Pine



Pistacia chinensis
Chinese Pistache



Platanus racemosa
California Sycamore



Schinus molle
California Pepper Tree

Note: Median planting palette is defined in a separate document, the Huntington Drive Median Landscape Plan.

HUNTINGTON DRIVE PARKLET/BULBOUT TREES AND SHRUB SELECTIONS

Parklet / Bulbout
Trees



Cercis canadensis
Eastern Redbud



Olea europaea 'Swan Hill'
Swan Hill Olive



Melaleuca linariifolia
Flax Leaf Paperbark



Robinia 'Purple Robe'
Locust

Shrubs /
Groundcovers



Agave attenuata
Foxtail Agave



Aloe striata
Coral Aloe



Anigozanthos 'Bush Baby'
Kangaroo Paw



Arctostaphylos 'Pacific Mist'
Manzanita



Baccharis pilularis 'Twin Peaks'
Dwarf Coyote Brush



Callistemon 'Little John'
Dwarf Bottlebrush



Carex praegracilis
California Field Sedge



Ceanothus gloriosus 'Anchor Bay'
Pt. Reyes Ceanothus

HUNTINGTON DRIVE SHRUB SELECTIONS

Shrubs /
Groundcovers



Cotoneaster dammeri 'Lowfast'
Bearberry Cotoneaster



Juncus patens 'Elk Blue'
California Gray Rush



Lavandula angustifolia 'Hidcote'
Lavender



Leucophyllum frutescens
Texas Sage



Myoporum 'Pacificum'
Creeping Myoporum



Pyracantha 'Ruby Mound'
Firethorn



Rosmarinus officinalis 'Huntington Carpet'
Huntington Carpet Rosemary

Huntington Drive Curb Bulbouts

Curb bulbouts (sometimes referred to as curb extensions) enhance pedestrian safety by increasing pedestrian visibility, shortening crossing distances, slowing turning vehicles, and visually narrowing the roadway. They also create more space for landscaping, benches, and even outdoor dining, providing increased tree canopy, valued shade and a place to experience and build upon the Town Center identity. Curb extensions should be placed at as many intersections and driveways as possible along the Huntington Drive corridor within the Town Center and may also be located mid-block.

Curb Bulbout Objectives | Curb bulbouts should:

- Be located at intersections and driveways
- Be located entirely within parking lanes
- Enhance the pedestrian experience and safety

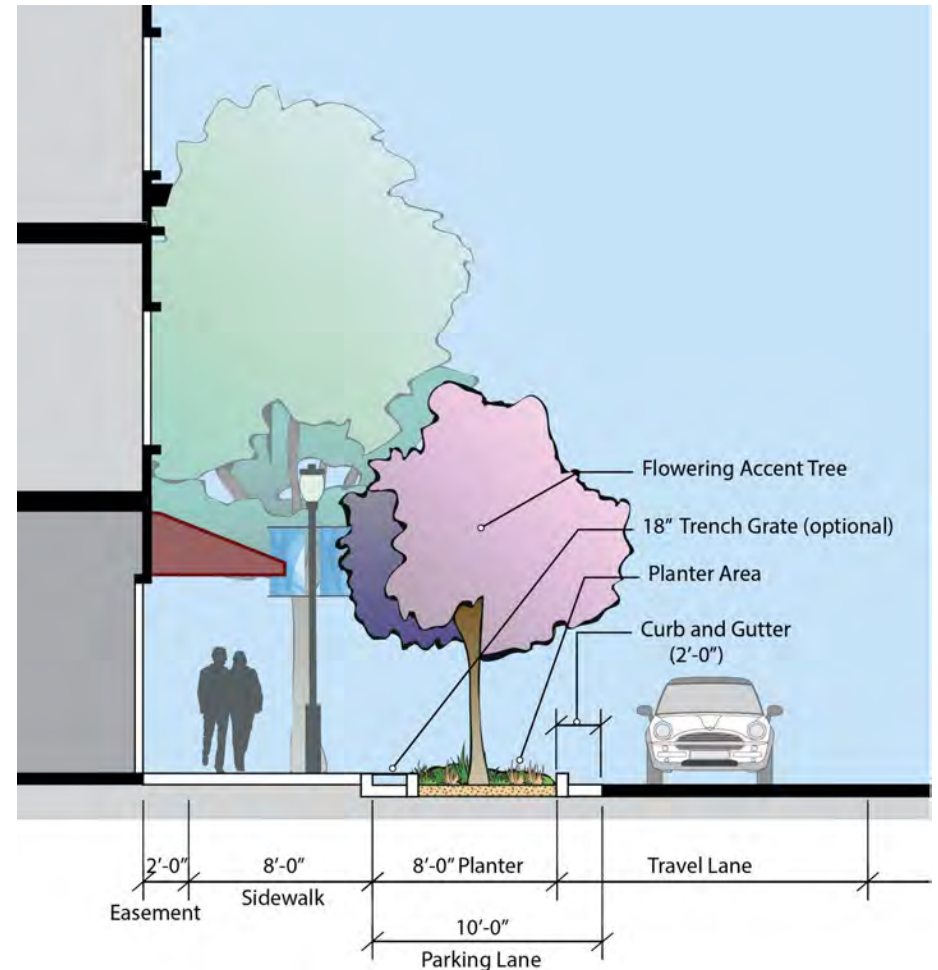
Curb Bulbout Requirements:

- **Width.** Curb Bulbouts are intended to narrow the vehicle lanes and slow traffic along Huntington Drive. Bulbouts shall be located entirely within the parking lanes and shall not exceed 10 feet as measured from the curb, including a 2-foot gutter adjacent to the travel lane.
- **ADA Access.** Where sidewalks and curb returns are reconstructed, meet Americans with Disabilities Act (ADA) compliance for grades, clearances, and curb ramp locations

Curb Bulbout Recommendations:

- **Location.** Locating curb bulbouts in areas where on-street parking is already prohibited, such as near fire hydrants or driveway setbacks, can encourage implementation without affecting parking or curbside access. Attention should also be paid to location of bulbouts to ensure emergency responders have necessary access to utilities at all times and that sight distances are maintained on the approach side of driveways and streets.

- **Alternative Concepts.** If proposed by a developer as part of an improvement plan adjacent to property slated for improvement, designs should include two alternative concepts for curb extensions. Alternatives should evaluate existing roadway flowline, storm water, irrigation runoff and catch basins, as well as future maintenance requirements.



Concept Curb Bulbout – Huntington Drive

Curb Bulbout Considerations:

In consultation with the City Engineer, designs should consider:

- **Bulbout Design.** Identify:
 - Maximum allowable curb return radius
 - Curb bulbout reverse curve radius (to accommodate street sweeper turning radius and maintenance)
 - Catch basin impacts and/or relocation
 - U-Turn ability: A passenger car requires 45 feet from the left turn lane edge line to the curb line for a U-Turn across from a curb extension
- **Pavement Rehabilitation.** Evaluate existing pavement conditions and geotechnical evaluation to recommend pavement rehabilitation strategy.
- **Rights-of-Way.** Verify all ROW easements or acquisitions.
- **ADA Compliance.** Verify ADA compliance of existing curb ramps, driveways, and sidewalks and recommend upgrades of all non-compliant ramps, driveways, and sidewalks.
- **Bus Stops.** For 60-foot buses, on the far side and mid-block curb bulbout, allow 120-foot minimum clearance; near side of bus stop should allow 170-foot minimum clearance.
- **Traffic Signals.** As needed based on existing signal locations and proposed projects, prepare signal modification plans and interconnect/fiber optic upgrade plans.
- **Street Lighting.** Perform photometric analysis of the corridor for IES compliance and prepare streetlight upgrade recommendations as needed with priority on pedestrian lighting installation.
- **Landscaping & Irrigation.** Landscaping shall be California native and drought tolerant. Consider provision of irrigation to new landscaping elements. Any storm water retention shall follow LACDPW requirements and designs include hydraulic analysis and percolation testing of soil along corridor to determine bioswale

sizing. Bulbouts should include tree planting to increase shade and cooling effects and CO2 absorption.

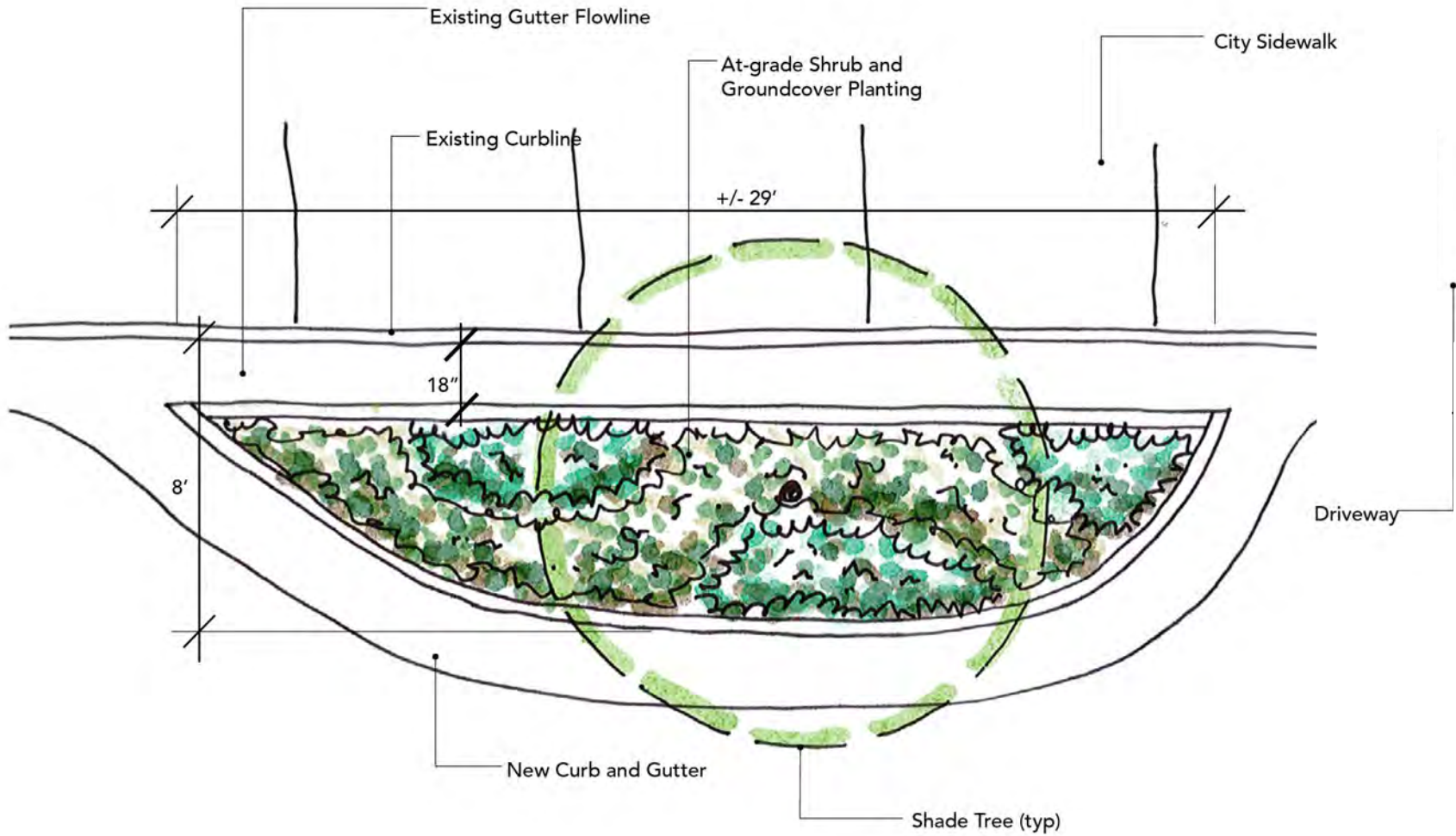
- **Fire Hydrants.** Evaluate fire hydrant impacts and/or relocation, and coordinate with Los Angeles County Fire Department (LACFD) early in the design process. Generally, the LACFD requires a 50-foot clear area (25 feet on each side) for access to a hydrant. Fire hydrants cannot be more than six feet from the curb.
- **Sight Distance.** Comply with Duarte Development Code Section 19.32.030 (Corner cutback areas).
- **Maintenance.** Consider long-term maintenance requirements, including necessary equipment and staffing. Avoid designs that will require excessive maintenance.

The drawing on the next page indicates a conceptual curb bulbout design.

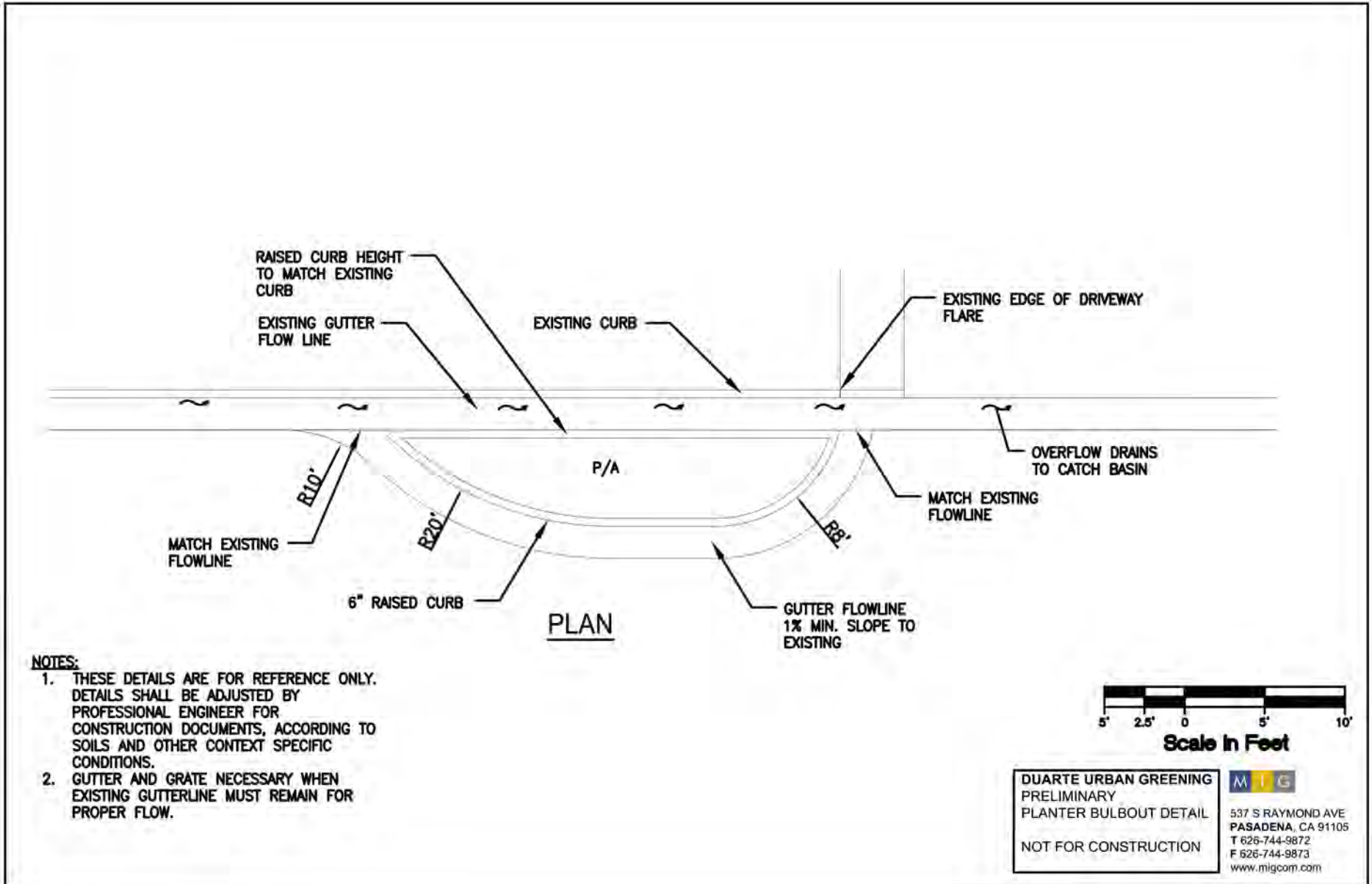


Curb Bulbout Example: Arcadia

CONCEPT DESIGN | DRIVEWAY/INTERSECTION ADJACENT LANDSCAPING CURB BULBOUT



CONCEPT ENGINEERING DESIGN | CURB BULBOUT LOCATED AT DRIVEWAY OR INTERSECTION



Huntington Drive Parklets

Parklets repurpose small segments of streets into public spaces. Located within curb bulbouts, these small parks provide amenities like seating, planting, bicycle parking, and art. Parklets help encourage social activity by creating community spaces where people can move out of pedestrian traffic, dine, or simply people watch, creating a more attractive and interactive pedestrian realm.

Parklet Objectives | Parklets should:

- Respond to the local surroundings and conditions
- Respect accessibility and users of the sidewalks
- Use durable, high-quality materials
- Be engaging and generate interest

Parklet Requirements:

- **Adjacent Use.** The relationship with the fronting business is key for a successful parklet. The physical site must be adjacent to surrounding land uses that support pedestrian activity. Ideally these uses include sales of food or drink, but may include another active use if the site is programmed accordingly.
- **Bollards.** Any parklet should provide protection for pedestrians and users of the parklet space. Security bollards made of steel and filled with concrete are an appropriate treatment and can be decorated with the aesthetics of the area with either paint, or for a wider range of styles, with bollard covers. In general, the substrate and installation of security bollards are essential parts of their impact resistance. Different bollard applications will also have different impact resistance levels. Crash resistant standards should be articulated in the design phase, as a function of the adjacent street speed and vehicle mix.
- **Maintenance.** There must be a dedicated partner identified for site maintenance, programming, and upkeep. This includes maintaining

the parklet landscape, weeding, watering and pruning. This partner will be responsible for securing furniture and other movable items as deemed appropriate after business hours. Partners can include ground-floor businesses owners, fronting property owners, and others on a case-by-case basis.

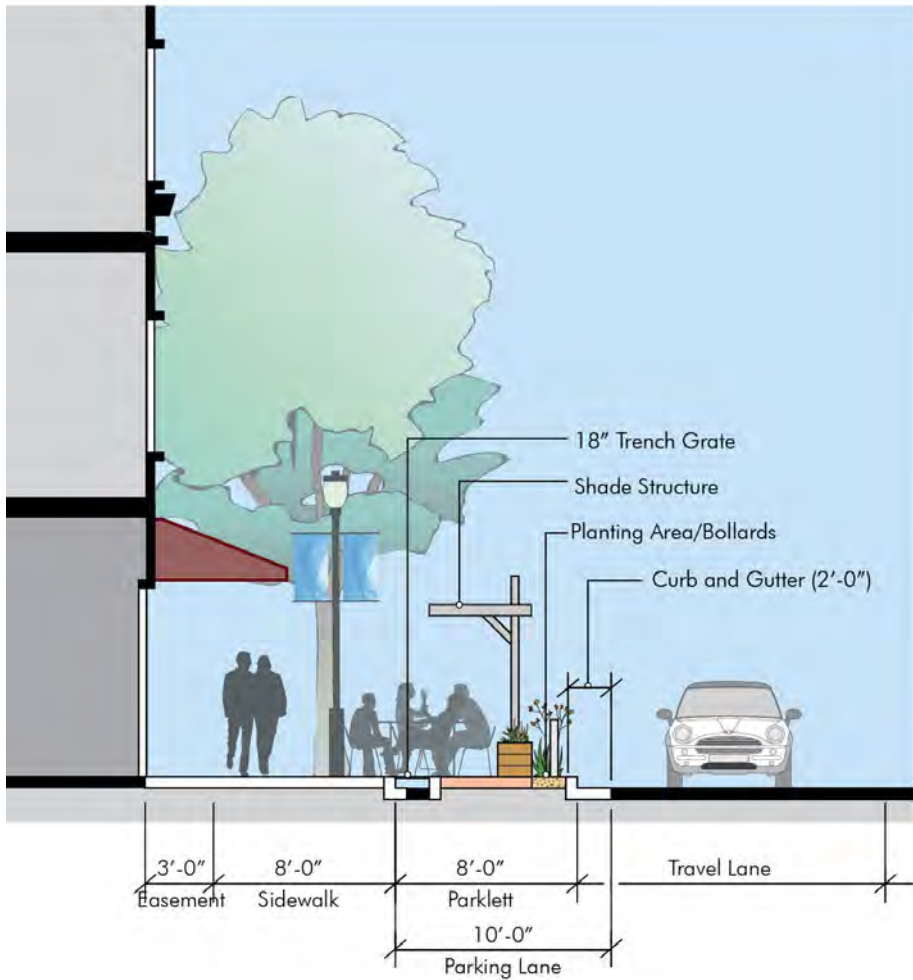
- **Liability Insurance.** The partner responsible for the parklet must also carry Comprehensive General Liability Insurance and Workers' Compensation Insurance, consistent and of the amounts required by City of Duarte policies.

Parklet Recommendations:

- Parklets should have high visibility from inside adjacent business.
- Shade trees or trellises should be incorporated or adjacent, such that the parklet is at least partly shaded.
- Pedestrian-scale street lights are recommended near each parklet.
- Multiple single seating opportunities should be provided to encourage pedestrian use and comfort.



Parklet in San Francisco. Photo credit: Steve Rhodes



Concept Parklet – Huntington Drive

Parklet Process

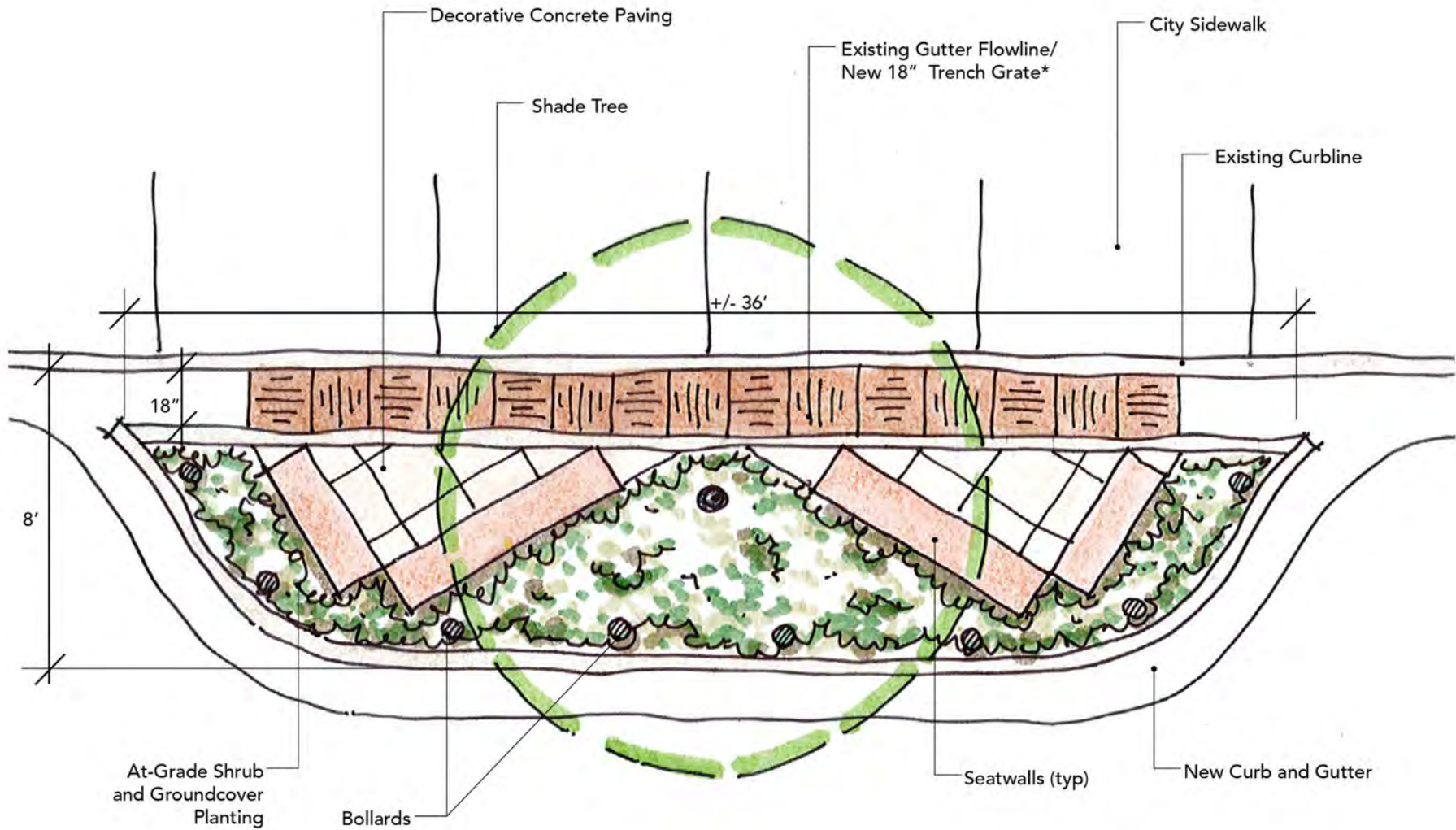
Parklets may be initiated by the City of Duarte or by an adjacent property owner/business/developer. If proposed by an entity other than the City, that entity shall be responsible for design and installation consistent with this Plan, capital costs, liability insurance, performance bond (if required), maintenance and upkeep. Successful applicants will be required to enter into a Memorandum of Understanding (MOU) and receive an Encroachment Permit with the City.

Proposed parklet plans shall be reviewed and approved by the City of Duarte.



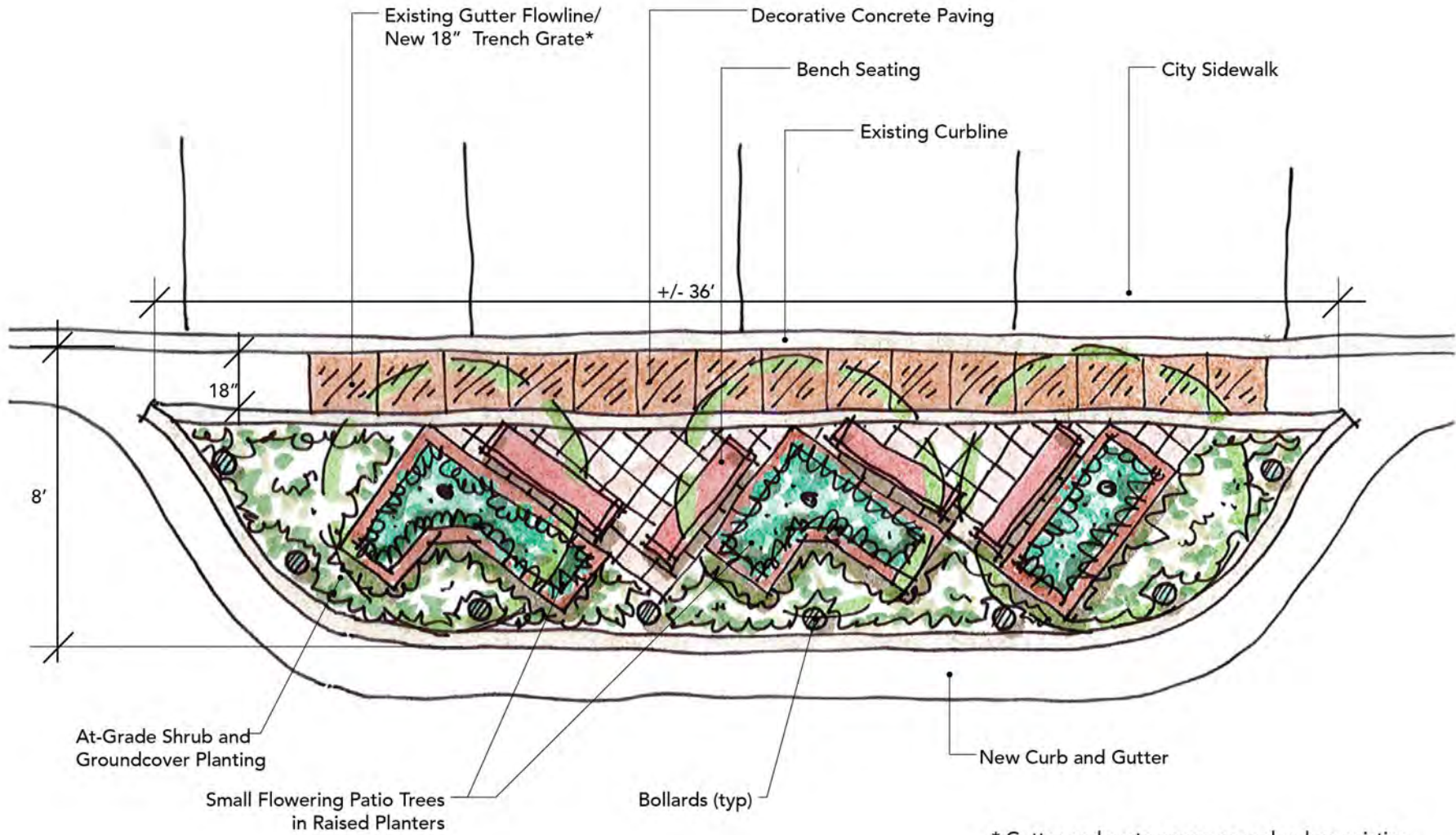
Parklet in Downtown Los Angeles. Photo credit: LADOT People St.

EXAMPLE | CONCEPT DESIGN | SEATWALL PARKLET WITH SHADE TREE



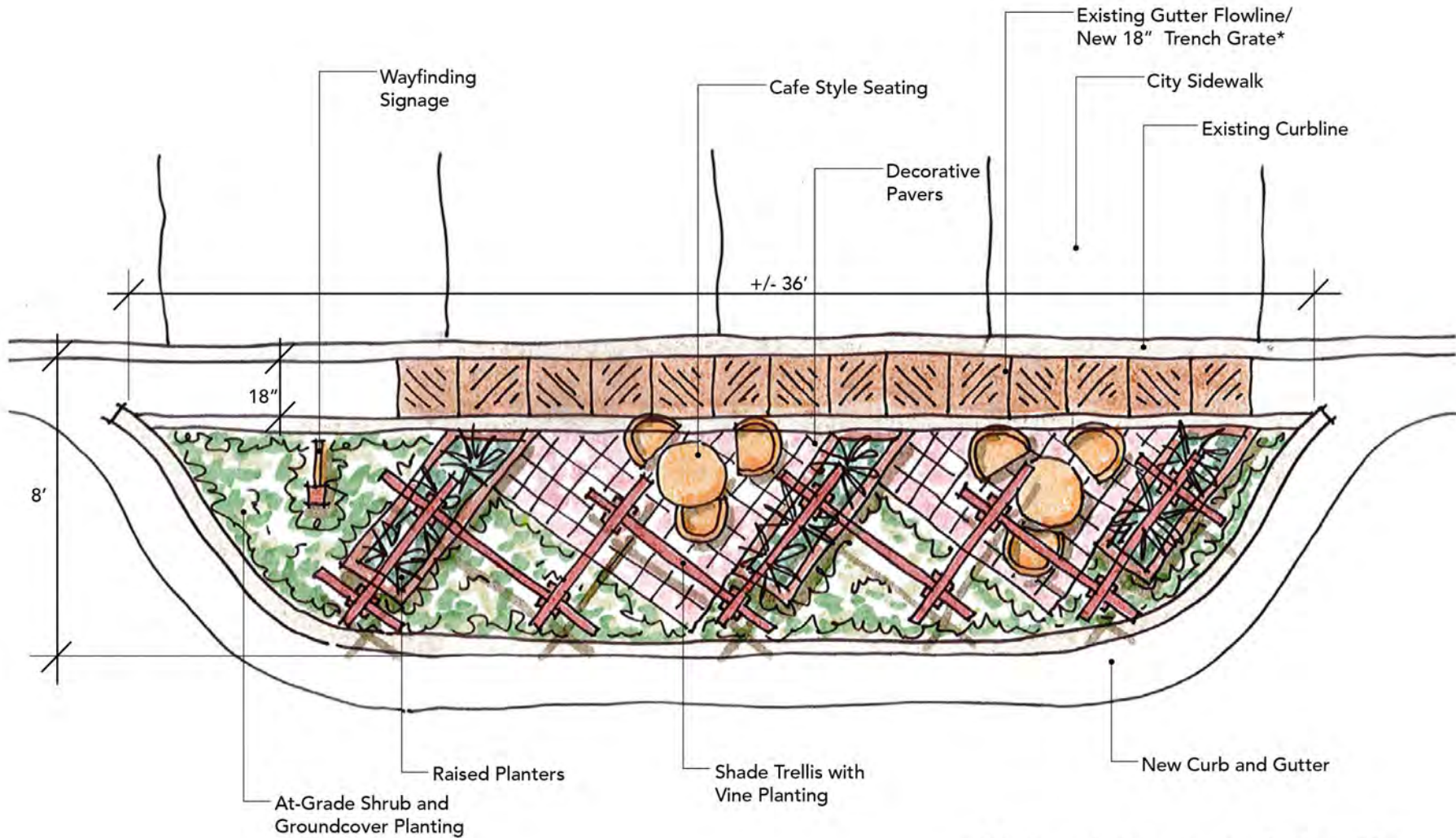
* Gutter and grate necessary only when existing gutterline must remain for proper flow.

EXAMPLE | CONCEPT DESIGN | MINI PARKLET WITH BENCH SEATING



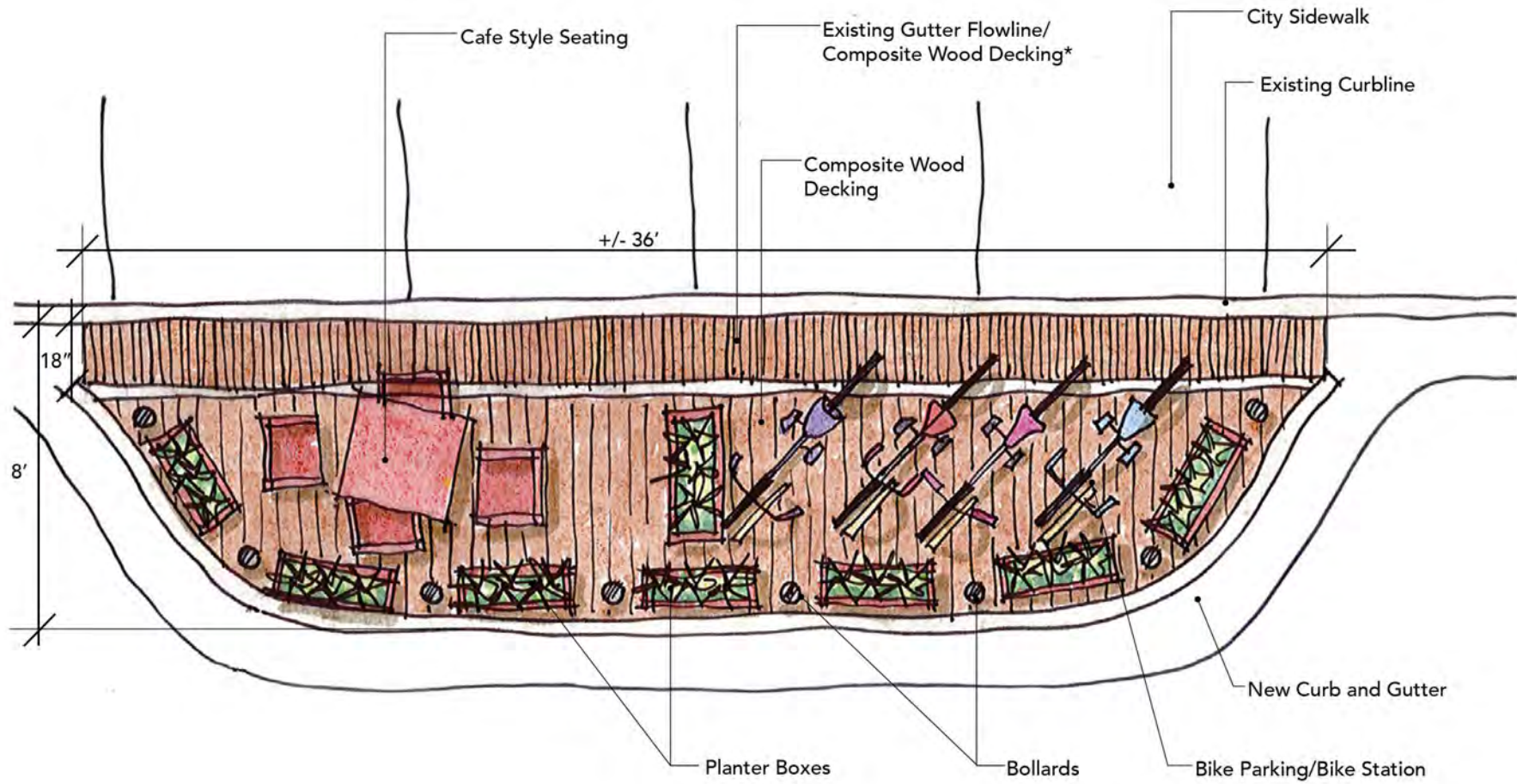
* Gutter and grate necessary only when existing gutterline must remain for proper flow.

EXAMPLE | CONCEPT DESIGN | TRELIS PARKLET WITH PLANTER BOXES



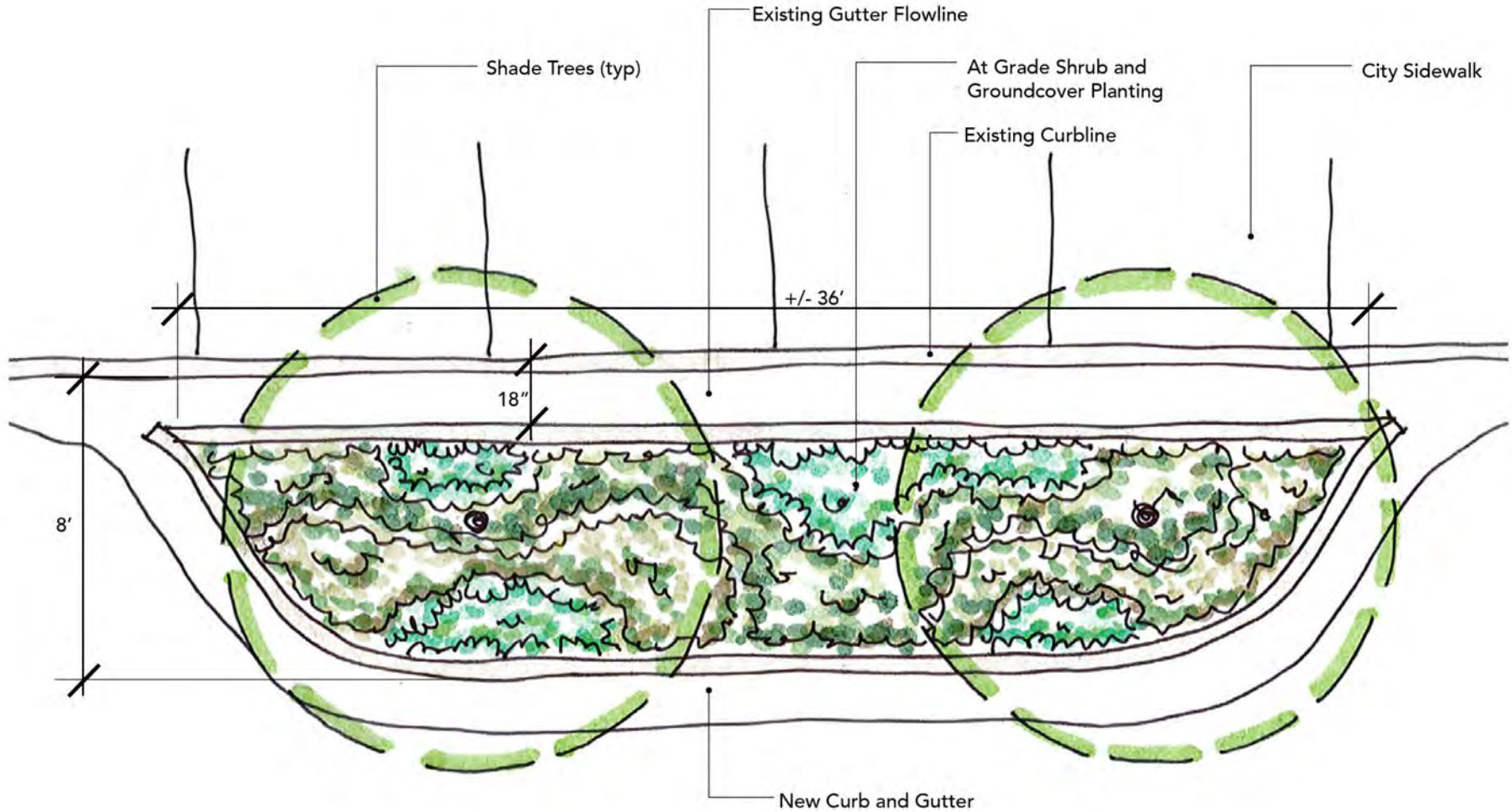
* Gutter and grate necessary only when existing gutterline must remain for proper flow.

EXAMPLE | CONCEPT DESIGN | CAFÉ SEATING AND BICYCLE PARKING PARKLET



* Gutter and grate necessary only when existing gutterline must remain for proper flow.

EXAMPLE | CONCEPT DESIGN | MIDBLOCK LANDSCAPING PARKLET



Huntington Drive Storm Water Curb Bulbouts | Concept Design

The primary purposes of curb bulbouts in the Town Center are to encourage traffic calming, facilitate a comfortable pedestrian experience, and green the Huntington Drive corridor. In addition, **in certain applications and locations, increased storm water storage and infiltration may be an additive benefit of a curb bulbout installation.** Onsite storm water treatment provides water quality benefits and assists with groundwater recharge.

Storm Water Bulbout Objective | Storm water bulbouts should:

Increase storm water capture and infiltration using bioretention (rain gardens) or other low impact development (LID) practices when feasible and practical.

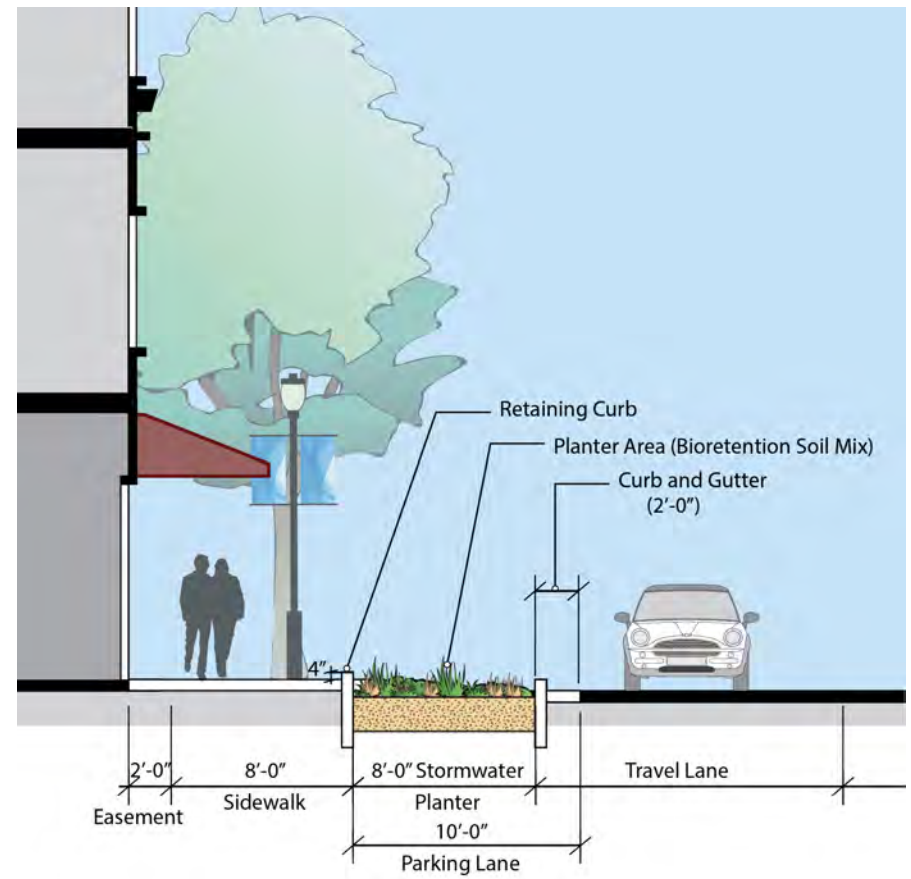
Storm Water Bulbout Requirements:

- **Flow.** Review runoff flow patterns, gutter flow, and grades to ensure bioretention is sited to efficiently capture street runoff and sized for its tributary area. Bioretention areas that are at least 1-4% of the tributary area typically require less frequent maintenance.
- **Utilities.** Review underground utilities within the right-of-way to determine feasibility of locating stormwater bulbouts, given required depths of retaining structures that may reach 4 feet below grade.
- **Soil Conditions.** Where soil conditions require underdrains, such as areas of low infiltration potential, drywells or new connections to the storm drain may be required.
- **NPDES.** Where storm water bulbouts are required for NPDES (National Pollution Discharge Elimination System) permit compliance, storm water bulbouts must be designed and installed in accordance with the County of Los Angeles Department of Public Works Low Impact Development Standards Manual.

- **Maintenance.** Planter areas should be maintained per the County of Los Angeles Department of Public Works Low Impact Development Standards Manual.

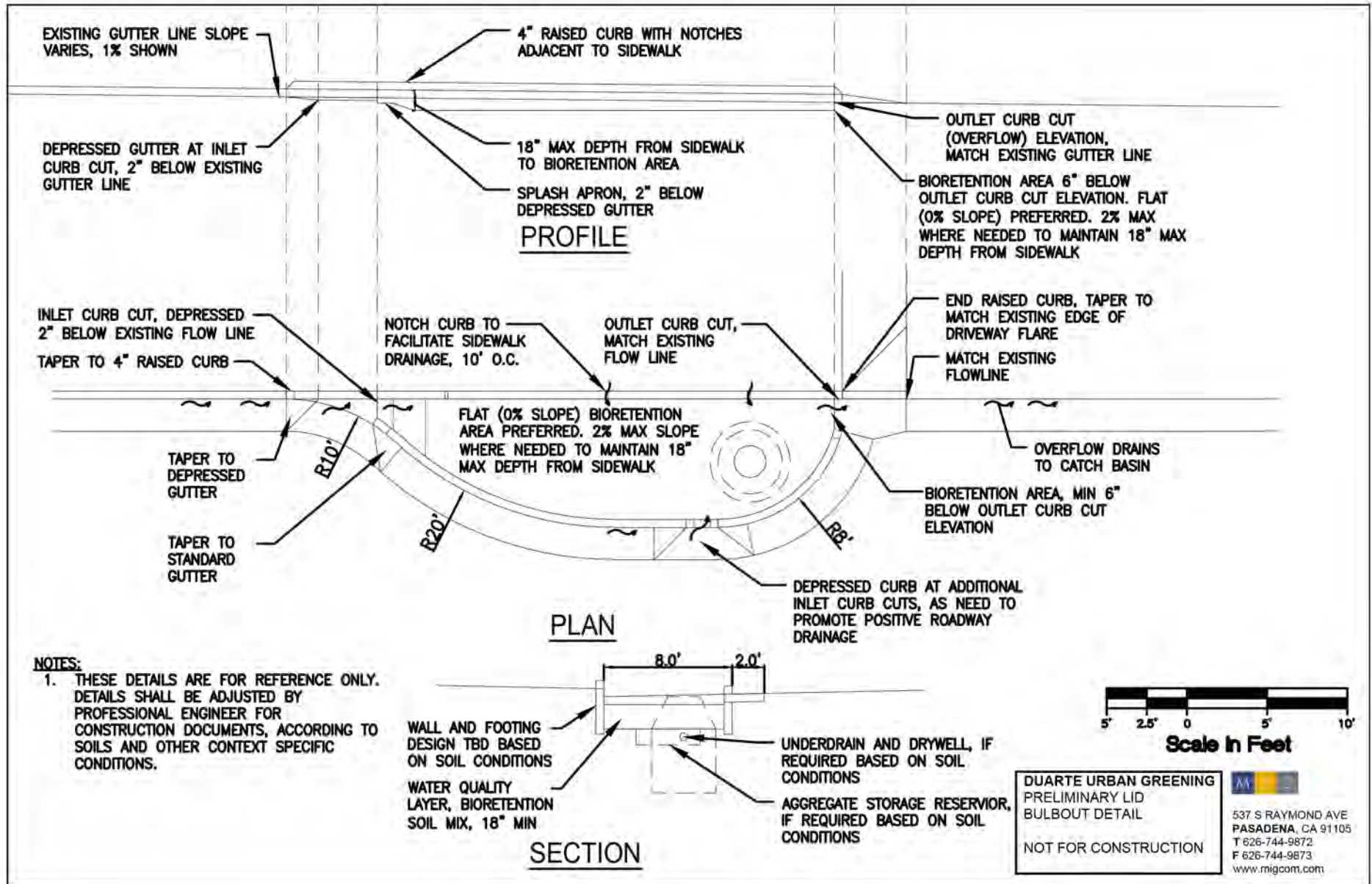
Storm Water Bulbout Recommendations:

- **Location.** If installed, consider locations where benefits to stormwater cleansing and retention are maximized. Multiple planters may be necessary to achieve goals. In general, the north side of Huntington Drive receives more storm water flows and has higher potential for storm water bulbout applications.



Concept Storm Water Planter – Huntington Drive

CONCEPT ENGINEERING DESIGN | STORM WATER TREATMENT BULBOUT



Huntington Drive General Streetscape Improvements

Sidewalk and Crosswalk Improvements Recommendations. As indicated in the Town Center Specific Plan, safe, accessible, and well-designed sidewalks and crosswalks are essential for an activated Town Center setting. Paving should be simple and consistent throughout the Town Center area to allow for seamless connectivity. Recommendations include:

- Contrasting and high-visibility crosswalks are more visible to motorists and have been shown to improve safety behavior of motorists. To enhance walkability on Huntington Drive, ornamental paving material will be used to identify crosswalks at the key intersections (Buena Vista Street and Highland Avenue). Crosswalks should be installed with scored concrete, designed to form a 24-inch square grid (terra cotta and/or brown color mix), lined by a 12-inch gray concrete band running the length of the crosswalk.
- International markings (also referred to as continental or zebra markings) are recommended to be installed at all marked pedestrian crosswalks (other than key intersections), per the Huntington Drive Intersection Capacity and Safety Analysis (2016).
- The addition of a controlled pedestrian crossing at Brycedale Avenue will provide for approximately one-quarter-mile spacing between controlled crossings along Huntington Drive.

Lighting. Pedestrian-scale lighting enhances the sense of place and improves the pedestrian experience. For the installation of new lighting, the City will review existing lighting conditions and focus new lighting especially at pedestrian concentration areas, such as bus stops and crosswalks, and install new pedestrian lighting consistent with the Specific Plan Design Guidelines.



Buena Vista and Highland Intersections Crosswalk Treatment

Street Trees and Landscaping. The existing street trees within the pedestrian realm on the north and south sides of Huntington Drive are of many varieties, shapes and sizes. As funding becomes available, the City is encouraged to adopt a consistent street tree master plan with no more than one or two species, for continuity, aesthetics and simplicity of maintenance.

Equipment Upgrades. As indicated in the Huntington Drive Intersection Capacity and Safety Analysis (2016), certain pedestrian equipment is obsolete and should be upgraded to improve safety by reducing the probability of equipment failure or malfunction and enhancing driver, bicyclist, and pedestrian awareness.

- Replace all 8-inch signal heads with 12-inch signal heads as part of a safety improvement based on FHWA Signalized Intersections: Informational Guide Report Dated August 2004 (see Appendix F, 11.1.3 Increase size of Signal Heads).
- Replace all pedestrian push buttons with Polara EZ Communicator or approved equal with audible guidance for safer pedestrian crosswalks.
- Replace all existing pedestrian signal indications with pedestrian countdown signals as required in the 2014 CA Manual of Uniform Traffic Control Devices, section 4E.07.

FREEWAY UNDERPASS AT HIGHLAND AVENUE

Highland Avenue connects the Metro Gold Line Duarte Station with the Town Center. After the Metro Gold Line Duarte Station opened in 2016, foot traffic has significantly increased in the area. California School of the Arts – San Gabriel Valley recently located to the school site just north of the I-210 freeway, and many of their students use the Metro Gold Line to access school. For students, visitors to the district, and local residents, enhanced connections to the Metro Gold Line are a priority, with particular attention focused on the underpass at Highland Avenue. However, pedestrians currently experience the underpass as an empty zone. The installation of pedestrian-scaled lighting is essential to enhancing safety and comfort. In addition, light can be used as a form of public art to create an identity for the gateway to Duarte from the Gold Line Station.

Highland Freeway Underpass Objectives | The underpass should:

- Foster pedestrian access to and from the Metro Gold Line Duarte Station
- Enhance safety
- Make an artistic statement

Highland Freeway Underpass Requirements:

- **Widen Sidewalk.** Duarte Station Specific Plan includes plans for a pedestrian promenade reaching north from the Metro Gold Line Duarte Station to the I-210 Freeway. Within the underpass, widen the sidewalk to 14 feet on the west side to flow smoothly with the planned promenade as well as sidewalks to the north.¹
- **Limit Parking.** Prohibit parking within the underpass and use the excess right-of-way width to widen the western sidewalk.
- **ADA Access.** Where sidewalks and curb returns are reconstructed, meet Americans with Disabilities Act (ADA) compliance for grades, clearances, and curb ramp locations.

¹ The Bicycle Master Plan must be amended to accommodate this improvement.

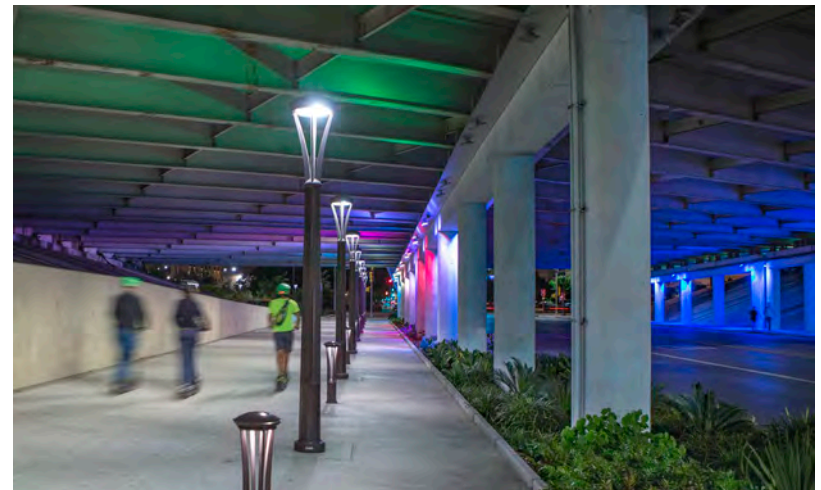
- **Lighting.** Add artistic and colorful lighting features to create interest and an identifiable sense of place. Additional pedestrian scale lighting should create a safer experience and stronger visual connections to the proposed promenade. Use a lighting specialist to determine LED wattage and appropriate light levels.

Highland Freeway Underpass Recommendations:

- **Wayfinding.** Add and unify wayfinding elements to create a sense of entry and location within Duarte.
- **Sharrows.** Facilitate bicycle movement to and from the Metro Gold Line Duarte Station with sharrow pavement markings.
- **Phase II and III Improvements.** Consider additional improvements, including landscaped terracing along the freeway embankment, gateway public art, and optionally a mural.

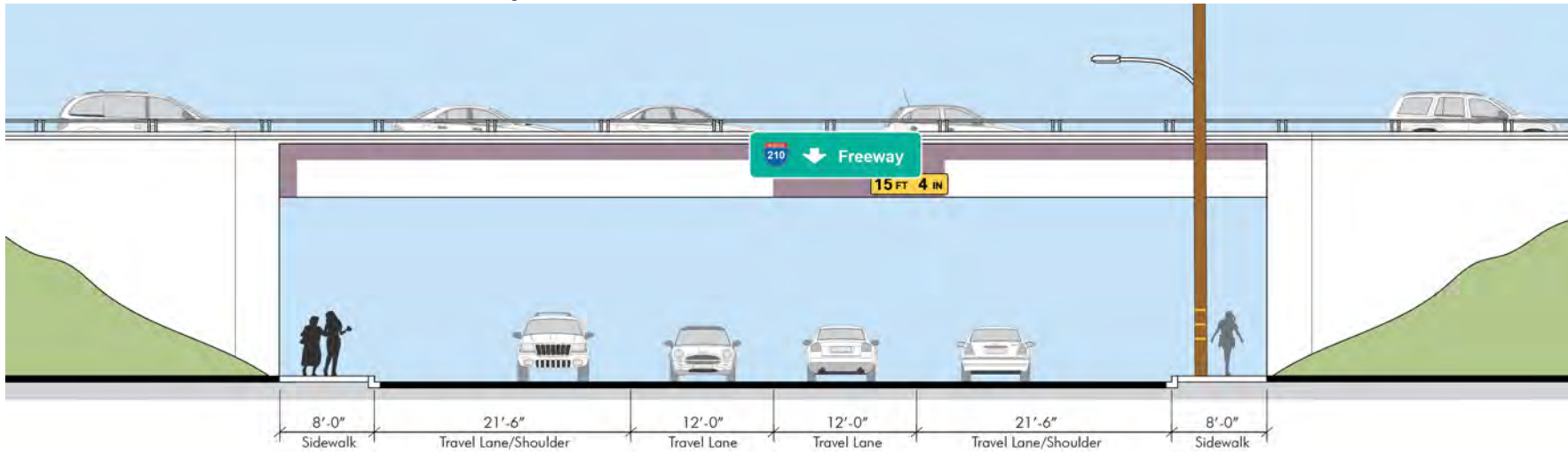
Highland Freeway Underpass Considerations:

- **Review Process.** Consider the design review process required by Caltrans, which has review authority over improvements within the space underneath the freeway.
- **Maintenance.** Consider long-term maintenance requirements when considering project scale, scope, and items.

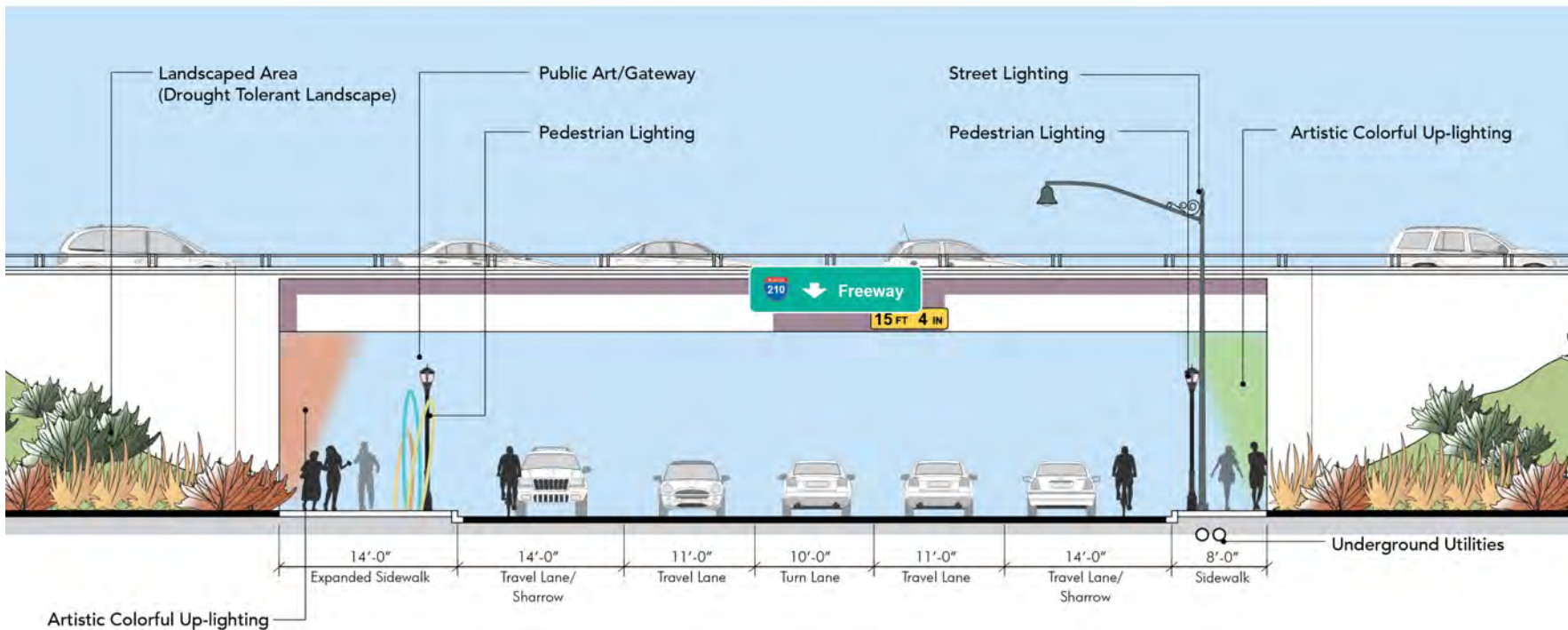


Design Inspiration – San Antonio, TX

CONCEPT DESIGN (SECTION) | HIGHLAND AVENUE FREEWAY UNDERPASS

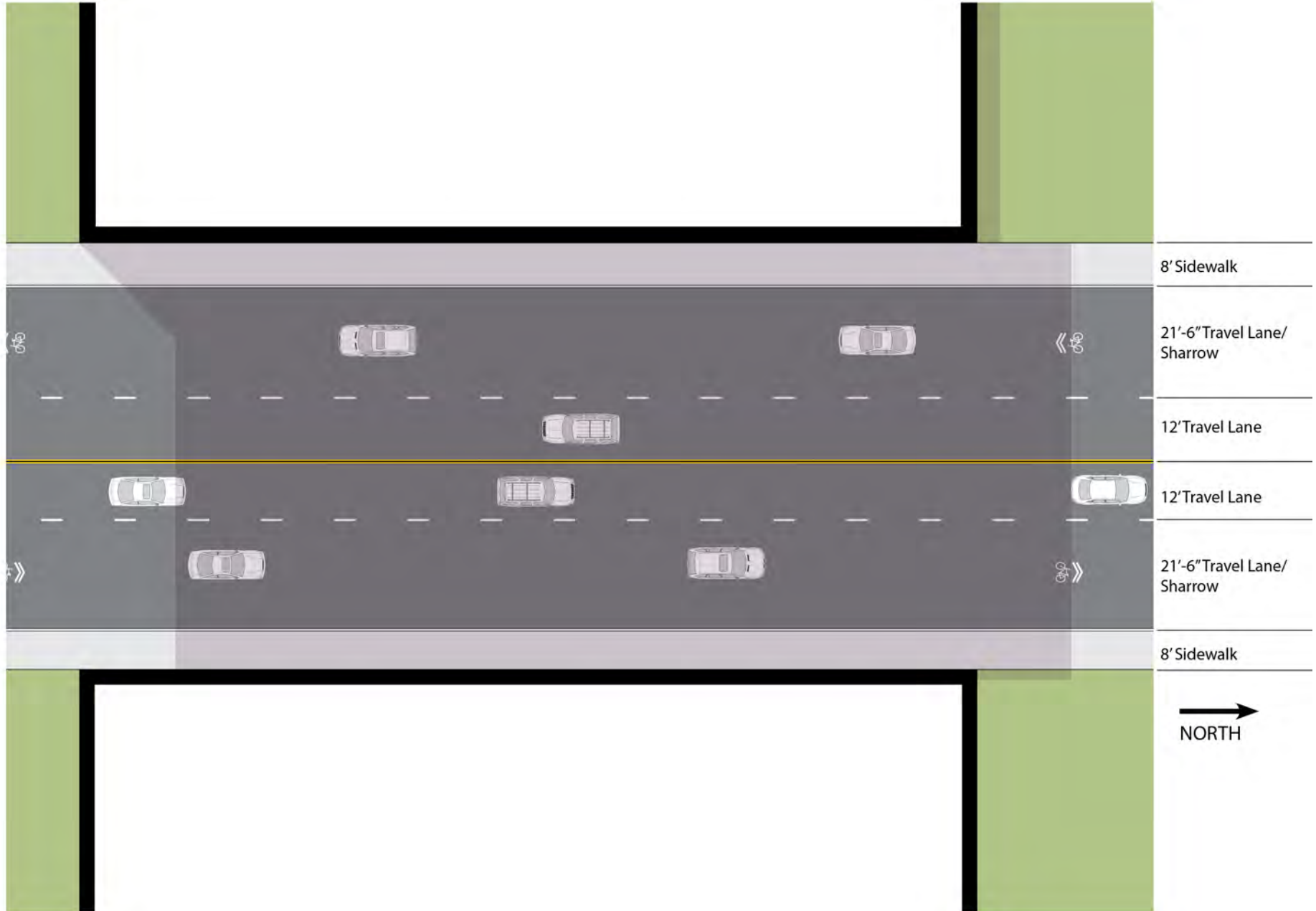


Existing Elevation (Looking North)

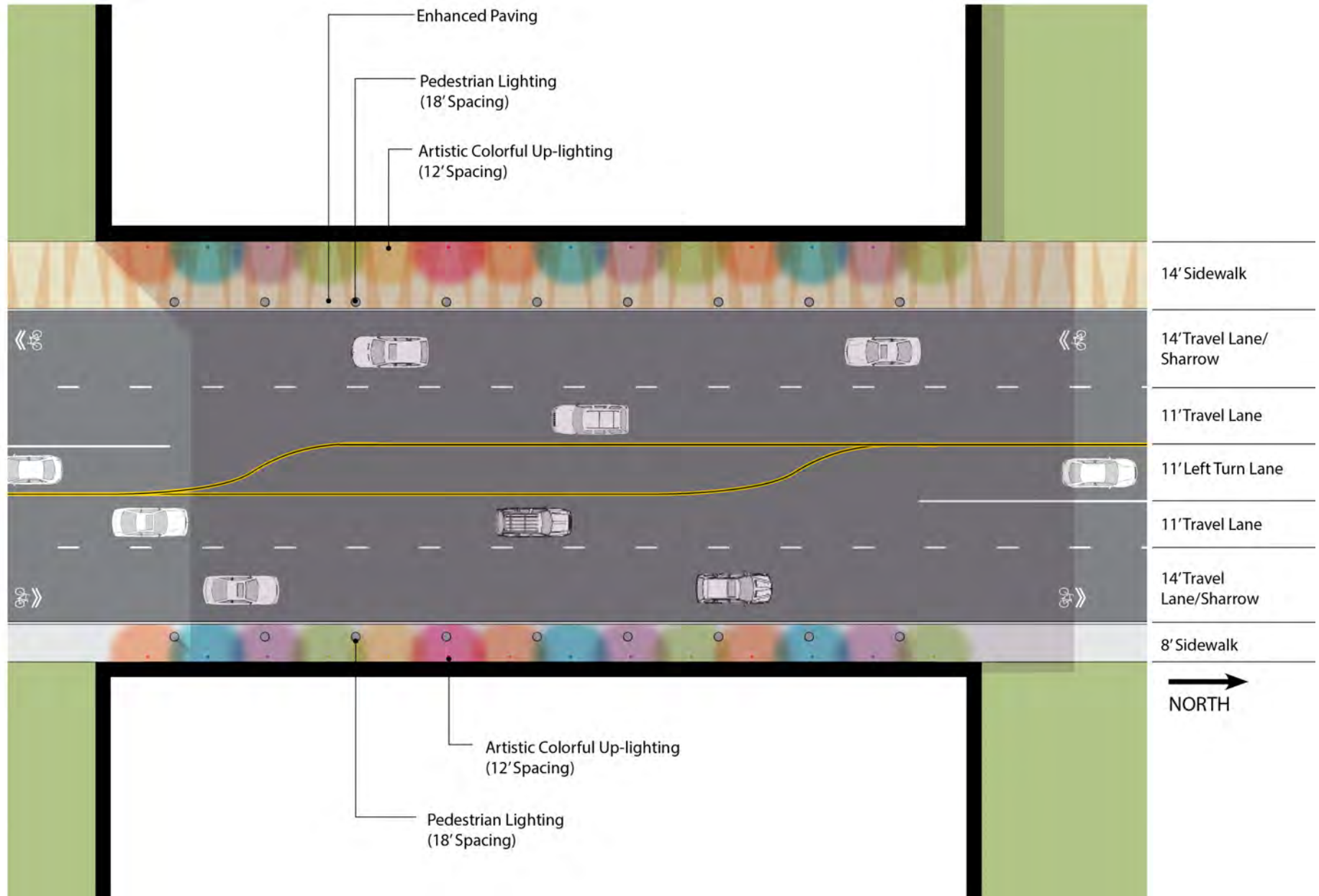


Proposed Elevation (Looking North)

EXISTING CONDITION (PLAN VIEW) | HIGHLAND AVENUE FREEWAY UNDERPASS



PROPOSED (PLAN VIEW) | HIGHLAND AVENUE FREEWAY UNDERPASS



EXISTING | HIGHLAND AVENUE FREEWAY UNDERPASS





PHASE I IMPLEMENTATION:

- 14-foot sidewalk on west side of street
- Enhanced paving
- Artistic and colorful lighting
- Pedestrian lighting

**PHOTOSIMULATION | CONCEPT | PHASE I
HIGHLAND AVENUE FREEWAY UNDERPASS**



PHASE II CONCEPT:

- Public art as a gateway/entry feature
- Landscaping

**PHOTOSIMULATION | CONCEPT | OPTIONAL PHASE II
HIGHLAND AVENUE FREEWAY UNDERPASS**

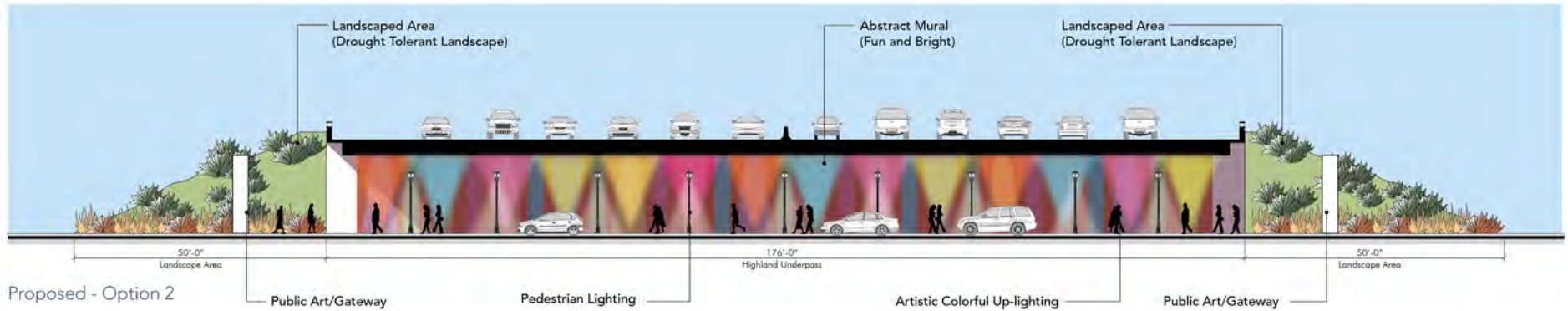
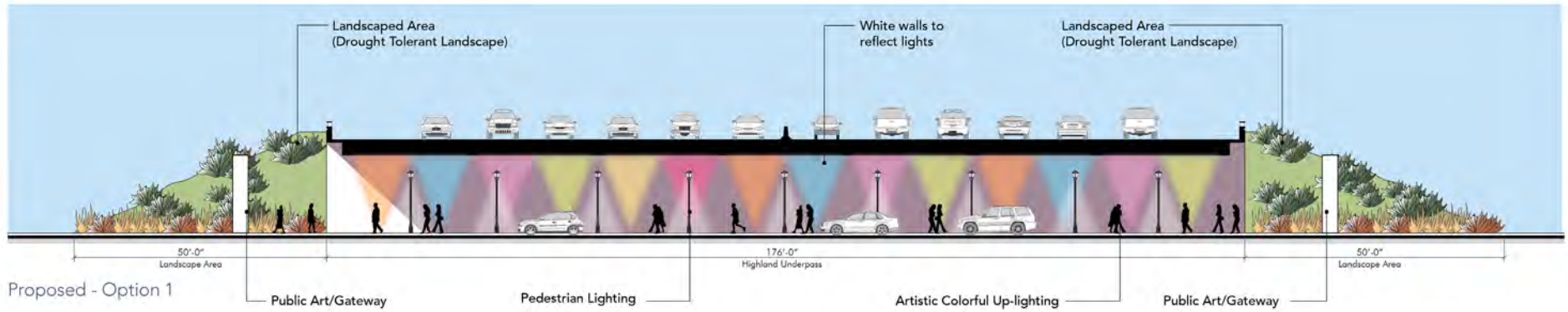


PHASE III CONCEPT:

- (Optional) Mural

**PHOTOSIMULATION | CONCEPT | OPTIONAL PHASE III
HIGHLAND AVENUE FREEWAY UNDERPASS**

HIGHLAND AVENUE FREEWAY UNDERPASS – SIDE ELEVATION



Caltrans Process

Any changes to the infrastructure along the underpasses, including lighting installations and sidewalk widening, as well as any changes to landscaping along the freeway mainline adjacent to the I-210 overcrossing itself fall under the purview of Caltrans. Caltrans owns the rights to the area above and adjacent to the freeway mainline as well as the area underneath an overcrossing. As such, a process that includes Caltrans review must be undertaken when considering improvements to the underpass.

Whenever improvements are proposed within Caltrans right-of-way and encroachment permit must be obtained. An encroachment permit must be obtained for all proposed activities related to the placement of encroachments within, under, or over the State highway rights of way. Some examples of work requiring an encroachment permit are: utilities, excavations, encroachment renewals, advertisements (when allowed by statute), vegetation planting or trimming, surveys, mail boxes, driveways, installation or removal of tire chains for compensation, special events, and commercial filming activities.

The encroachment permit process, standards, forms and other information is documented in the Caltrans Encroachment Permits Manual. There is a processing fee that will be determined by the permit section of the Caltrans District office.

The manual can be accessed online at:

<http://www.dot.ca.gov/trafficops/ep/manual.html>

In general, the process begins by contacting the Caltrans Permit Section at the District 07 office in downtown Los Angeles. A meeting would be arranged between the City and all associated sections/departments that need to be involved in the project. This may include for example engineering, landscape, utilities, signals and lighting, among others.

The next step will be for the City to meet with Caltrans to begin the encroachment application permit process with Caltrans. At the meeting, Caltrans will identify what information/studies they will need to consider and approve the permit request. This may include a civil survey, traffic counts, a drainage study, among others.

Depending on the nature and complexity of the work being proposed, the process could take one to two years to complete. Caltrans may request a Fact Sheet to justify any non-standard features per the Highway Design Manual. Occasionally, a local agency will be granted an exemption from this process by Caltrans. Fact Sheet requirements can be found in the Caltrans Highway Design Manual. The manual can be found online at:

<http://www.dot.ca.gov/design/manuals/hdm.html>

FREEWAY UNDERPASS AT BUENA VISTA AVENUE

The I-210 freeway underpass at Buena Vista functions as the primary vehicle gateway into Duarte and the Town Center. As such, treatment to associate it with Duarte and the sense of place here is important. Given limited width and vehicle volumes, sidewalk widening in this location is infeasible.

Buena Vista Freeway Underpass Objectives | The underpass should:

- Act as a gateway to Duarte and the Town Center
- Enhance safety
- Make an artistic statement

Buena Vista Freeway Underpass Requirements:

- **Lighting.** Add lighting to enhance safety and a sense of place. Lighting should include artistic and colorful features as well as pedestrian scale lighting to enhance safety for drivers and pedestrians and create an identifiable sense of place. Pedestrian scale lighting should be consistent with new pedestrian lighting installed in the immediate vicinity to create a brand and sense of identity.

Buena Vista Freeway Underpass Recommendations:

- **Wayfinding.** Add and unify wayfinding elements to create a sense of entry and location within Duarte.
- **Phase II Improvements.** Consider additional improvements, including landscaped terracing along the freeway embankment.

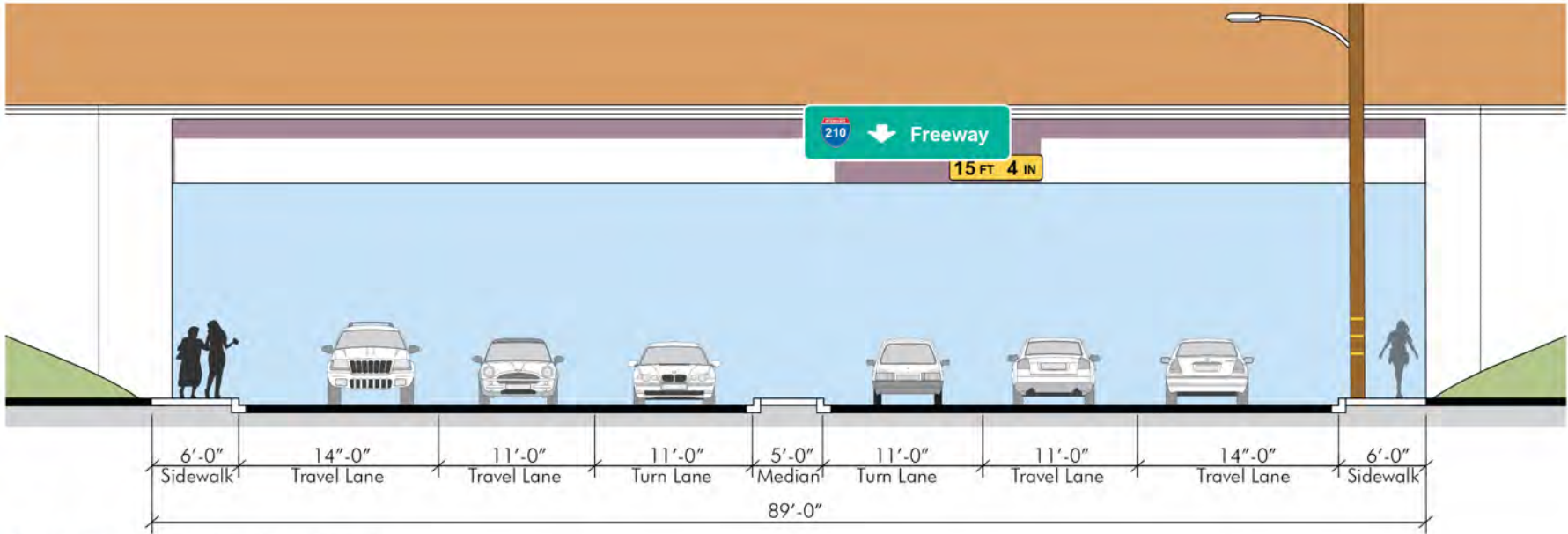
Buena Vista Freeway Underpass Considerations:

- **Review Process.** Consider the design review process required by Caltrans, which has review authority over improvements within the space underneath the freeway.
- **Maintenance.** Consider long-term maintenance requirements when considering project scale, scope, and items.

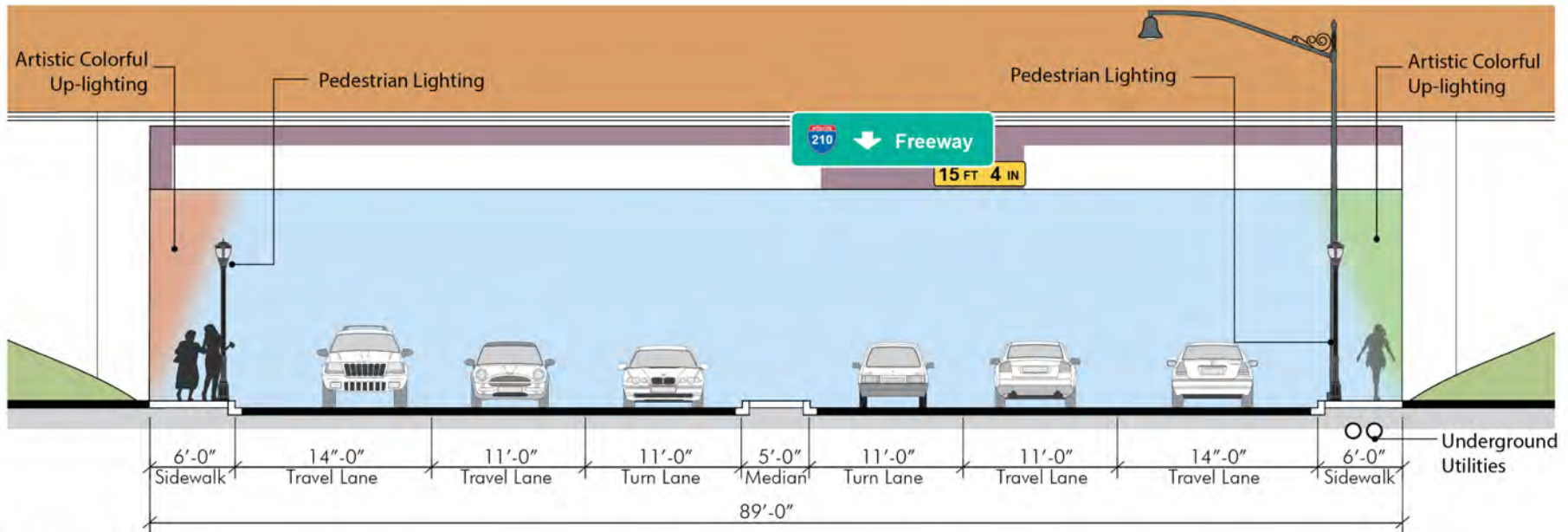


Design Inspiration – San Antonio, TX

CONCEPT DESIGN (SECTION) | BUENA VISTA FREEWAY UNDERPASS

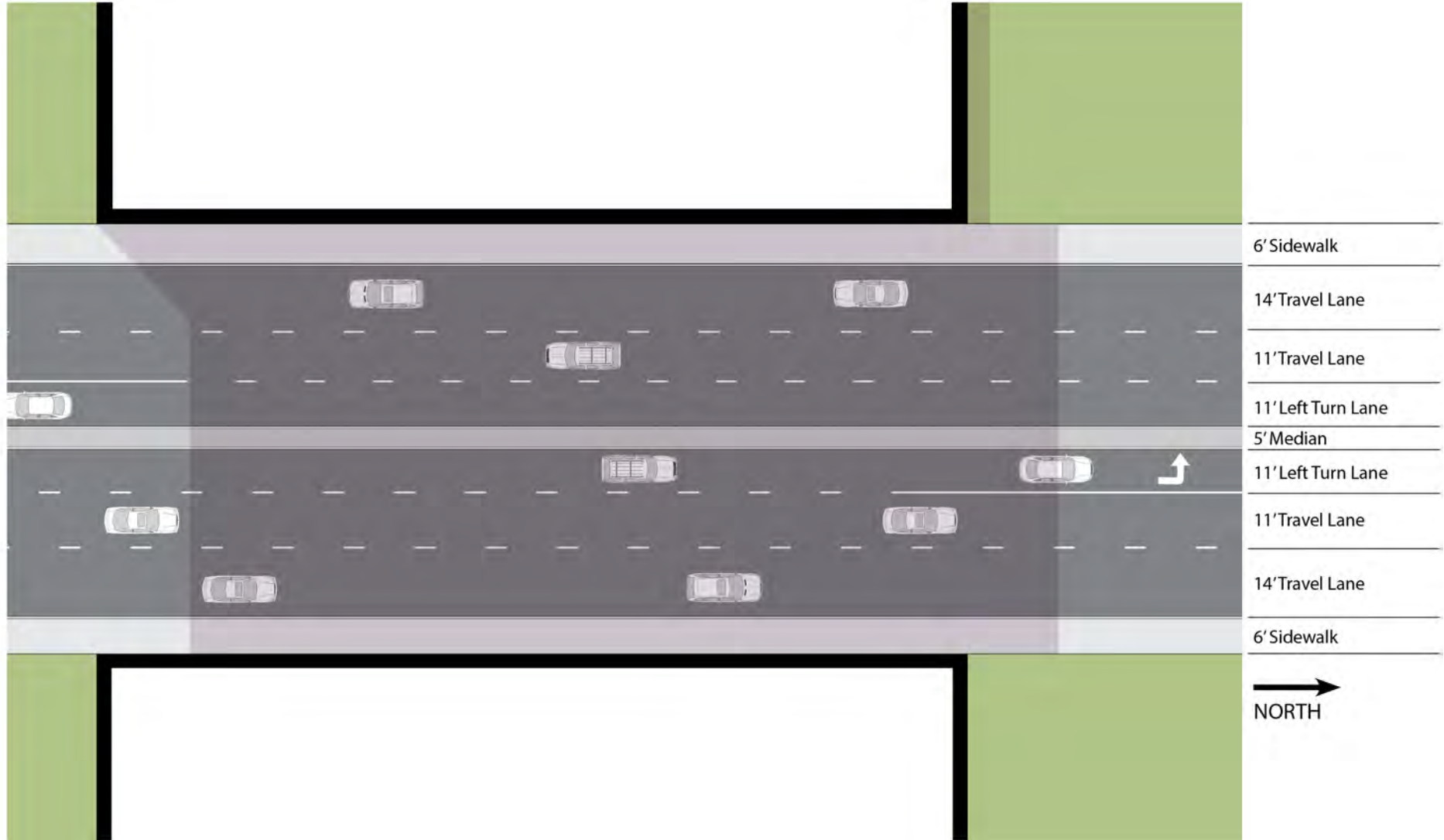


Existing Elevation (Looking North)

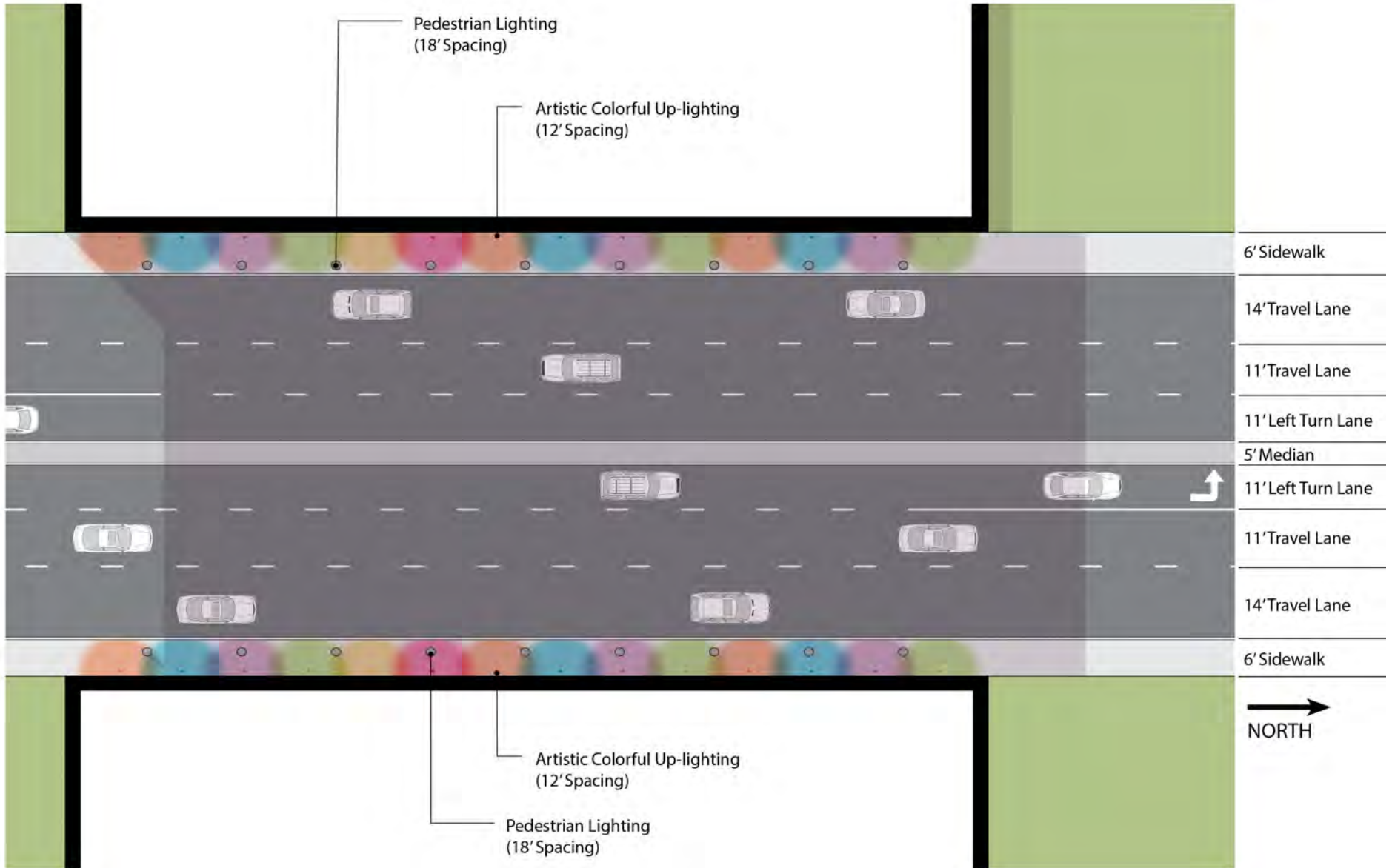


Proposed Elevation (Looking North)

EXISTING CONDITION (PLAN VIEW) | BUENA VISTA STREET FREEWAY UNDERPASS



PROPOSED (PLAN VIEW) | BUENA VISTA STREET FREEWAY UNDERPASS



HIGHLAND AVENUE STREETScape (NORTH OF CENTRAL)

Highland north of the I-210 freeway is anticipated to function as a key pedestrian linkage to the Town Center.

Highland Streetscape Objectives | The streetscape should:

- Widen the western sidewalk to foster pedestrian access to the Town Center
- Increase pedestrian amenities including street trees and pedestrian lighting

Highland Streetscape Requirements:

- **Widen Sidewalk.** Duarte Station Specific Plan calls for a pedestrian promenade along Highland Avenue. Within the underpass, widen the sidewalk to 14 feet on the west side to flow smoothly with the planned promenade as well as sidewalks to the north. Widen the western sidewalk north of Central Avenue from 6.5 feet to 9.5 feet. A modification to the Bicycle Master Plan will be required.
- **ADA Access.** Where sidewalks and curb returns are reconstructed, meet Americans with Disabilities Act (ADA) compliance for grades, clearances, and curb ramp locations.
- **Lighting.** Add lighting to enhance safety and a sense of place. Additional pedestrian scale lighting should create visual connections to the proposed promenade. Install pedestrian light fixtures specified in Duarte Town Center Specific Plan (McGraw-Edison, GAR/GAT/GLC Generation Series Pedestrian Light), located 40-foot on center.
- **Street Trees.** Increase street tree planting to provide shade, and to strengthen the visual connection between the promenade, the Huntington Drive corridor and the Town Center. The Specific Plan recommends brick pavers as a surface treatment in the tree planters to increase the overall walkability of the sidewalks. No more than two or three tree species should be considered for consistency in aesthetics and simplicity of maintenance.

- **Crosswalks.** Install continental markings at all marked pedestrian crosswalks.

Highland Streetscape Recommendations:

- **Add Northbound and Southbound Left Turn Pockets.** As recommended in the Huntington Intersection Capacity and Safety Report (2016), left turn pockets for both northbound and southbound approaches would facilitate traffic movement and increase sight distance in the north/south direction on Highland Avenue. This enhancement will result in improvement of safety by reducing the chance of rear end collisions and more capacity by requiring less green time for the north/south direction to clear traffic.
- **Wayfinding.** Unify wayfinding elements to create a sense of entry and location within Duarte.
- **Maintain Parking.** Allow for existing on-street parking to be retained to accommodate existing and future uses.

Highland Streetscape Considerations:

- **Maintenance.** Consider the short-term maintenance requirements (such as increased tree watering to establish trees) and long-term maintenance requirements when considering project scale, scope, and items.
- **Safe Routes to School.** Consider proximity of local schools and safe routes to school.

Recommended Street Trees for Highland Avenue:



Lagerstroemia indica 'Muskogee'
Crape Myrtle (Lavender Flower)

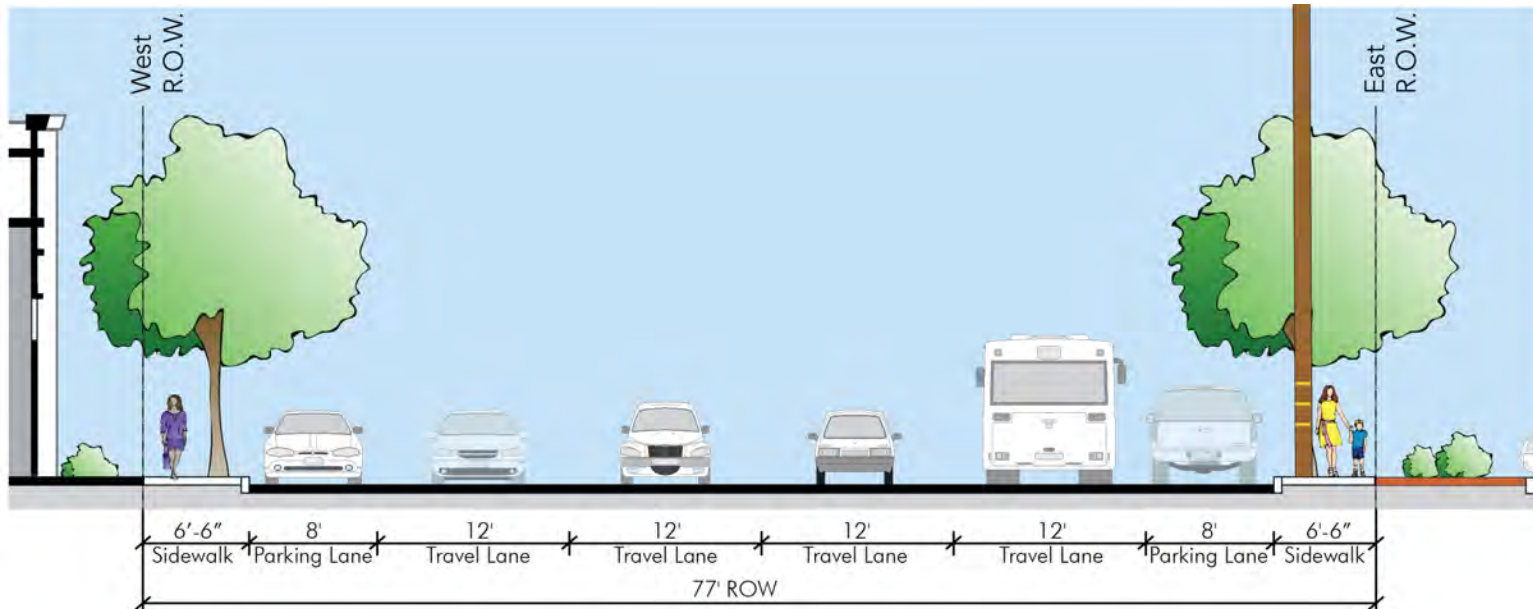


Robinia 'Purple Robe'
Locust

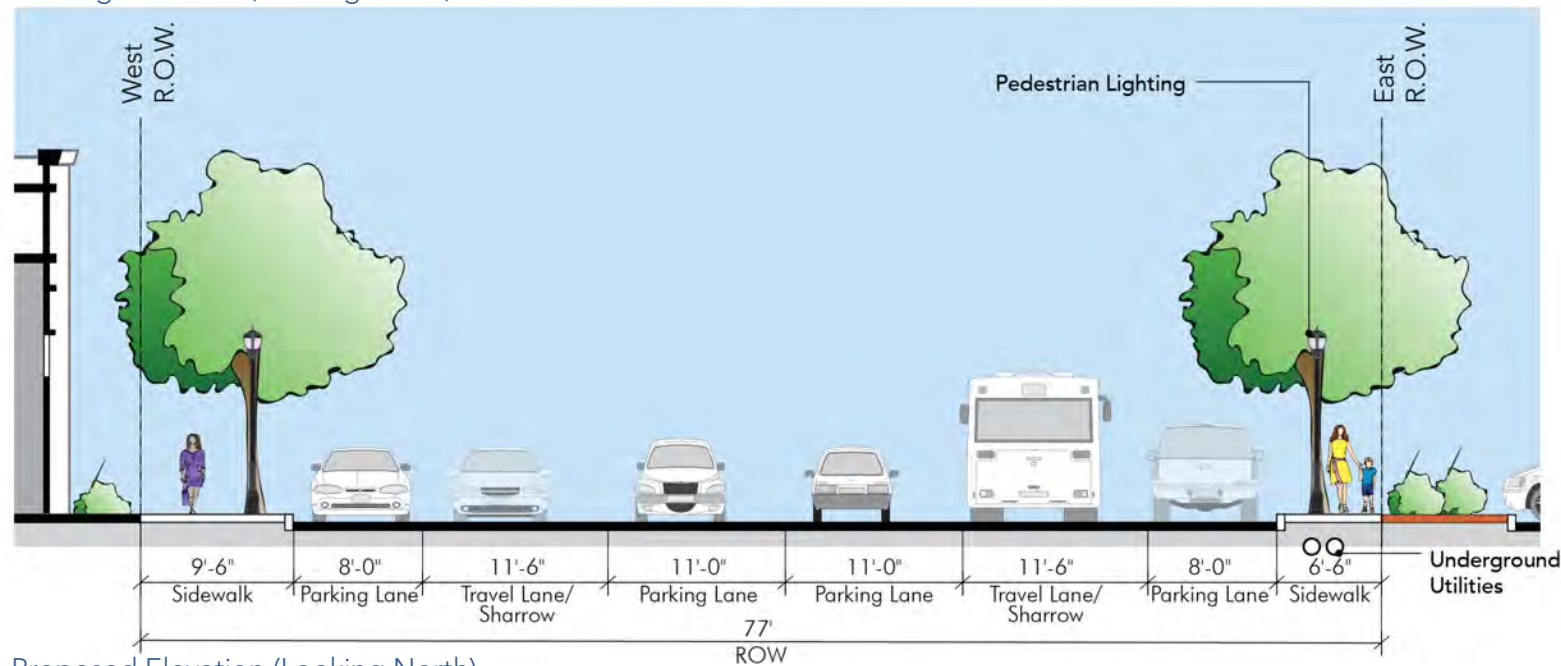


Tabebuia impetiginosa
Pink Trumpet Tree

CONCEPT DESIGN (SECTION) | HIGHLAND AVENUE STREETScape (NORTH OF CENTRAL)

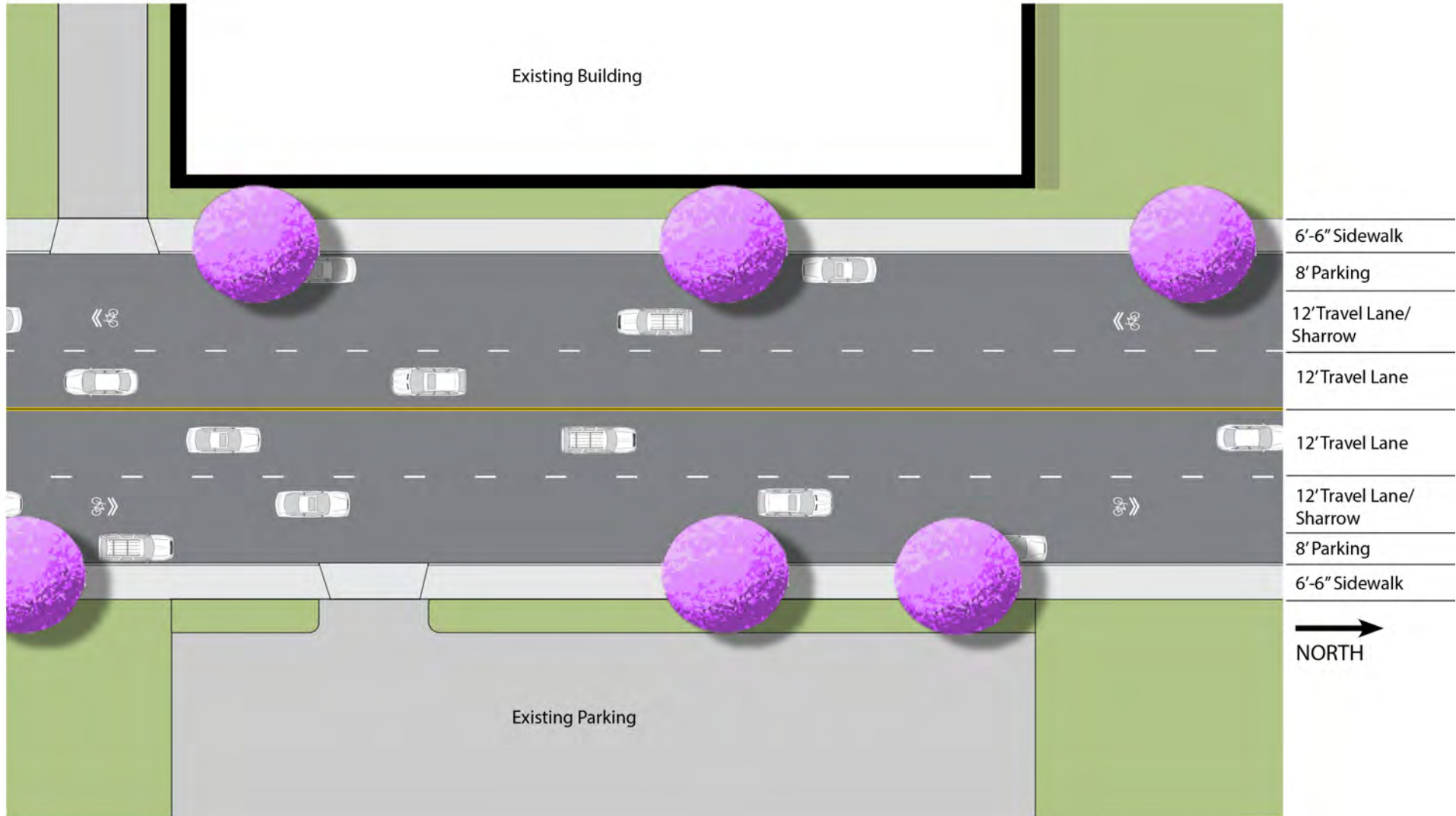


Existing Elevation (Looking North)

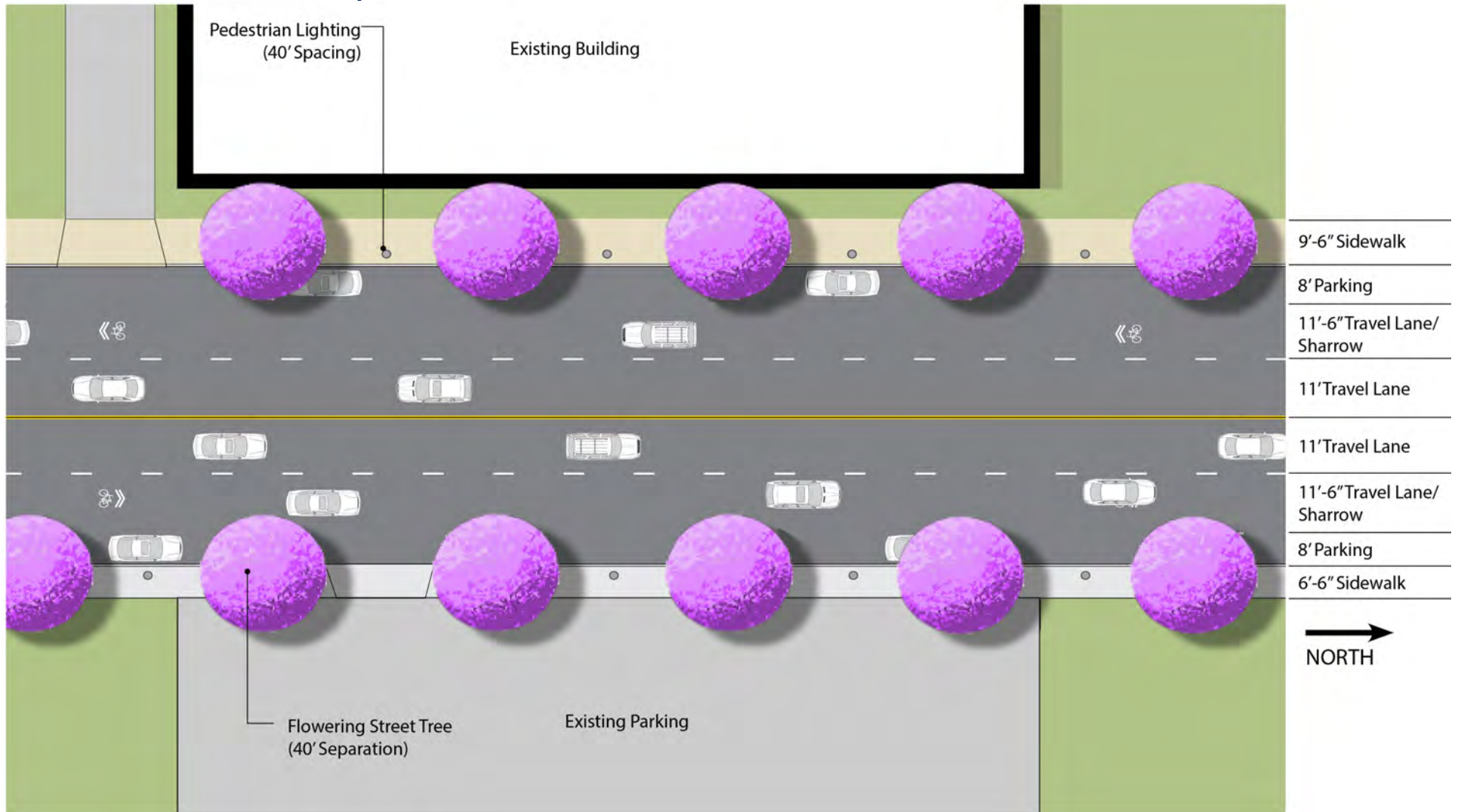


Proposed Elevation (Looking North)

EXISTING CONDITION (PLAN VIEW) | HIGHLAND AVENUE (NORTH OF CENTRAL)



PROPOSED (PLAN VIEW) | HIGHLAND AVENUE (NORTH OF CENTRAL)



BUENA VISTA STREET STREETScape (NORTH OF CENTRAL)

Many Duarte residents think of Buena Vista as the gateway to the city. As such, the streetscape is important to present a unified and attractive view. However, given vehicle volumes and limited right-of-way width, potential improvements are limited. The existing bicycle lane provides bicycle connections to larger Duarte. To enhance the pedestrian experience, additional street trees within private property set back areas and lighting within the sidewalk areas are proposed.

Buena Vista Streetscape Objectives | The streetscape should:

- Enhance the tree canopy through increased tree planting in private property setback areas
- Increase pedestrian amenities including pedestrian lighting

Buena Vista Streetscape Recommendations:

- **Tree Planting.** Increase the urban canopy by encouraging property owners to plant trees from the approved list within private property setback areas. Endeavor for spacing of 40-feet on center. No more than three species of trees are recommended, in order to provide for consistency in aesthetics and simplicity of maintenance.

Recommended Street Trees for Buena Vista Street:



Pistacia chinensis
Chinese Pistache



Robinia 'Purple Robe'
Locust



Tabebuia impetiginosa
Pink Trumpet Tree

- **Crosswalks.** Install continental markings at all marked pedestrian crosswalks. With regard to the crosswalk at Buena Vista and Central, the existing red stamped concrete would need to be removed. As such, implementation of this removal and replacement is a lower priority for the City that would happen at a later time if funding and other circumstances align.
- **ADA Access.** Where sidewalks and curb returns are reconstructed, meet Americans with Disabilities Act (ADA) compliance for grades, clearances, and curb ramp locations.
- **Lighting.** Add lighting to enhance safety and an identifiable sense of place. Additional pedestrian scale lighting should create strong visual connections to the proposed promenade. Pedestrian lights should be located 40-foot on center.

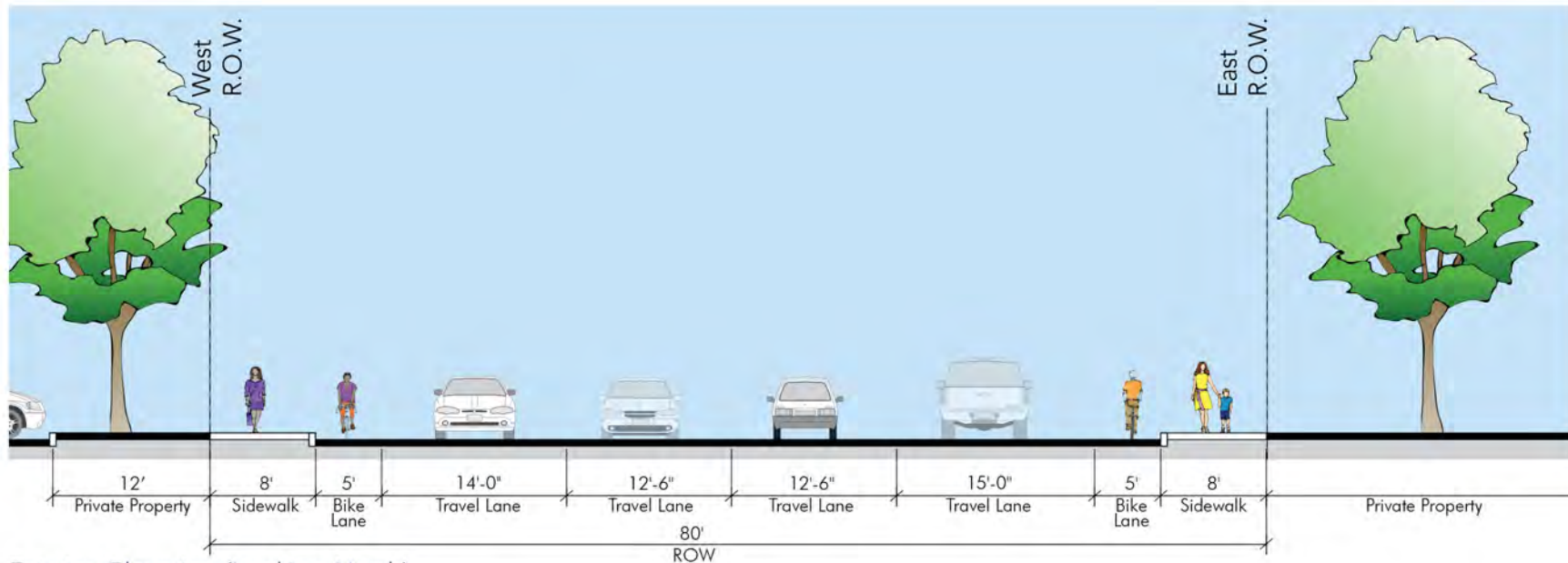
Buena Vista Streetscape Considerations:

- **Safe Routes to School.** Consider proximity of local schools and safe routes to school.
- **Consider Aligned Grant and Tree Funding Resources.** Prioritize opportunities tree planting where property frontage has a public owner or tenant, such as the Teen Center and LA County Library. Consider city-wide and nonprofit tree planting programs that may assist with provisions of trees at a lower cost for installation on private property.
- **Maintenance.** Consider and clearly articulate maintenance responsibilities for new trees, including watering requirements for new trees to ensure they are adequately established.

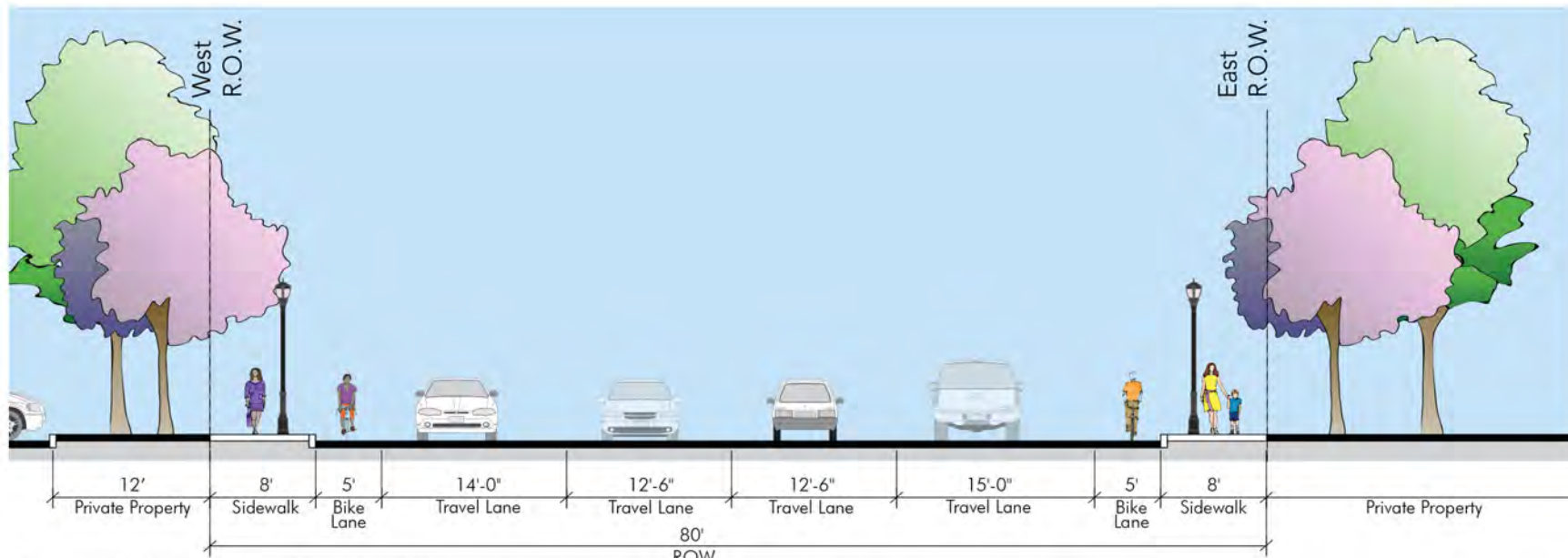
Recommended Pedestrian Light on Buena Vista St:
McGraw-Edison, GAR/GAT/GLC Generation Series
Pedestrian Light



CONCEPT DESIGN (SECTION) | BUENA VISTA STREET STREETScape (NORTH OF CENTRAL)

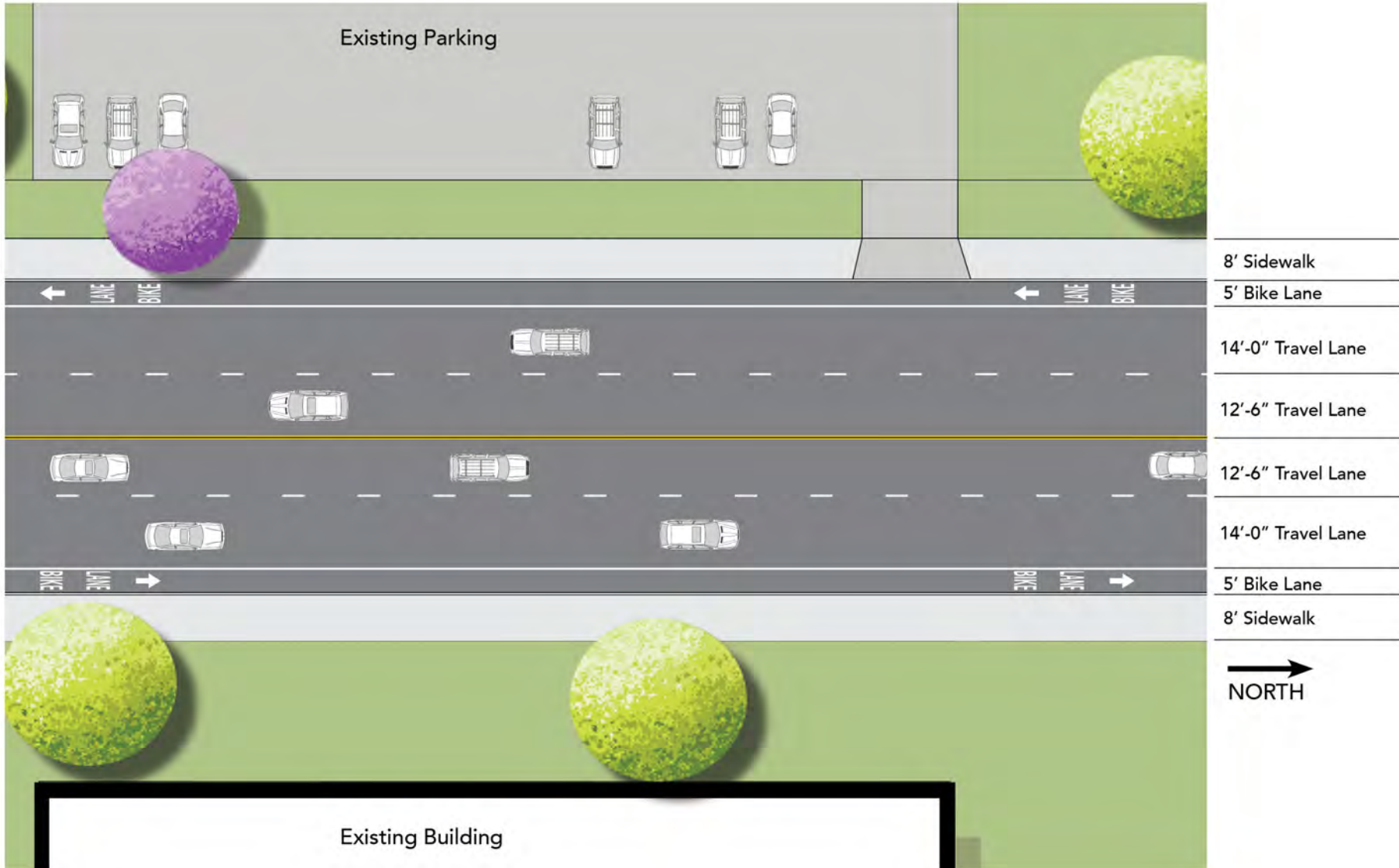


Existing Elevation (Looking North)

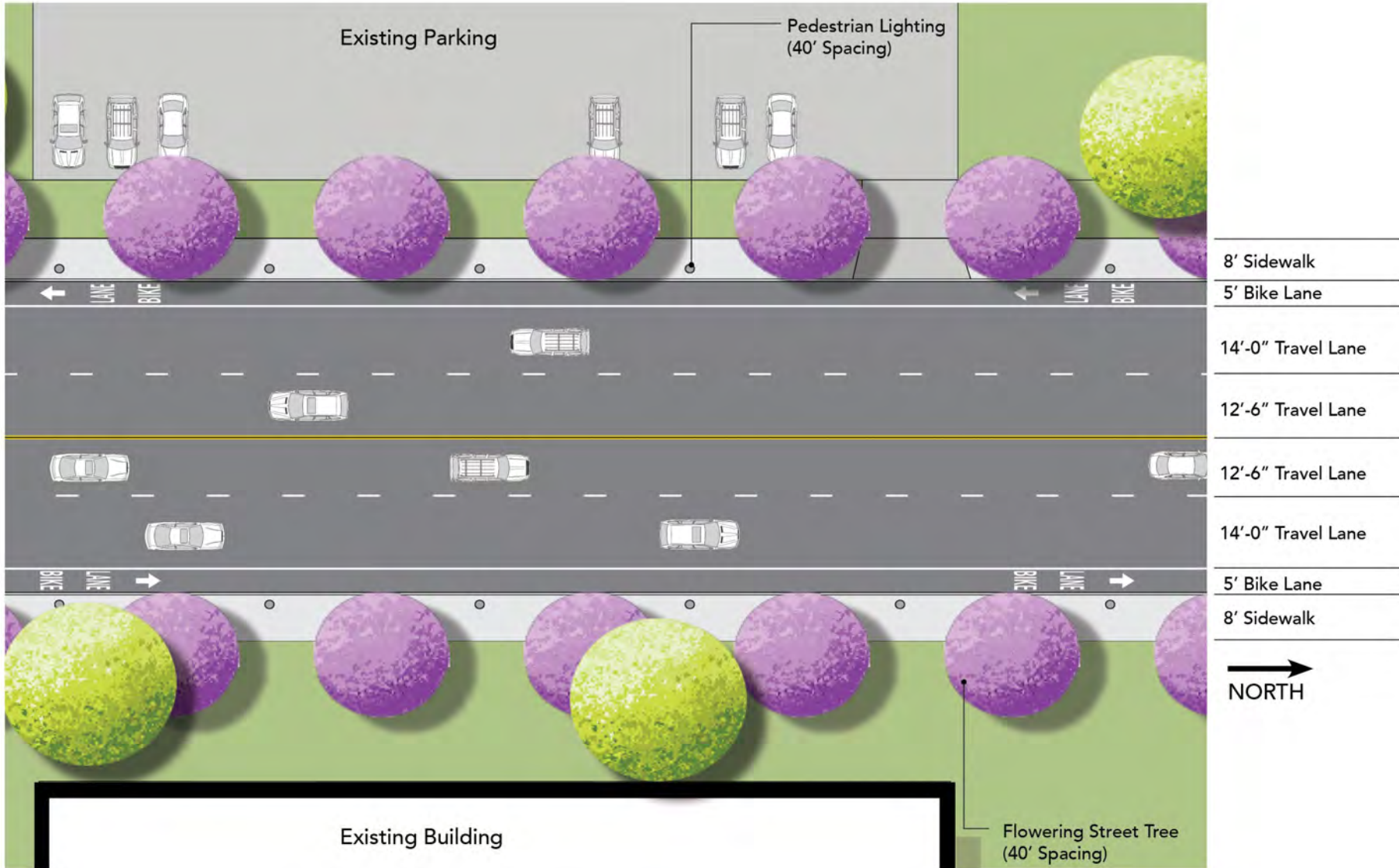


Proposed Elevation (Looking North)

EXISTING CONDITION (PLAN VIEW) | BUENA VISTA STREET (NORTH OF CENTRAL)



PROPOSED (PLAN VIEW) | BUENA VISTA STREET (NORTH OF CENTRAL)



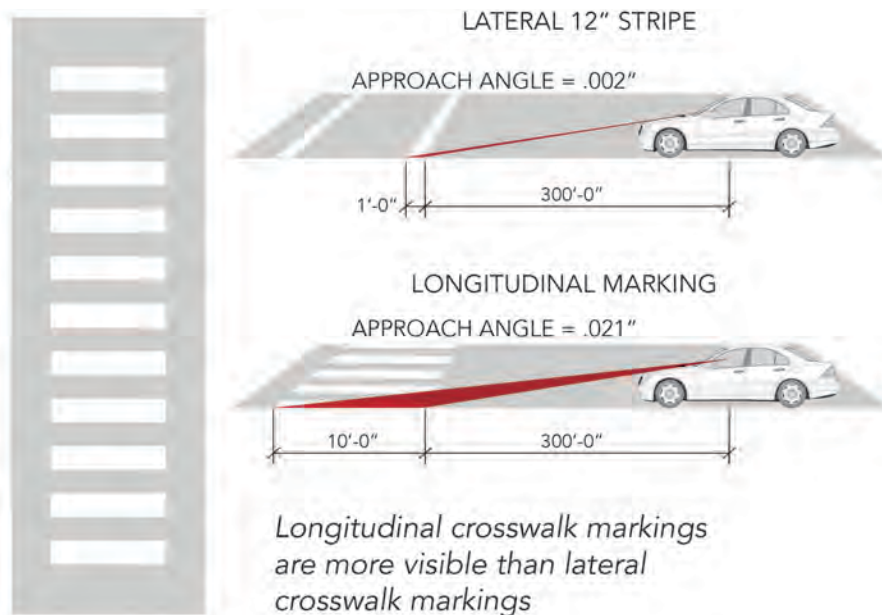
TRAFFIC CALMING IN THE TOWN CENTER

The project-specific improvements presented on the preceding pages are intended to provide for a public realm that is comfortable for all people moving through the space and accessing the local destinations. In addition, this section provides additional measures that should be considered throughout the Specific Plan area.

Crosswalk Improvements

High Visibility Crosswalks

High visibility crosswalk markings that are longitudinal (often referred to as zebra, international, or continental crosswalks) are preferable to standard parallel (lateral) pavement markings. Longitudinal markings are more visible to approaching vehicles and have been shown to improve yielding behavior. All crosswalks in the Town Center should be updated with high visibility, longitudinal crosswalk markings.



Leading Pedestrian Intervals

Leading Pedestrian Intervals give people walking a “head start” (generally 7 to 10 seconds) to cross the street before the light turns green for vehicles. This makes people more visible to drivers and reduces the chance for pedestrian-vehicle conflicts. Intersections at locations throughout Los Angeles and other neighboring cities such as Pasadena have been outfitted with Leading Pedestrian Interval signals. These treatments have been proven to result in up to a 60 percent reduction in vehicle collisions with people walking (Journal of the Transportation Research Board No. 2198, 2010). Major intersections within the Town Center should be updated with Leading Pedestrian Interval signals.

Education

Everyone has a role to play in traffic safety. From the choices you make while moving through Duarte to the conversations you have with a neighbor, we must all do our part to make it safer to move through our community. Educational campaigns about traffic safety are an effective mechanism to encourage safe traffic behavior. The City will consider additional educational campaigns, especially associated with streetscape improvement project implementation.



ADA Standards

New construction and alternations of City facilities, including pedestrian facilities in the public right-of-way, are required to comply with the 2010 Americans with Disabilities Act (ADA) Standards and the current California Building Code (CBC). The 2019 CBC was released in July 2019 for implementation in January 2020. When standards differ, the City must apply the standard that provides the higher level of accessibility.

As a best practice, it is recommended to consult with the 2011 Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG).

It is recommended to consider construction tolerances when designing facilities and provide sufficient tolerance to ensure all features are constructed in compliance with the standards. This is typically employed by noting a 1.5 percent cross slope on drawings where 2 percent is the allowed maximum. Recommended construction tolerances include:


DESIGN SLOPE / CROSS-SLOPE REQUIREMENTS		
Feature	ADA / CBC Construction Maximums	Recommended Design Maximums
Ramps	1:12 = 8.33%	1:13.3 = 7.5%
Walking Surfaces*	1:20 = 5.00%	1:25 = 4.0%
Parking	1:48 = 2.00%	1:66.6 = 1.5%
'Level Areas' e.g. landings, parking access aisles, turning spaces, etc.	1:48 = 2.00%	1:66.6 = 1.5%
Cross-Slope	1:48 = 2.00%	1:66.6 = 1.5%

* CBC 11B-403.3 Provides the following exception. *The running slope of sidewalks shall not exceed the general grade established for the adjacent street or highway.* A Sidewalk is defined as a surfaced pedestrian way contiguous to a street used by the public (CBC 11B- 202 Definitions). A similar exception can be found in PROWAG R302.5.



CHAPTER 4 IMPLEMENTATION

DUARTE TOWN CENTER
greening and traffic calming plan



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IMPLEMENTATION

This Greening and Traffic Calming Plan provides project design concepts and strategic direction for implementation of the Town Center Specific Plan mobility improvements. This chapter includes tools to support staff in ongoing evaluation and prioritization of capital improvement projects, including the development of annual budgets, regular updates to the Capital Improvement Plan, and alternative funding sources.

FINANCIAL ESTIMATES

An Opinion of Probable Construction Costs with approximate quantities and unit prices has been developed for each of the project areas:

- Huntington Drive Standard Curb Bulbouts (full implementation)
 - Huntington Drive Parklet (optional upgrade, cost per parklet)
 - Huntington Drive Stormwater Curb Bulbout (optional upgrade, cost per stormwater curb bulbout)
- Highland Avenue (Central to Huntington Drive)
- Highland Avenue Underpass (Evergreen to Central)
- Buena Vista Avenue (Central to Huntington Drive)
- Buena Vista Underpass (Evergreen to Central)

The probable costs have been based on similar public construction projects completed within the last three years. In addition to the construction cost estimate, we have included estimated percentages for soft costs (design, survey, etc.), design contingency and construction contingency for each project area. See pages 4-2 through 4-8.

REVENUE SOURCES AND FUNDING METHODS

In order to implement the strategies and projects identified in this Plan, a variety of funding sources will be required. There is a range of funding opportunities that cities can consider in achieving streetscape improvements, as summarized in the Potential Funding Sources table to the

right. Options are further described in Appendix C: Evaluation of Funding Methods.

POTENTIAL FUNDING SOURCES
Local Funding Sources
Citywide Approval <ul style="list-style-type: none"> • Sales Tax • Property Tax and General Obligation Bonds • Parcel Tax • Dedication Transient Occupancy Tax • Property Transfer Tax • Utility User Tax • Business License Tax
City Council Approval <ul style="list-style-type: none"> • Development Impact Fee • Development Agreement, Community Benefits, and Incentive Zoning
Local Stakeholder Approval <ul style="list-style-type: none"> • Improvement District (e.g. Business Improvement District) • Mello-Roos Community Facilities District
Joint Powers Authority <ul style="list-style-type: none"> • Enhanced Infrastructure Financing District (EIFD) • Community Revitalization District (CRIA)
Grant Funding Sources
Regional <ul style="list-style-type: none"> • LA Metro Measure M • LA Metro Call for Projects
State <ul style="list-style-type: none"> • Highway Safety Improvement Program • Active Transportation Program • Strategic Growth Council Affordable Housing and Sustainable Communities Program

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Huntington Drive: Standard Curb Bulbout					
Street Improvements					
1	Mobilization	LS	1	\$98,337	\$ 98,337
2	Demolition	CY	2,222	\$100	\$ 222,200
3	Construct Curb & Gutter	LF	3,000	\$50	\$ 150,000
4	Construct Curb Only	LF	3,000	\$35	\$ 105,000
5	Construct 24" AC slot patch	TON	666	\$125	\$ 83,250
6	Crushed Misc. Base	TON	26	\$35	\$ 910
7	Traffic Signal Mod @ Huntington & Buena Vista	LS	1	\$100,000	\$ 100,000
8	Traffic Signal Mod @ Huntington & Highland	LS	1	\$150,000	\$ 150,000
9	Remove & Install Striping & Pavement Markings	LS	1	\$50,000	\$ 50,000
10	Demo Ex. X-walks (Huntington & Buena Vista)	CY	367	\$100	\$ 36,700
11	Construct PCC X-walks Pavement (Huntington & Buena Vista)	CY	183	\$400	\$ 73,200
12	Crushed Misc. Base (Huntington & Buena Vista)	TON	346	\$35	\$ 12,110
Subtotal					\$ 1,081,707
Landscape Improvements					
13	Soil Preparation	SF	5,000	\$0.70	\$ 3,500
14	Landscape Planting	SF	5,000	\$5	\$ 25,000
15	Domestic Water Connection 2 - 1 1/2" meters	Allow	1	\$20,000	\$ 20,000
16	Irrigation	SF	5,000	\$5	\$ 25,000
17	Tree (24" box)	EA	50	\$350	\$ 17,500
18	New Pedestrian Lights	EA	120	\$7,000	\$ 840,000
Subtotal					\$ 931,000
Soft Costs (Design, Survey, etc.)			25%		\$ 503,177
Design Contingency			15%		\$ 301,906
Construction Contingency			20%		\$ 402,541
TOTAL					\$ 3,220,331

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Huntington Drive: Parklet (Optional Upgrade - Per Parklet)					
Landscape Improvements					
19	Soil Preparation	SF	100	\$0.70	\$ 70
20	Hardscape (Decorative Paving)	SF	60	\$15	\$ 900
21	Decorative Bridge Plates over Existing Gutter	Allow	90	\$45	\$ 4,050
22	Decorative Bollards (Traffic Rated)	EA	7	\$1,800	\$ 12,600
23	Landscape Planting	SF	40	\$5	\$ 200
24	Irrigation	SF	40	\$5	\$ 200
25	Domestic Water Service Connection	Allow	1	3000	\$ 3,000
26	Tree (24" box)	EA	2	\$350	\$ 700
27	Site Furniture (Benches, Trash Receptacles, Trellises, Raised Planters, Café Seating, etc.)	Allow	1	\$15,000	\$ 15,000
Subtotal					\$ 36,720

Huntington Drive: Stormwater Curb Bulbout (Optional Upgrade - Per Stormwater Planter)					
Landscape Improvements					
28	Soil Preparation	SF	100	\$0.70	\$ 70
29	Bioretention Soil Mix	CY	10	\$30	\$ 300
30	Landscape Planting	SF	100	\$5	\$ 500
31	Irrigation	SF	100	\$5	\$ 500
32	Domestic Water Service Connection	Allow	1	\$3,000	\$ 3,000
33	Bioretention retaining wall	LF	55	\$50	\$ 2,750
Subtotal					\$ 7,120

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Highland Avenue: Central to Huntington					
Street Improvements					
34	Mobilization	LS	1	\$68,833	\$ 68,833
35	Demolition	CY	842	\$100	\$ 84,200
36	Construct Curb & Gutter	LF	1,300	\$50	\$ 65,000
37	Construct Driveway	SF	1,400	\$12	\$ 16,800
38	Construct Bus Pad	SF	800	\$15	\$ 12,000
39	Construct 24" AC slot patch	TON	290	\$125	\$ 36,250
40	Crushed Misc. Base	TON	228	\$35	\$ 7,980
41	Construct Catch Basin	EA	1	\$10,000	\$ 10,000
42	Construct Curb Ramp	EA	4	\$5,000	\$ 20,000
43	Adjust Manhole to Grade	EA	1	\$1,000	\$ 1,000
44	Adjust Valve to Grade	EA	6	\$500	\$ 3,000
45	Construct Curb Drain	EA	9	\$1,000	\$ 9,000
46	Construct Parkway Drain	EA	1	\$2,500	\$ 2,500
47	Relocate Fire Hydrant	EA	3	\$6,000	\$ 18,000
48	Remove Tree	EA	13	\$500	\$ 6,500
49	Install 2" Conduit and Wiring	LF	3,000	\$40	\$ 120,000
50	Install #5 Pull Box	EA	70	\$500	\$ 35,000
51	Install Type III-BF Service Cabinet	EA	2	\$6,000	\$ 12,000
52	Remove & Install Striping & Pavement Markings	LS	1	\$20,000	\$ 20,000
53	Remove Sign & Sign Post	EA	13	\$200	\$ 2,600
54	Install Sign & Sign Post	EA	13	\$500	\$ 6,500
55	Traffic Signal Mod @ Highland & Huntington	LS	1	\$100,000	\$ 100,000
55	Traffic Signal Mod @ Highland & Central	LS	1	\$100,000	\$ 100,000
56	Utility Relocation	LF	955	\$350	\$ 334,250
Subtotal					\$ 1,124,838

(continued on next page)

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Landscape Improvements					
57	Soil Preparation	SF	1,250	\$0.70	\$ 875
58	Landscape Planting	SF	1,250	\$5	\$ 6,250
59	Irrigation	SF	1,250	\$5	\$ 6,250
60	Domestic Water Service Connection 1- 1 1/2" meter	Allow	1	\$10,000	\$ 10,000
61	Tree (24" box)	EA	50	\$350	\$ 17,500
62	Tree Well Root Barriers	EA	50	\$200	\$ 10,000
63	Brick Paving at Treewells	SF	1,250	\$6	\$ 7,500
64	Concrete Sidewalk (9.5' wide)	SF	13,000	\$10	\$ 130,000
65	New Pedestrian Lights	EA	50	\$7,000	\$ 350,000
Subtotal					\$ 538,375
Soft Costs (Design, Survey, etc.)			25%		\$ 415,803
Design Contingency			15%		\$ 249,482
Construction Contingency			20%		\$ 332,643
TOTAL					\$ 2,661,141

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Highland Avenue I-210 Underpass (Evergreen to Central)					
Street Improvements					
66	Mobilization	LS	1	\$24,540	\$ 24,540
67	Demolition	CY	364	\$100	\$ 36,400
68	Construct Curb & Gutter	LF	400	\$50	\$ 20,000
69	Construct 24" AC slot patch	TON	89	\$125	\$ 11,125
70	Crushed Misc. Base	TON	105	\$35	\$ 3,675
71	Construct Curb Ramp	EA	2	\$5,000	\$ 10,000
72	Install 2" Conduit and Wiring	LF	1,000	\$40	\$ 40,000
73	Install #5 Pull Box	EA	25	\$500	\$ 12,500
74	Install Type III-BF Service Cabinet	EA	1	\$6,000	\$ 6,000
75	Remove & Install Striping & Pavement Markings	LS	1	\$5,000	\$ 5,000
76	Remove Sign & Sign Post	EA	1	\$200	\$ 200
77	Install Sign & Sign Post	EA	1	\$500	\$ 500
78	Traffic Signal Mod @ Highland & Central	LS	1	\$100,000	\$ 100,000
79	Utility Relocation	LF	280	\$350	\$ 98,000
Subtotal					\$ 377,740
Landscape Improvements					
80	Promenade Concrete Sidewalk (14' Wide)	SF	3,920	\$15	\$ 58,800
81	New Pedestrian Lights	EA	24	\$7,000	\$ 168,000
82	Artistic Lighting	Allow	1	\$75,000	\$ 75,000
83	Phase 2 Public Art	Allow	1	\$50,000	\$ 50,000
84	Phase 2 Mural	Allow	1	\$50,000	\$ 50,000
85	Phase 2 Terraced Landscaping @ Gateway	Allow	1	\$100,000	\$ 100,000
Subtotal					\$ 501,800
Soft Costs (Design, Survey, etc.)			25%		\$ 219,885
Design Contingency			20%		\$ 175,908
Construction Contingency			20%		\$ 175,908
TOTAL					\$ 1,451,241

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Buena Vista Avenue: Central to Huntington					
Street Improvements					
86	Mobilization	LS	1	\$27,624	\$ 27,624
87	Install 2" Conduit and Wiring	LF	3,000	\$40	\$ 120,000
88	Install #5 Pull Box	EA	70	\$500	\$ 35,000
89	Install Type III-BF Service Cabinet	EA	2	\$6,000	\$ 12,000
90	Demo Ex. X-walks (Buena Vista & Central)	CY	233	\$100	\$ 23,300
91	Construct 8" AC Pavement (Buena Vista & Central)	TON	156	\$125	\$ 19,500
92	Crushed Misc. Base (Buena Vista & Central)	TON	184	\$35	\$ 6,440
93	Install High-Visibility X-walks (Buena Vista & Central)	LS	1	\$10,000	\$ 10,000
94	Traffic Signal Mod @ Buena Vista & Central	LS	1	\$50,000	\$ 50,000
Subtotal					\$ 303,864
Landscape Improvements					
95	New Trees (24" box) on private property	EA	50	\$350	\$ 17,500
96	New Pedestrian Lights	EA	50	\$7,000	\$ 350,000
Subtotal					\$ 367,500
Soft Costs (Design, Survey, etc.)			25%		\$ 167,841
Design Contingency			15%		\$ 100,705
Construction Contingency			20%		\$ 134,273
TOTAL					\$ 1,074,182

DUARTE STREET TOWN CENTER GREENING AND TRAFFIC CALMING COST ESTIMATES

Item #	Location and Item Description	Unit	Quantity	Unit Cost	Cost
Buena Vista I-210 Underpass (Evergreen to Central)					
Street Improvements					
97	Mobilization	LS	1	\$5,450	\$ 5,450
98	Install 2" Conduit and Wiring	LF	900	\$40	\$ 36,000
99	Install #5 Pull Box	EA	25	\$500	\$ 12,500
100	Install Type III-BF Service Cabinet	EA	1	\$6,000	\$ 6,000
101	Utility Relocation	LF	300	\$350	\$ 105,000
Subtotal					\$ 175,450
Landscape Improvements					
102	New Pedestrian Lights	EA	24	\$7,000	\$ 168,000
103	Artistic Lighting	Allow	1	\$75,000	\$ 75,000
104	Phase 2 Public Art	Allow	1	\$50,000	\$ 50,000
105	Phase 2 Mural	Allow	1	\$50,000	\$ 50,000
106	Phase 2 Terraced Landscaping @ Gateway	Allow	1	\$100,000	\$ 100,000
Subtotal					\$ 443,000
Soft Costs (Design, Survey, etc.)			25%		\$ 154,613
Design Contingency			20%		\$ 123,690
Construction Contingency			20%		\$ 123,690
TOTAL					\$ 1,020,443

IMPLEMENTATION STRATEGIES

Criteria for Project Consideration and Prioritization

When considering the priority of projects and programs and the order in which they are implemented, the following set of criteria should be used as a guide to identify the benefit to the community and Town Center in relation to other projects and programs. These criteria will not provide a numerical score but will inform staff, the community, and the City Council how a particular project could implement community goals. Staff and ultimately the City Council will determine the final order of implementation as part of the established Capital Improvement Program (CIP) and operating budget process.

The following criteria are presented to assist with deciding how best to allocate resources among various project and program options when new funding opportunities become available:

- **Provides multiple benefits.** Proposed projects that can advance more than one overarching goal of the Greening and Traffic Calming Plan.
- **Has other funding or partnerships available.** Projects that have potential for other types of funding, such as grants, donations, or other partner contributions, compared to other projects without other funding opportunities.
- **Supports strategic priorities.** Proposed projects that support and advance City Council established strategic priorities.
- **Meets identified needs.** Projects that address identified needs, especially pertaining to increasing safety and perceptions of safety, as identified within this Plan.

Long-Term Considerations

Incremental Change

The City should attempt to achieve early wins by methodically implementing projects that can be quickly built but also have a measurable impact. For

example, pilot projects can be short-term, low-cost, and scalable interventions, to catalyze long term change.

Maintenance

Design contract scopes for these projects should include an estimate of lifecycle costs during preliminary design so that Duarte can determine what resources will be required to maintain facilities and identify funding sources.

Relationship to Other Projects

Over time, other street improvement projects within Duarte will likely intersect with projects in this plan. All streetscape projects should be designed with the other anticipated projects in mind.

Continue to Dream

It is important to continue to dream for the future. This may include new adaptations in response to changing regulations. This may also include seizing the advantage of new opportunities that have not yet been envisioned in this plan.

Adapt and Iterate

Finally, the Greening and Traffic Calming Plan can adapt and should iterate. Over the life of the plan there are likely to be needs or opportunities that deviate from this plan. Additional projects may be identified; existing projects modified, and new project priorities may emerge.

Prioritization


Of the primary projects discussed in this Plan, the projects that are Phase I priority are to implement pedestrian enhancements in the underpass areas at Buena Vista Street and Highland Avenue. Improvements within these important gateways will help brand the City of Duarte, enhance the walking environment and encourage further use, and will galvanize support for additional streetscape improvements. As opportunities arise for subsequent projects, the City will use the criteria for project consideration and prioritization identified above.



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APPENDICES

DUARTE TOWN CENTER
greening and traffic calming plan



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APPENDIX A: PUBLIC OUTREACH AND STAKEHOLDER ENGAGEMENT

OVERARCHING OBJECTIVES

The Duarte Town Center Greening and Traffic Calming Plan is a direct implementation measure of the Duarte Town Center Specific Plan. Community engagement was the foundation of the planning process for the Town Center Specific Plan. To guarantee full involvement by the community, the City Council appointed a 17-member Town Center Ad Hoc Committee (TCAHC) to help craft the plan. The TCAHC met monthly for 14 months and collaborated to develop the project vision, discuss transformative strategies, and review each section of the draft Plan. In addition, stakeholder interviews were held, as well as public workshops tailored for the public and for private property owners and businesses.

Building on the successful public outreach structure from the Specific Plan, the following overarching objectives guided community engagement for the Greening and Traffic Calming Plan:

- **Educate and inform community members** regarding the Duarte Town Center Greening and Traffic Calming Plan
- **Solicit input** on the Duarte Town Center Greening and Traffic Calming Plan
- **Demonstrate transparency** through open, continual interaction with the community throughout the process and communicating how public comments/input are incorporated
- **Establish an accessible** process by offering a variety of options for the public to become engaged, both virtually and in-person

Community engagement included targeted stakeholder interview sessions and broader community input via Steering Committee meetings and the Town Center website.

STAKEHOLDER INTERVIEW SUMMARY

On November 15, 2018, Duarte Town Center Greening and Traffic Calming Plan consultant MIG met with key stakeholders to help inform the planning process and to **identify key infrastructure and mobility needs, opportunities, and challenges in the district**. The consultant team conducted interviews with a cross-section of stakeholders, including developers, property owners, representatives from local senior and assisted housing facilities, library staff, school representatives, and the Chamber of Commerce. Interviewees were asked a series of questions regarding broad-based concerns and objectives for getting to and moving through the Town Center, as well as specific topics pertaining to the stakeholders' interest and expertise. Participants were also given the opportunity to discuss issues of significance to them not otherwise raised in response to specific questions.

This summary presents the comments and key themes discussed during the interviews. Some comments may be contradictory where interviewees had differences of opinion.

Key Themes

Through the interviews, key themes emerged, as outlined below.

Enhance Connections to Metro Gold Line Duarte Station

The Metro Gold Line Duarte Station opened in 2016 and has significantly increased foot traffic in the vicinity. Many CSArts students use the Metro Gold Line to access school. For students, visitors to the district, and local residents, enhanced connections to the Metro Gold Line were identified as a priority, with particular attention focused on the underpass at Highland Avenue. Participants noted that it was dark and uncomfortable to walk between the station and northern destinations and recommend additional lighting and art installations.

Address Safety

Stakeholders commented about feelings of safety in certain locations, especially after dark. Stakeholders mentioned an increase in homelessness and issues of public safety and indicated that additional pedestrian-level lighting would enhance feelings of safety. Locations recommended for additional lighting include Buena Vista Street (west side) and within the underpasses for the freeway, as well as within local business parking lots.

Welcome People to Walk

Stakeholders recommended considering interventions that increase foot traffic and encourage pedestrians to linger, which will help local businesses. Interventions recommended include encouraging new destinations, better pedestrian environments, and parklets. Participants noted that a uniform, wider sidewalk, with consistent color, no potholes, fewer obstructions, and more pedestrian-scaled streetlights should be a priority.

Facilitate Student Pathways

Participants noted a need for an additional monitored crosswalk on Central, near Duarte High School, with a traffic light that could be activated by walkers pushing a button. Participants also noted that travel paths include cut-throughs to Brycedale Avenue from the south, as well as the underpass between Highland Avenue and Buena Vista, both of which are used by many students.

Consider Access to Bus Stops

Stakeholders noted the high level of bus use among seniors and library users. Many within the local senior population seek destinations within the district or use the bus to access outside locations. Participants recommended considering bus stop locations and sidewalk conditions/access to the bus stops.

Increase Signage and Wayfinding

Participants noted that there are limited wayfinding signs in the district, and that there was no sign on the 210 freeway that identifies travelers that they are entering Duarte. Participants also noted that additional business signage could help participants find key locations, such as the library. In addition, parking regulation signage should be clear, especially around the schools.

Consider Changing Mobility Patterns

Stakeholders noted an increase in the use of Uber, Lyft, and other ridesharing applications, as well as motorized scooters for seniors. The plan should consider how rideshare drop offs can be accommodated within the right-of-way, as well as the potential use of motorized scooters, which are an expanding mobility tool. Participants mentioned the Monrovia 50 cents Lyft program, where you can travel with another rider anywhere in Monrovia for just 50 cents. Participants also noted that more students use skateboards and scooters, rather than bicycles, and the plan should consider these mobility options as well.

Enhance Bicycle Facilities

Participants noted the Royal Oaks bicycle path as an asset for the community, and good linkages to that path are desired.

Traffic Concerns

Locations where participants noted difficulties and conflicts for motorists and/or pedestrians and bicyclists included Highland Avenue at Huntington Drive (southbound left turn does not have a dedicated lane), pedestrian crossings at Buena Vista and Central (northbound), and southbound left turns from the Big Lots parking lot onto Buena Vista. Participants noted that pedestrians, including seniors, cross Huntington Drive at locations other than crosswalks; however, the new light at Pops Road has helped and a new light proposed at Brycedale Avenue will also be helpful. There are also locations along Highland Avenue where people cross mid-block.

Address Derelict Properties

Participants noted deferred maintenance at certain properties. In addition, participants were interested in proposed developments for properties that are currently vacant. Derelict properties need to be addressed so that people feel safe and places look more inviting.

Green the Corridors

It was noted that additional trees will help to enhance the pedestrian experience, slow traffic, and provide a sense of place. Participants cautioned against thick vegetation and irrigation in certain locations where homeless might congregate.

Allow Flexibility for Parklets

Stakeholders were excited about the idea of parklets as identified in the Specific Plan and looked forward to seeing the first one installed soon with the proposed housing development on Huntington Drive. That project will include two parklets; each of these will be landscaped and provided by the developer. The City will be responsible for ongoing maintenance and watering of the parklet landscaping. The parklets will have the flexibility to be augmented in the future with seating, historic plaques, and/or art. Participants liked the idea that additional seating and tables could be provided in the parklets in the future.

Conclusion

The Town Center Specific Plan, adopted by the City in 2016, set the foundation for the Vision for the Duarte Town Center area. Stakeholder interviews reaffirmed that vision and identified current issues and opportunities to explore as part of the Greening and Traffic Calming Plan.

AD HOC COMMITTEE MEETINGS SUMMARY

The Ad Hoc Committee included five community members with key insight into the local context, issues, and process. The Ad Hoc Committee met four times to discuss issues and opportunities, draft the vision and goals for the Plan, and review draft project concepts.

Meeting 1: February 27, 2019

At the first meeting, the Ad Hoc Committee reviewed the Town Center Specific Plan, stakeholder interview input, and existing conditions maps.

Meeting 2: March 27, 2019

At the second meeting, the Ad Hoc Committee provided input on the proposed design concepts for the freeway underpasses at Highland Avenue and Buena Vista Street. The committee reviewed potential infrastructure financing tools and discussed options for implementation.

Meeting 3: April 24, 2019

On April 24th, the Ad Hoc Committee reviewed traffic calming and greening concepts, including lane narrowing through curb bulbouts and parklets, and modifications to sidewalks, crosswalks, and landscaping. In particular, the group discussed Huntington Drive street improvements including curb bulbouts and pedestrian lighting, and key components for successful parklets. The proposed Buena Vista Street improvements were reviewed as well. The group discussed preliminary goals to guide the Plan, and recommended modifications to highlight the traffic calming priorities associated with the plan.

Meeting 4: May 22, 2019

At the group's final meeting, the proposed Highland Avenue streetscape improvements were presented. The group reviewed and provided feedback on the refined overarching goals for the plan and strategies to guide each of the priority projects:



Huntington Drive parking lane modifications (bulbouts/parklets)



Highland streetscape (N of Central)



Freeway Underpass at Highland



Buena Vista streetscape (N of Central)



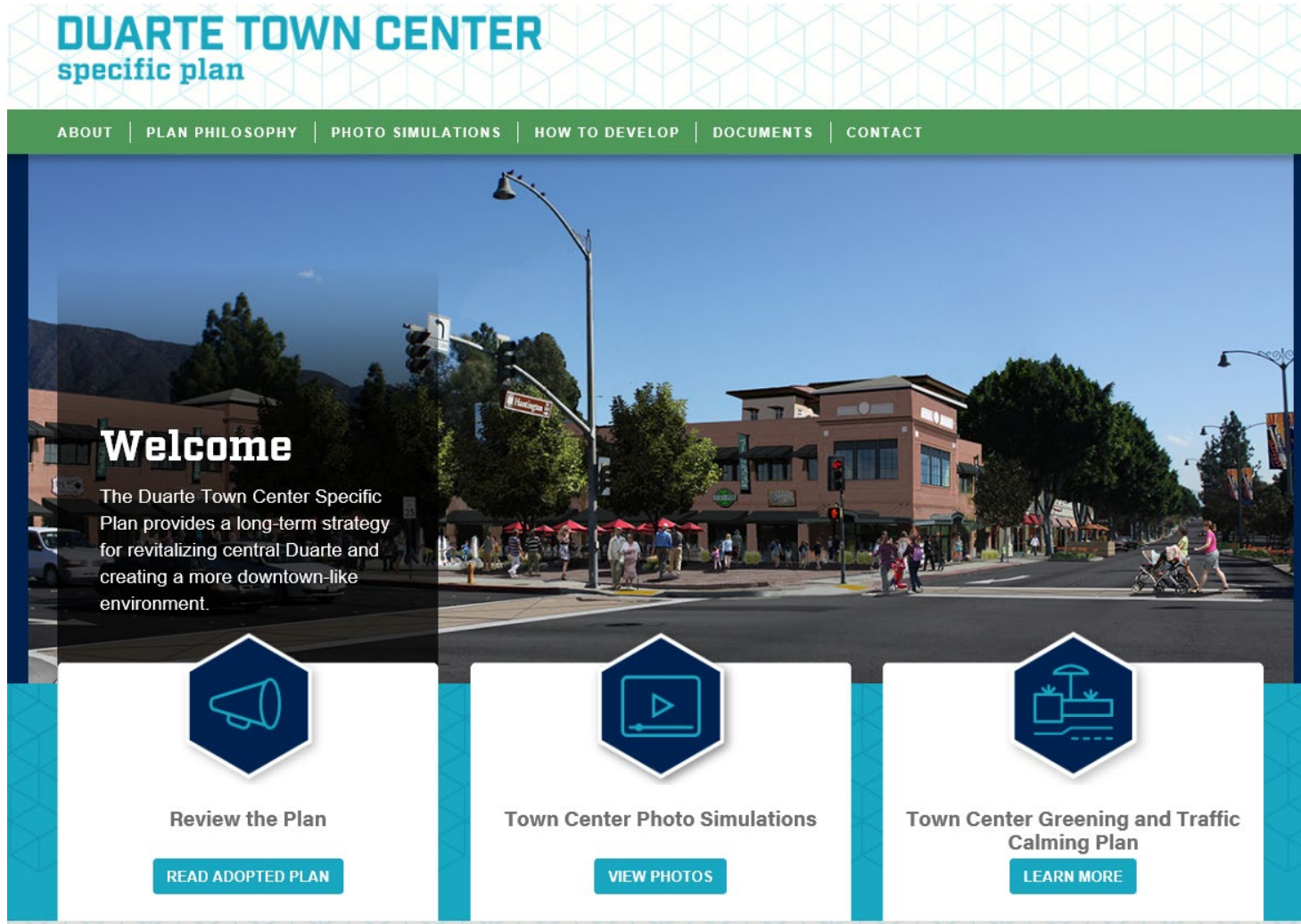
Freeway Underpass at Buena Vista



Traffic Calming in the Town Center (crosswalks & education)

WEBSITE

The Town Center Specific Plan website (www.duartetowncenter.com) provides a visual summary of the Specific Plan. The website was updated for the Greening and Traffic Calming Plan process to provide information for the community to learn more about the Greening and Traffic Calming Plan process and provide input.



SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Duarte Town Center Greening and Traffic Calming Plan

for the City of Duarte, California



Appendix B: Existing Conditions Report



In association with:
KOA CORPORATION | ECONOMIC & PLANNING SYSTEMS

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Project Overview

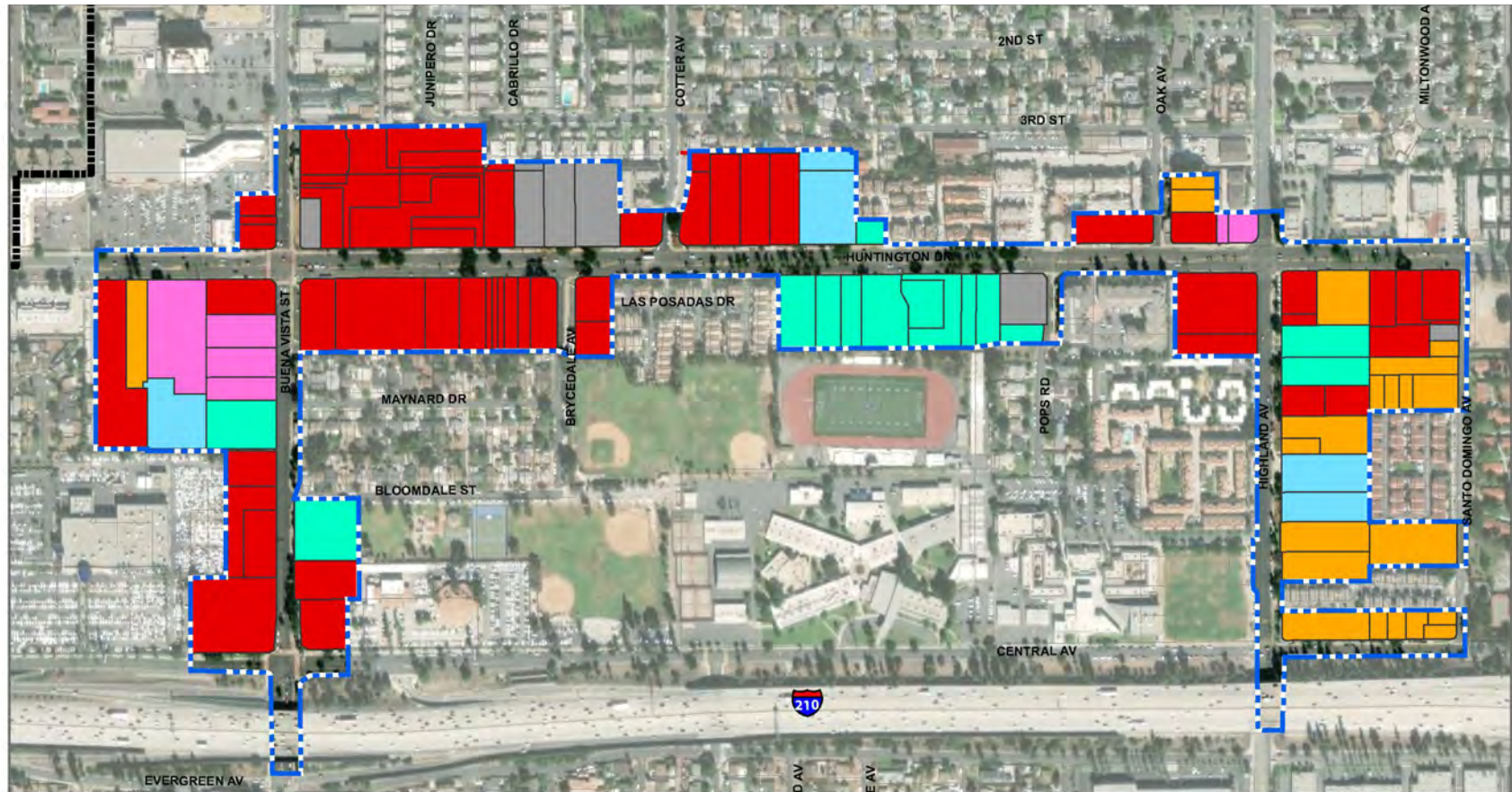
City of Duarte adopted the **Duarte Town Center Specific Plan** in 2016. This forward-thinking plan provides incentives for new, high-quality development and sets a high standard for public realm improvements that will enhance storm water quality, pedestrian safety, and multi-modal access.

Through traffic calming efforts on Huntington Drive—including curb bulbouts, additional street crossings, and parklets—as well as additional bicycle and pedestrian improvements along Buena Vista Street and Highland Avenue, the overall pedestrian experience will be enhanced, and walking to new shops, restaurants, and the Gold Line Station will become a much more pleasant and safer experience.

The **Greening and Traffic Calming Plan** is a direct implementation measure of the Specific Plan. Building on current and past planning efforts, this project will address existing constraints to create complete streets for Duarte residents, to leverage existing assets and work to date, and to develop a clear path toward an interconnected network of green open spaces that provide safe, healthy, and identifiable public realm improvements in the Duarte Town Center.

Existing Land Use

Figure 1: Existing Land Use

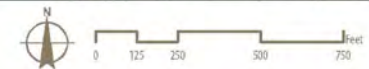


Existing Land Use

- Commercial
- Government
- Institutional
- Office
- Residential
- Vacant

Key Destinations include:

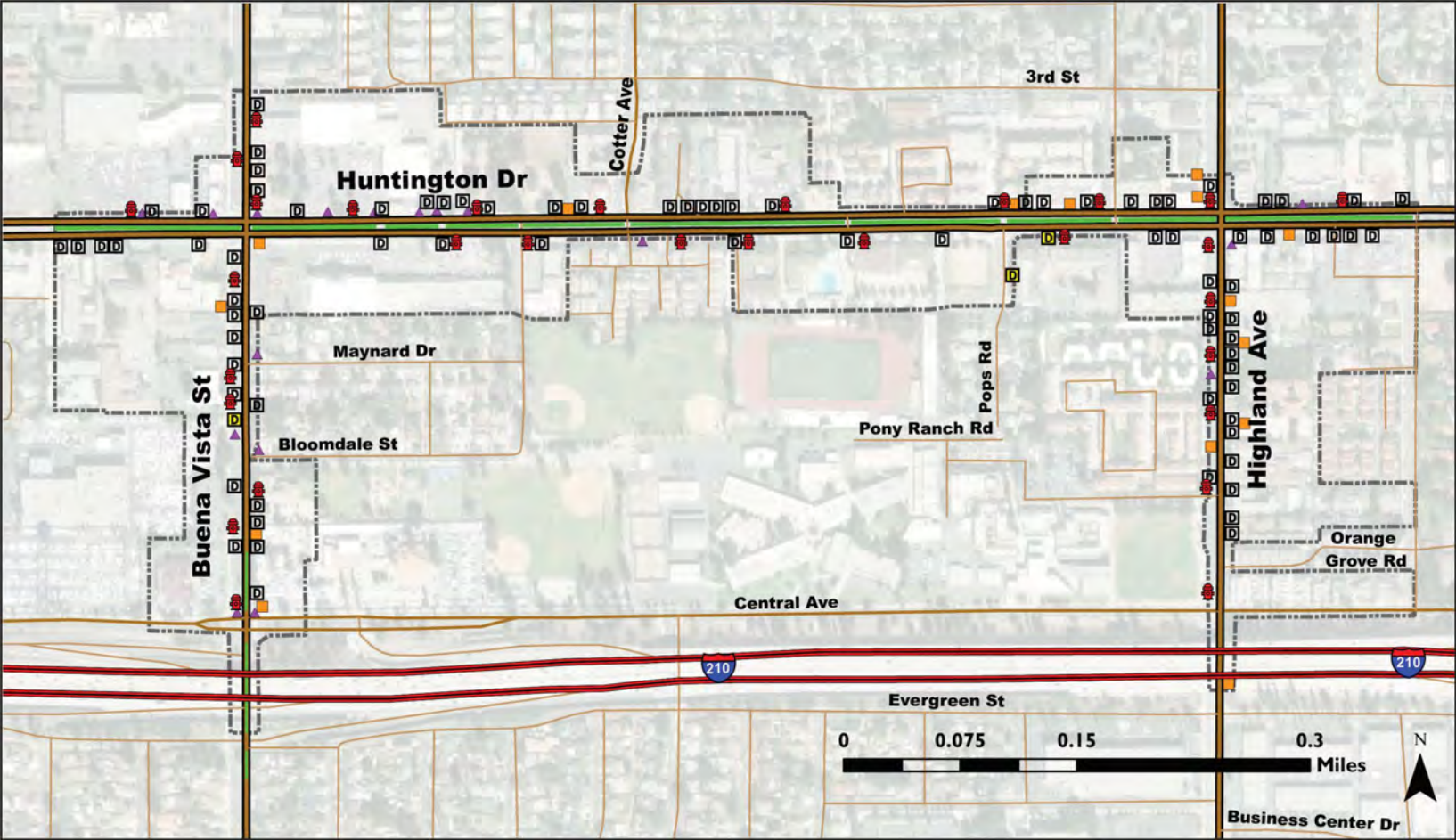
- Metro Gold Line Duarte Station
- Duarte Public Library
- Big Lots and Grocery Outlet Shopping Centers
- Duarte High School and CSArts
- City Hall



October 2018
Source: City of Duarte
Map Prepared by: MIG, Inc.

Water Infrastructure

Figure 2: Water Infrastructure

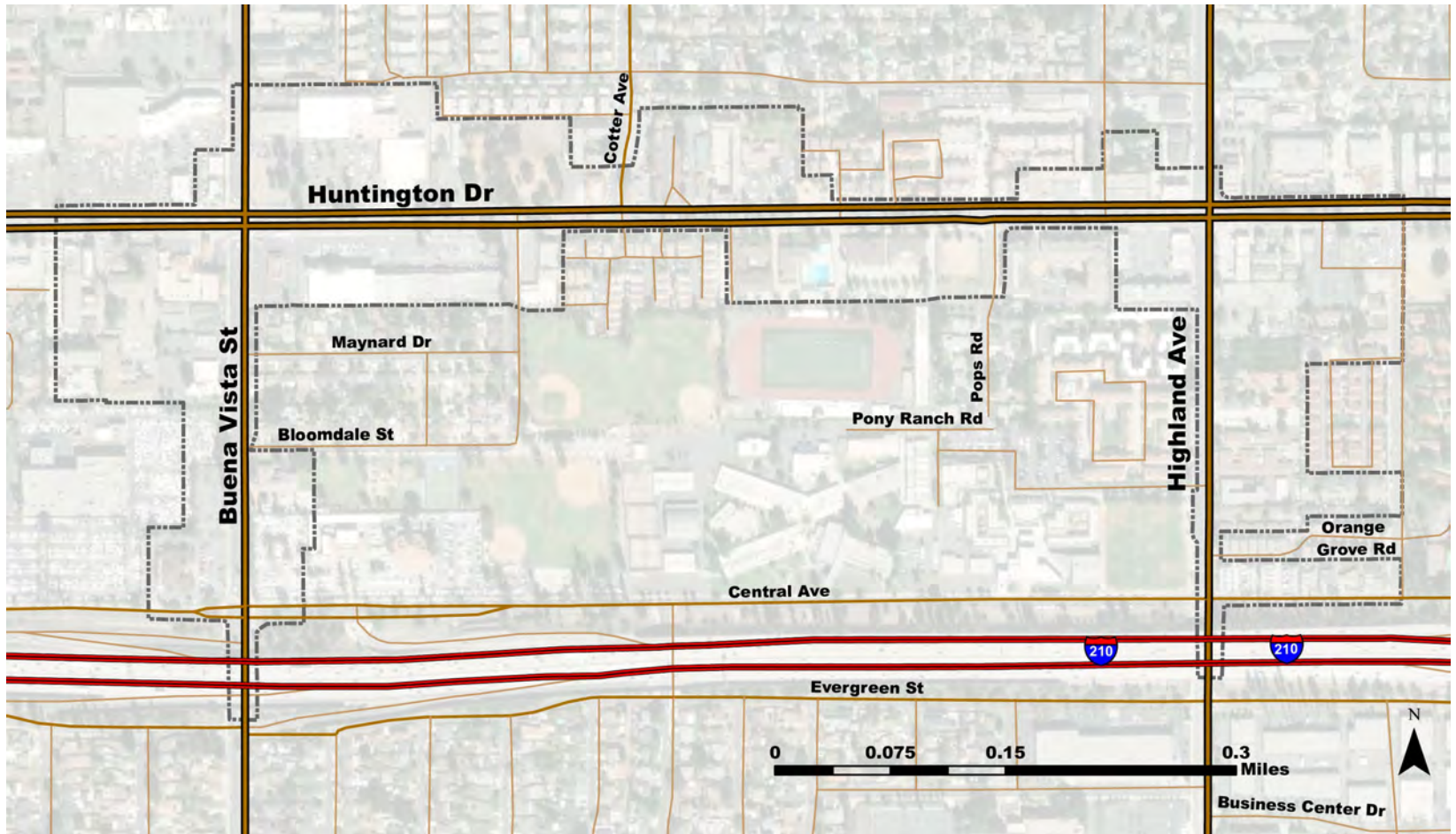


Legend

- | | | | | |
|---------------|--------------|---------|--------|-------------|
| Driveways | Electric Box | Hydrant | Median | Storm Drain |
| D Sloping | ■ | 🚒 | — | ▲ |
| D Not Sloping | | | | |

Roadway Classifications, Dimensions, and Facilities

Figure 3: Roadway Classifications (per Duarte General Plan)



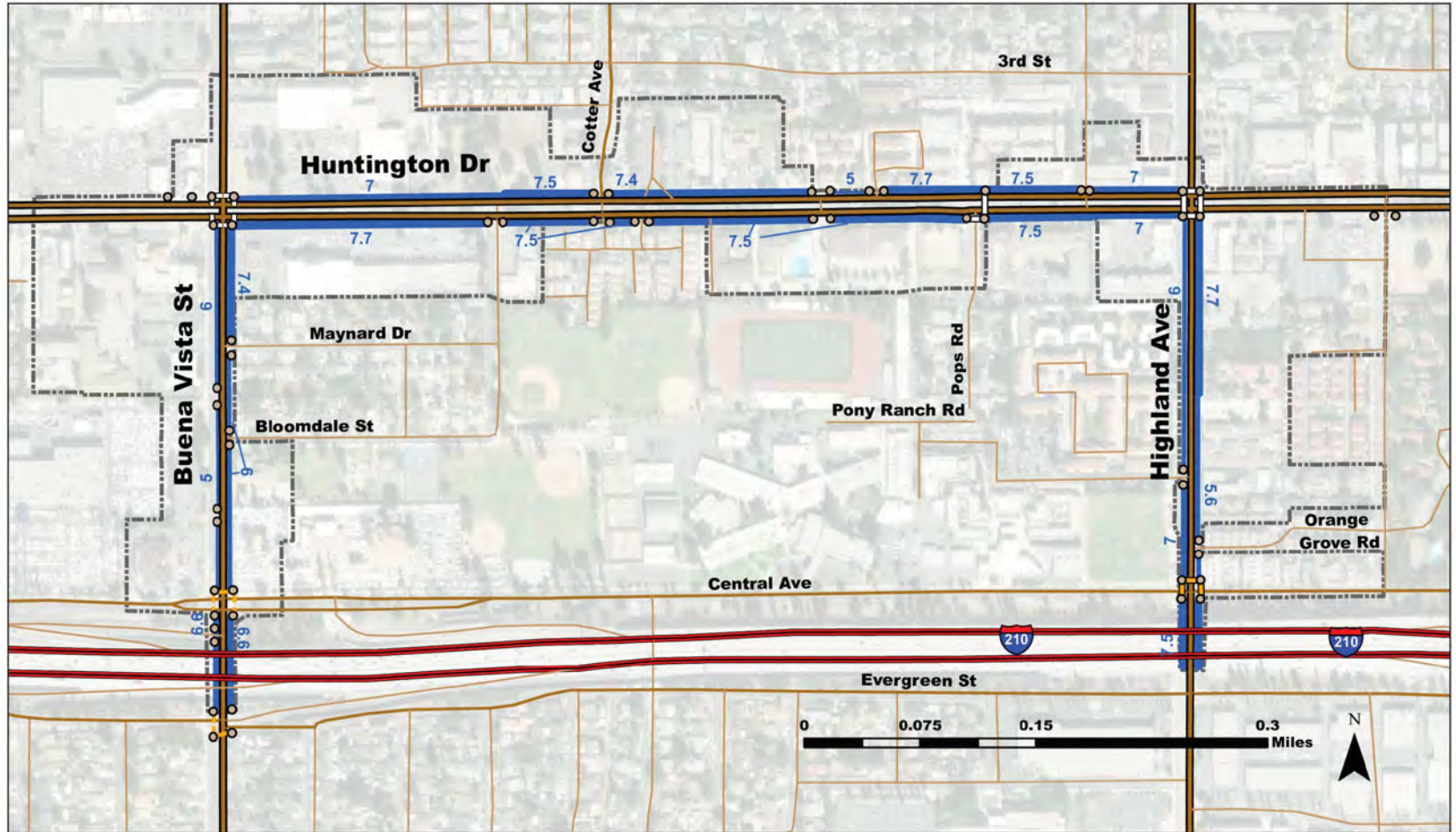
Legend

- Local
- Collector
- Minor Arterial

Figure 4: Roadway Dimensions of Study Area Arterials



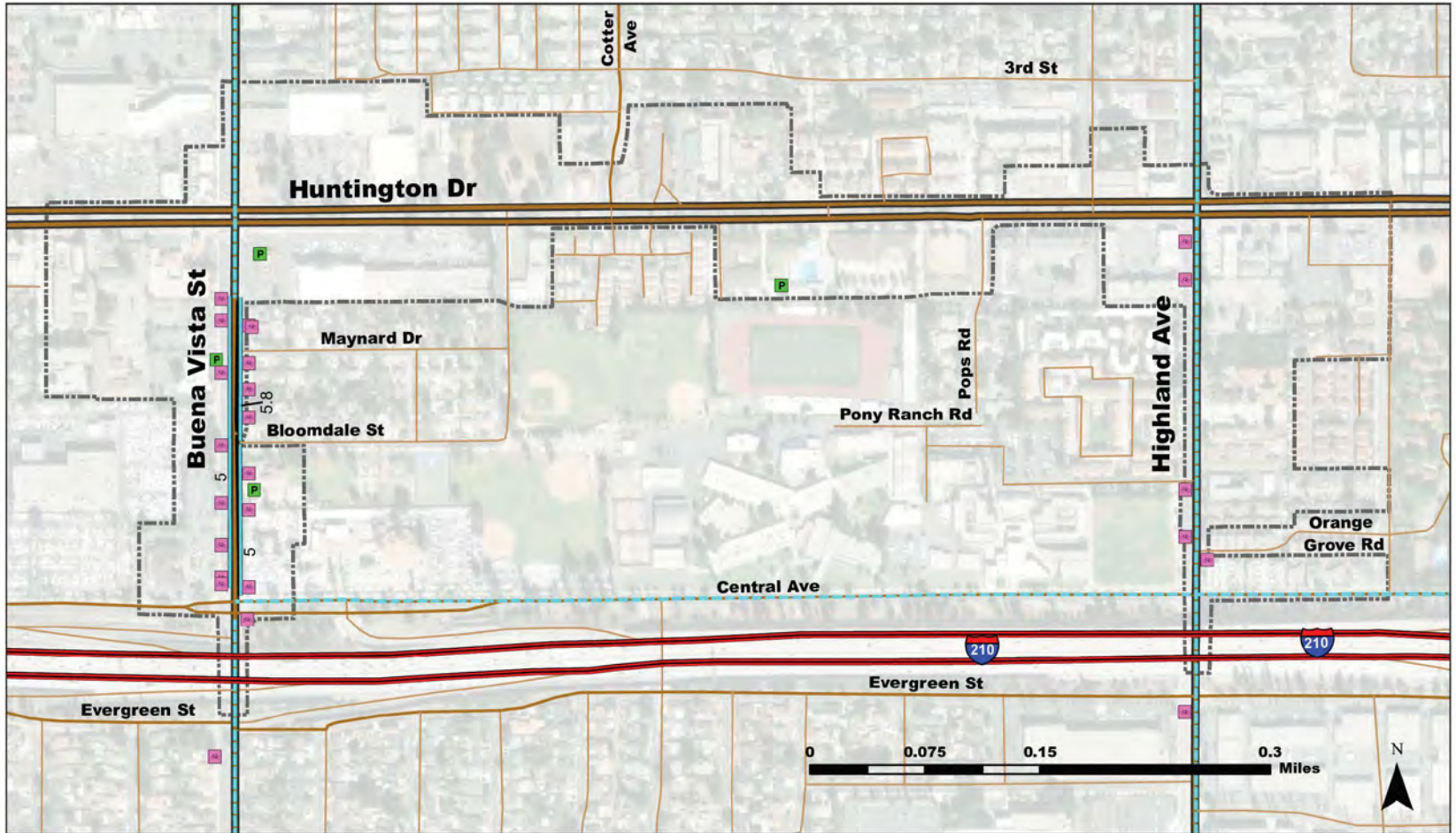
Figure 5: Pedestrian Facilities



Legend

(width in feet) sidewalk		Crosswalk		Curb Ramp
5 or less	5.1 to 6	White, high-visibility	Yellow, high-visibility	○
6.1 to 7	7.1 to 8	White, standard	Yellow, standard	

Figure 6: Bicycle Facilities



Legend

- Bikeways**
 - Bike Lane
 - Bike Route
- Bike Parking**
- Bike Signs**

Pedestrian and Bicycle Counts

Counts taken Tuesday November 27, 2018

Figure 7: Pedestrian and Bicycle Count Locations, Sidewalk Widths, and Crosswalks

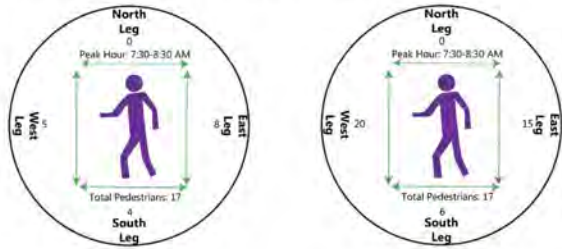


Legend

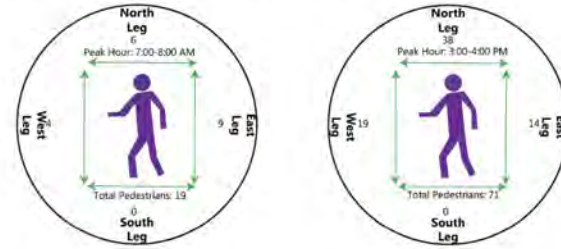
Count Location 	(width in feet) sidewalk		Crosswalk  White, high-visibility  White, standard	Curb Ramp 
	 5	5 or less		
	 6.6	6.1 to 7	 7.7	7.1 to 8
			 Yellow, high-visibility  Yellow, standard	

Figure 8: Pedestrian Volumes (Part 1)

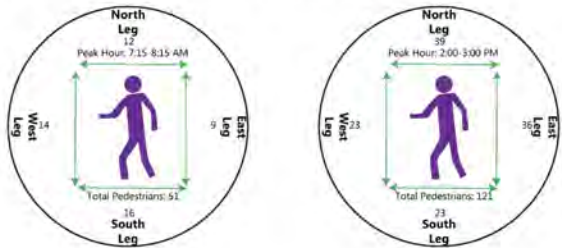
1. Buena Vista Street and Evergreen Avenue



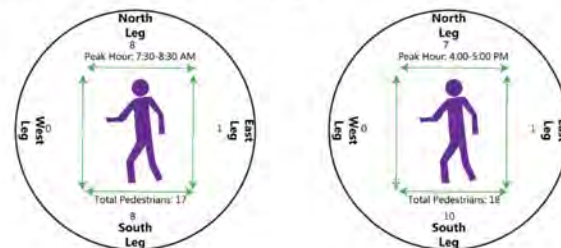
2. Buena Vista Street and Central Avenue



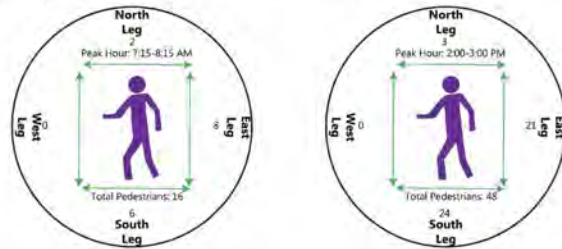
3. Buena Vista Street and Huntington Drive



4. Cotter Avenue and Huntington Drive



5. Pops Road and Huntington Drive



6. Highland Avenue and Huntington Drive

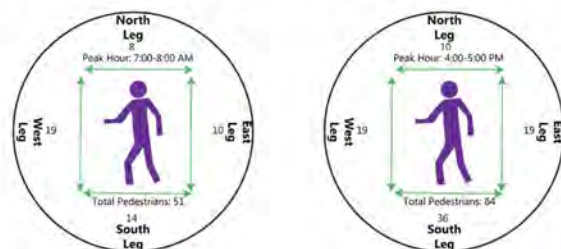
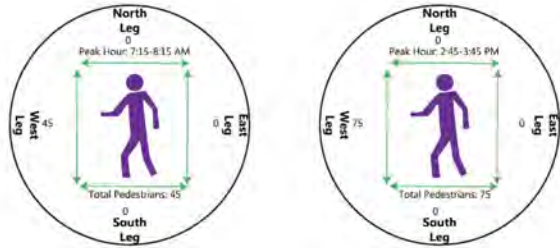
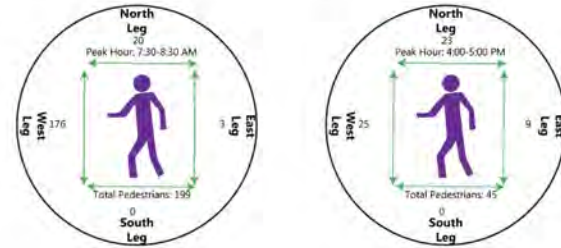


Figure 9: Pedestrian Volumes (Part 2)

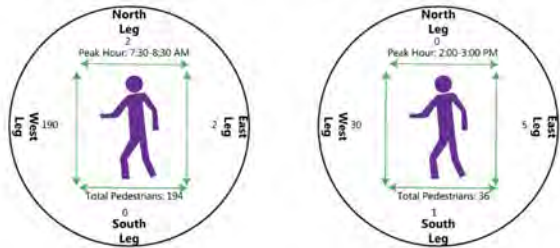
7. Highland Avenue and Duarte High School Driveway



8. Highland Avenue and Central Avenue



9. Highland Avenue and Evergreen Street



10. Central Avenue and Duncannon Street

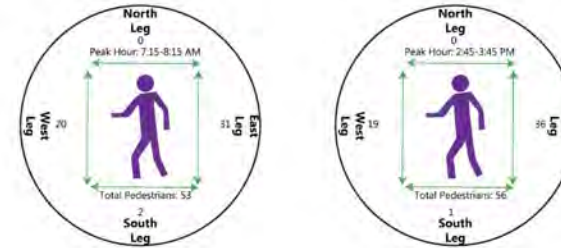
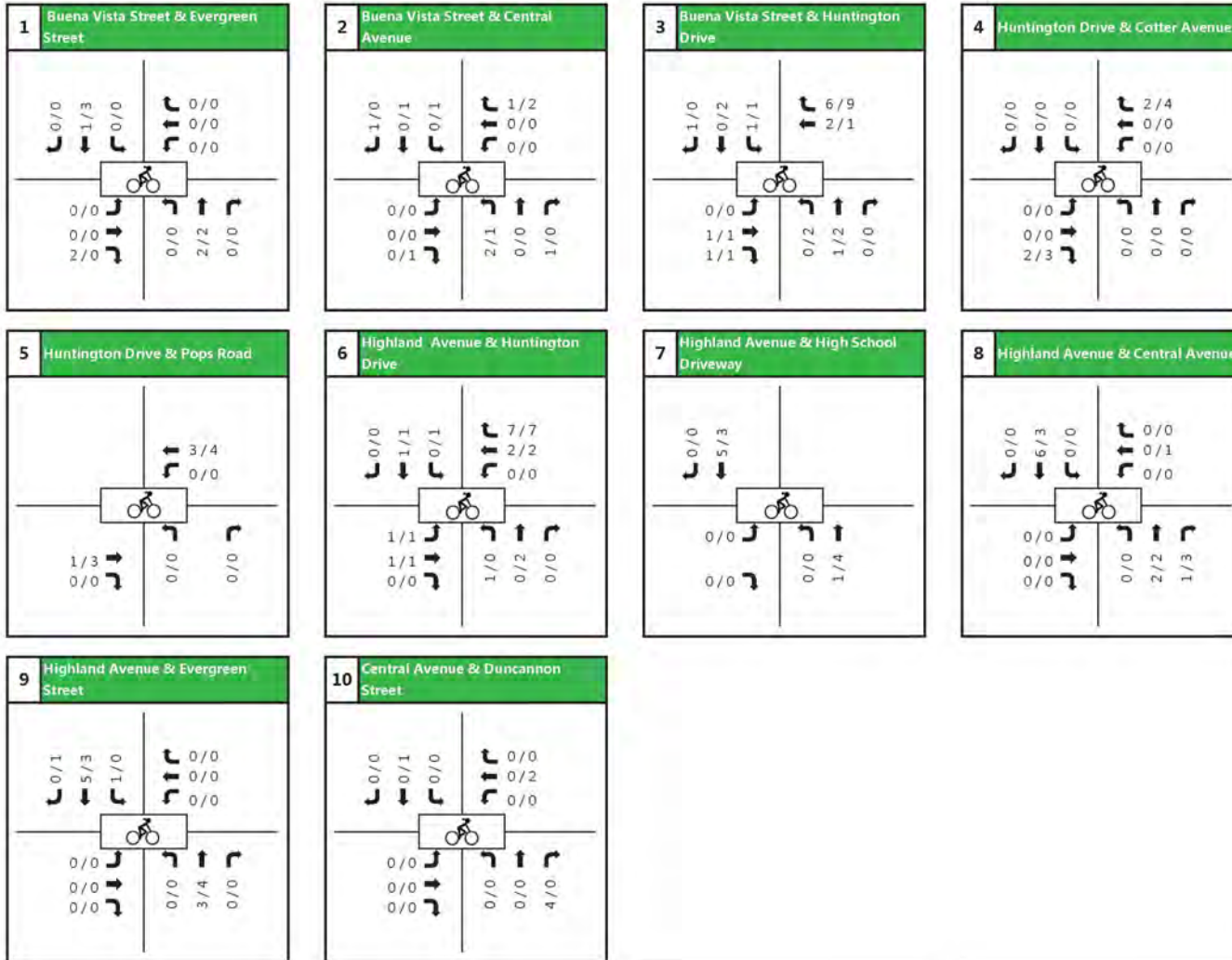
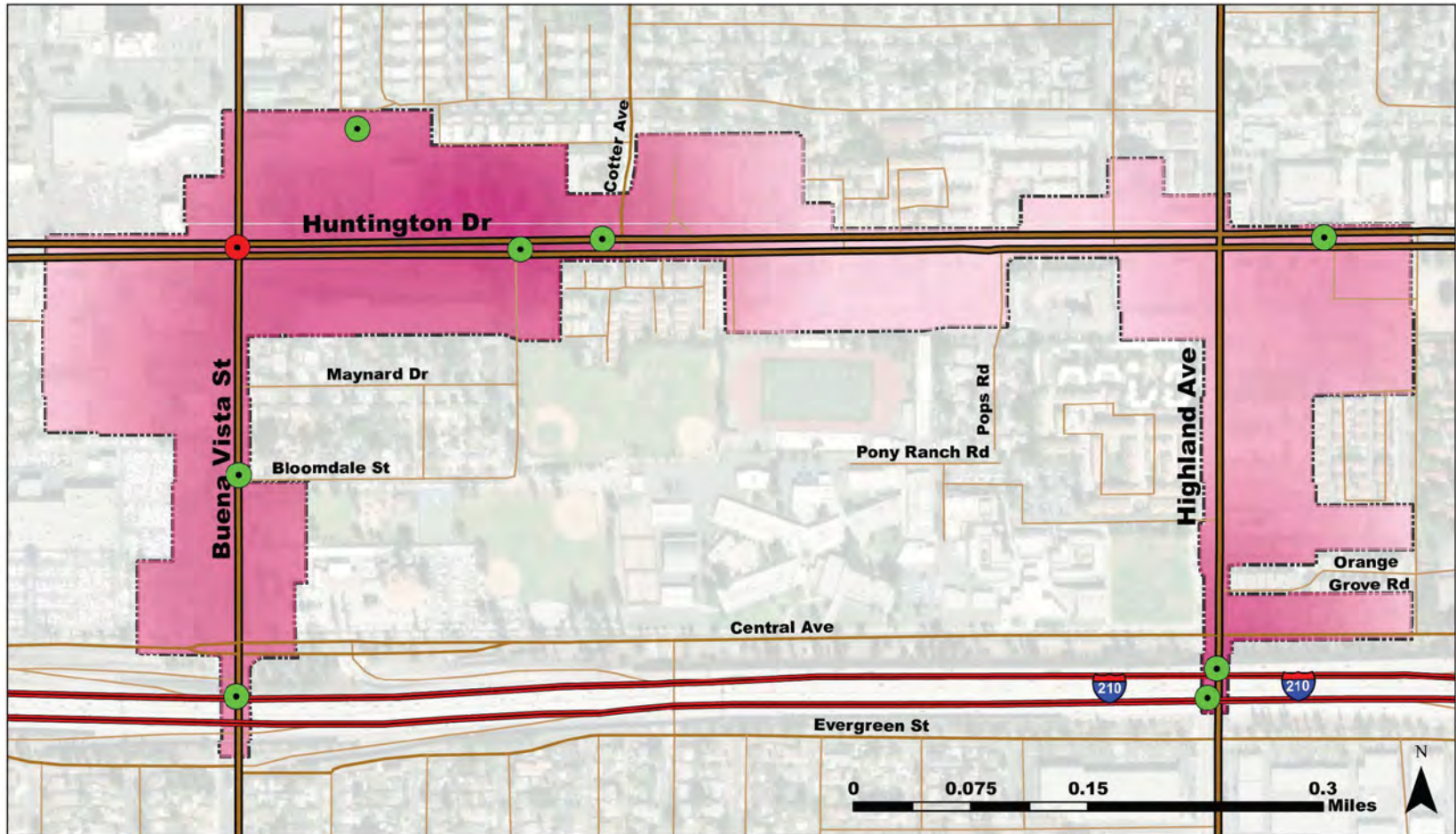


Figure 10: Bicycle Volumes



Collision Data

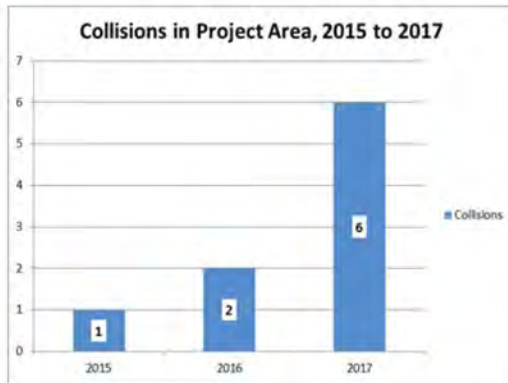
Figure 11: Collision Density (2015-2017)



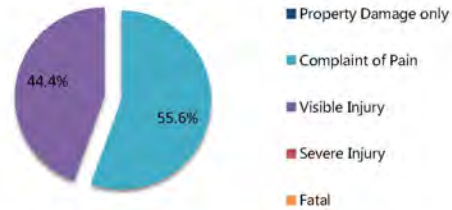
Legend

- | | | | |
|---|---------------|---|------|
| Collisions | | Density | |
|  | Pedestrian |  | Low |
|  | Motor Vehicle |  | High |

Figure 12: Collisions in Project Area

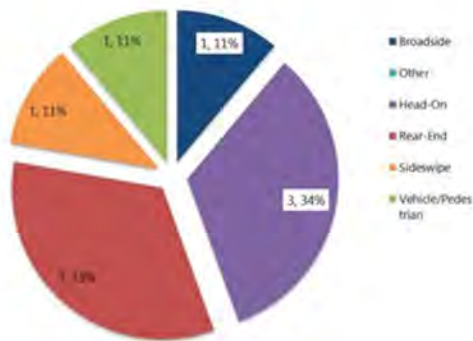


Collisions by Severity

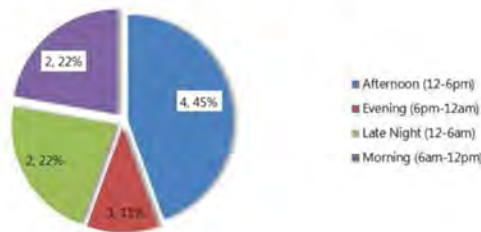


Category	Total	% (Total)
Total Collisions	9	100.0%
Bike	0	0.0%
Motor Vehicle	7	77.8%
Pedestrian	1	11.1%
Fixed Object	1	11%

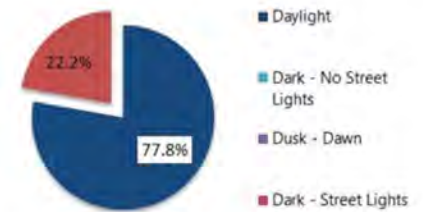
Top Collision Crash Types



Collisions by Time of Day

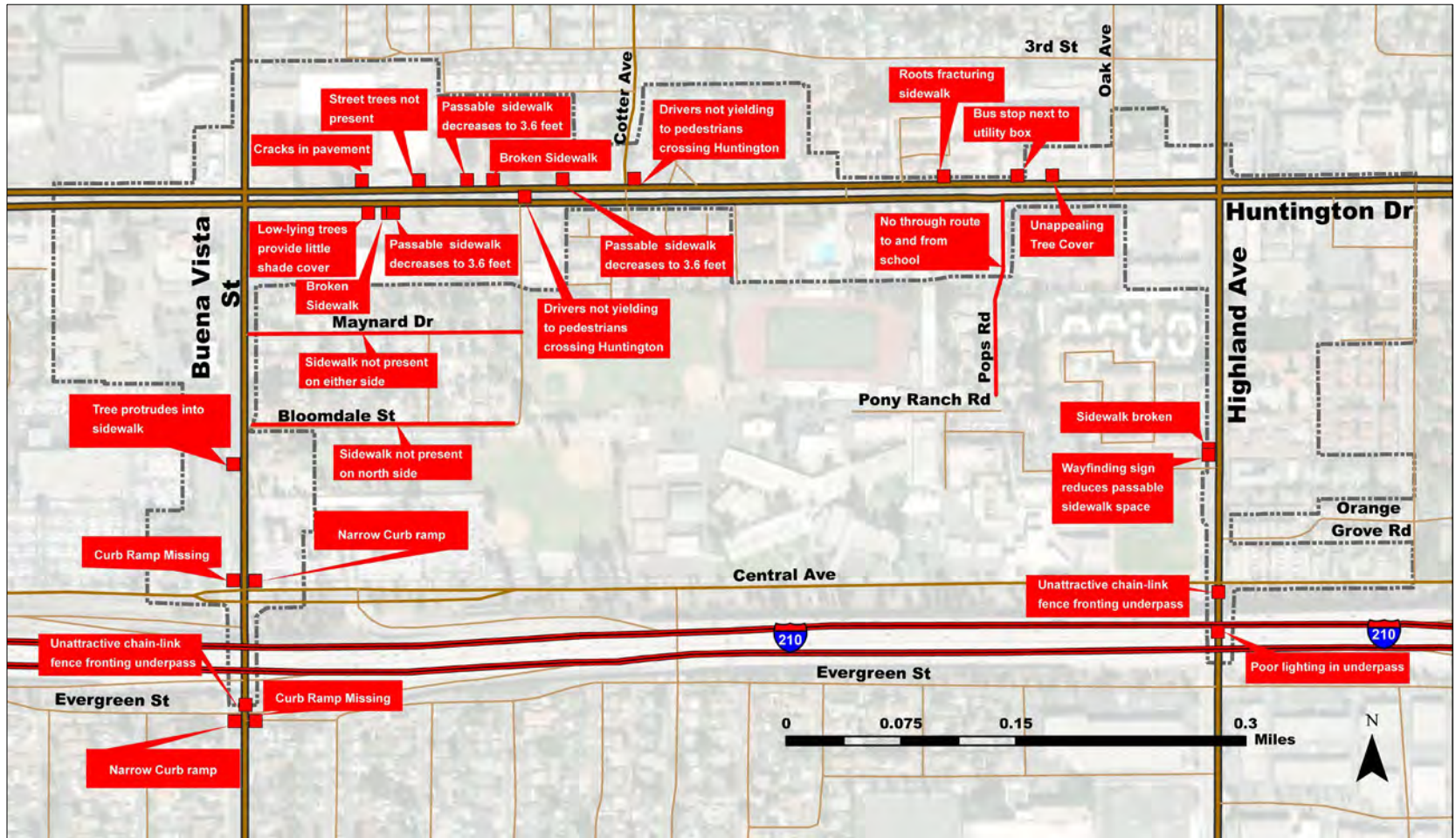


Collisions by Type of Lighting



Observed Behavior,
Issues and Opportunities

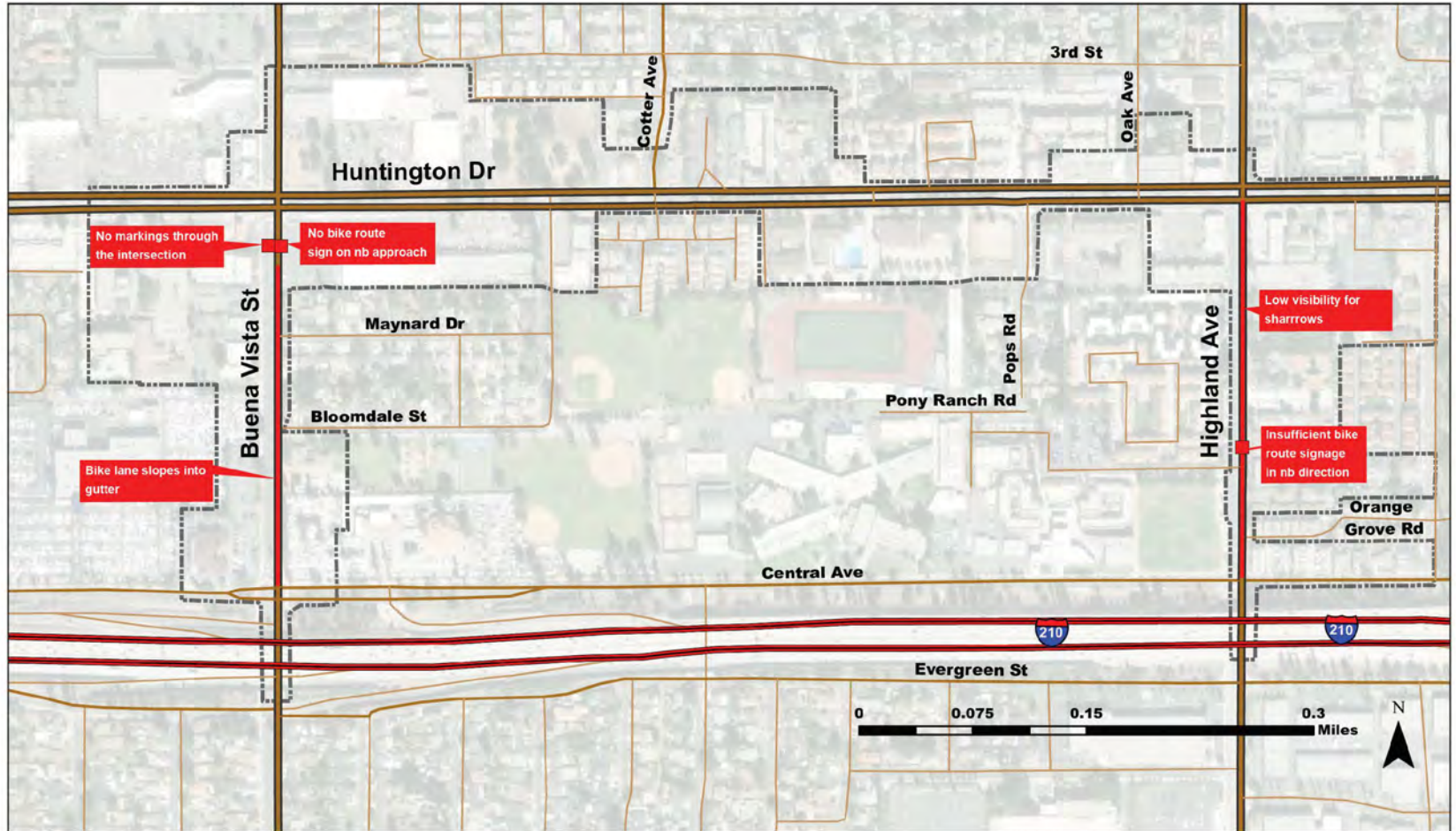
Figure 13: Pedestrian and Street-Related Issues



Legend

- Issues

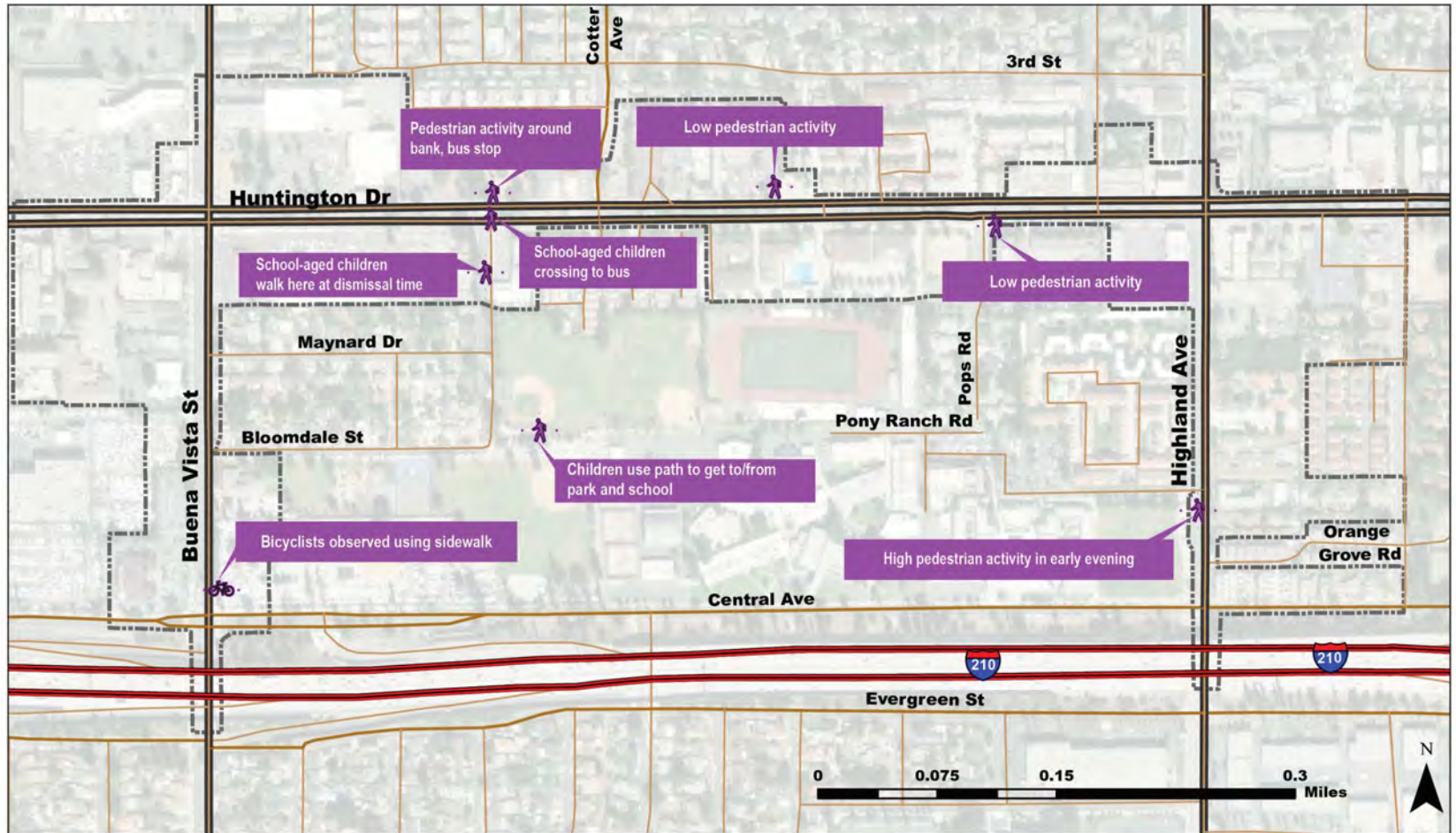
Figure 14: Bicycle Issues



Legend

- Issues

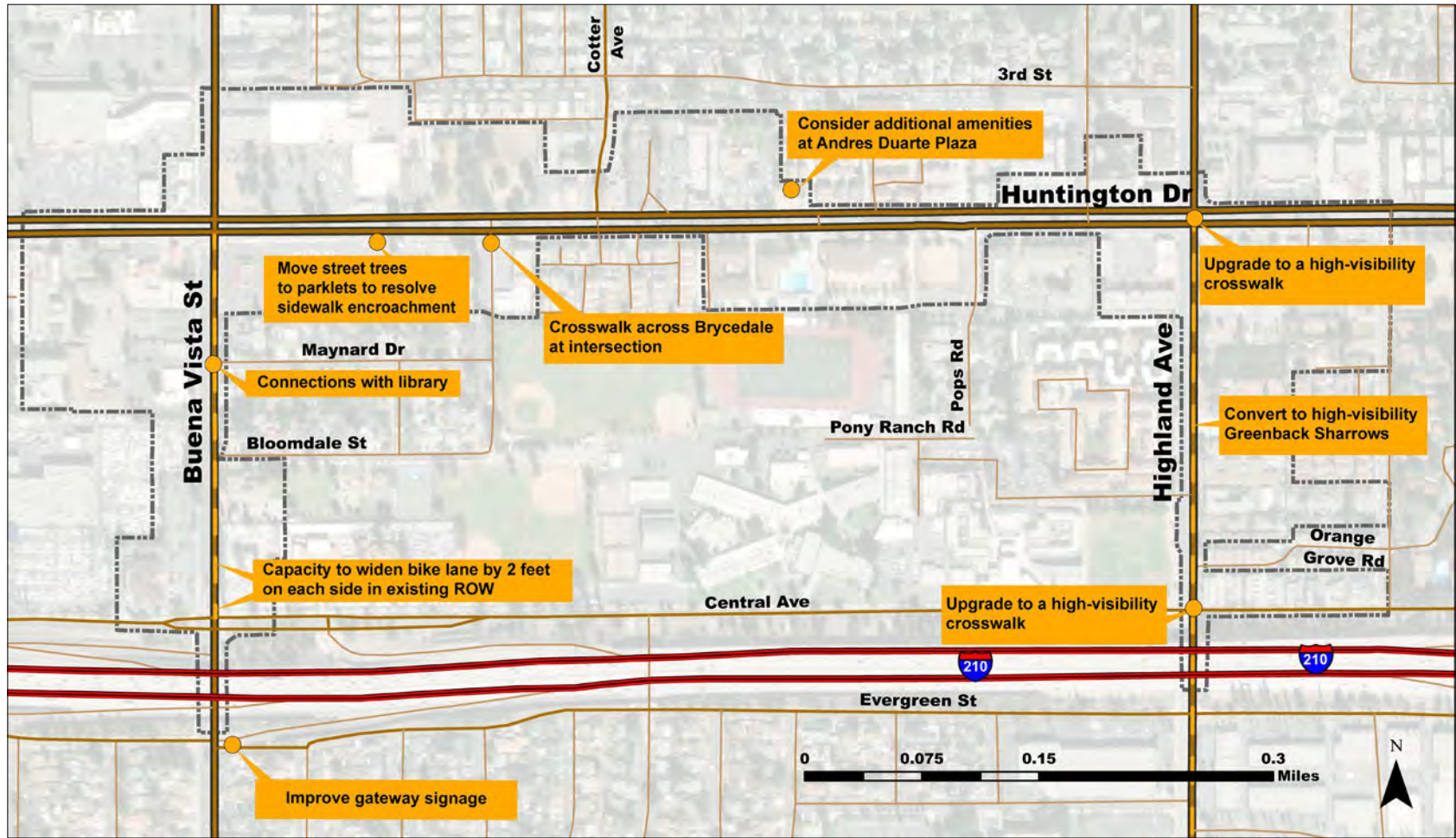
Figure 15: Observed Behaviors



Legend

- Behavior and Activity
- Pedestrian
 - Bicyclist

Figure 16: Opportunities



Legend

● Opportunities

Conclusion

This existing conditions summary report provides a baseline for understanding the study area and making preliminary recommendations to implement the Duarte Town Center Specific Plan through traffic calming and greening improvements.

APPENDIX C:

Evaluation of Funding Methods for Duarte Town Center Greening and Traffic Calming Plan

The Economics of Land Use



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The City of Duarte

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EPS #184008

June 28, 2019

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1. Introduction and Key Findings

Introduction

This report summarizes Economic & Planning Systems' (EPS) evaluation of funding methods and implementation strategies for the **Duarte Town Center Greening and Traffic Calming Plan** (the Plan). The City of Duarte retained EPS as part of a consultant team led by MIG. This work is an extension of the Duarte's Town Center Specific Plan also completed by MIG and EPS and adopted by the City in 2016.

The primary goal of this task is to identify local funding methods and sources that the City can use to finance localized greening and traffic calming projects identified within the Plan. To this end, EPS provides an evaluation of the funding options, including an overview, and a description of the advantages and disadvantages. When possible given available information and level of effort for the project, EPS also estimates the potential available funding for specific funding tools. The report is not an exhaustive survey of all funding sources but rather focuses on those expected to be the most applicable and offering the most value-added for the greening and traffic calming improvements identified in the project.

The Report begins with a brief description of the cost estimates associate with the Plan to give a sense of the level of funding needs as well as a summary of key findings. Subsequent chapters go on to evaluate different funding sources, organizing these funding sources into separate chapters based on the level of approval required. Level of approval includes citywide voter approval, City Council approval, and the approval of district stakeholders (e.g. landowners).

The Report also includes a chapter on state and regional competitive grant funding. EPS bases the geographies category of the grant on the location of the department or agency that administers the grant and not the source of the funds. For example, some funds are federally sources, but the competitive process for the grant is administered by the state. **Table 1** on the next page lists the funding sources included in this report.

Table 1. Funding Sources Evaluated

Local Funding Sources
Citywide Approval
<ul style="list-style-type: none"> • Sales Tax • Property Tax and General Obligation Bonds • Parcel Tax • Dedication Transient Occupancy Tax • Property Transfer Tax • Utility User Tax • Business License Tax
City Council Approval
<ul style="list-style-type: none"> • Development Impact Fee • Development Agreement, Community Benefits, and Incentive Zoning
Local Stakeholder Approval
<ul style="list-style-type: none"> • Improvement District (e.g. Business Improvement District) • Mello-Roos Community Facilities District
Joint Powers Authority
<ul style="list-style-type: none"> • Enhanced Infrastructure Financing District (EIFD) • Community Revitalization District (CRIA)
Grant Funding Sources
Regional
<ul style="list-style-type: none"> • La Metro Measure M • La Metro Call for Projects
State
<ul style="list-style-type: none"> • Highway Safety Improvement Program • Active Transportation Program • Strategic Growth Council Affordable Housing and Sustainable Communities Program

Estimated Costs

The MIG Team estimated both hard and soft development costs associated with the Town Center Greening and Traffic Calming Plan improvements. As shown in **Table 2**, these estimates separate out costs for Huntington Drive, Highland Avenue, and Buena Vista Avenue as well as costs for street and landscape improvements. Overall, MIG estimated that hard costs will equal approximately \$2.9 million for street improvements and \$2.8 million for landscape improvement for a total of \$5.7 million. If soft costs, estimated at 25 percent of hard as well as a construction and design contingency, estimated at 20 percent and 15 percent of hard costs respectively, are added, this total increases to approximately \$9.1 million.

Table 2. Cost Estimate Summary for Greening and Traffic Calming Projects

Project	Hard Costs			Other Costs		Total
	Street	Landscape	Subtotal	Soft 25%	Contingency [1] 35%	
Huntington Drive						
Standard Curb Bulbout	\$1,521,707	\$931,000	\$2,452,707	\$613,177	\$858,447	\$3,924,331
Parklet (Optional)	\$0	\$26,720	\$26,720	\$6,680	\$9,352	\$42,752
Stormwater Curb Bulbout (Optional)	\$0	\$7,120	\$7,120	\$1,780	\$2,492	\$11,392
Subtotal	\$1,521,707	\$964,840	\$2,486,547	\$621,637	\$870,291	\$3,978,475
Highland Avenue						
Central to Huntington	\$757,163	\$538,375	\$1,295,538	\$323,885	\$453,438	\$2,072,861
Underpass (Evergreen to Central)	\$269,940	\$486,000	\$755,940	\$188,985	\$264,579	\$1,209,504
Subtotal	\$1,027,103	\$1,024,375	\$2,051,478	\$512,870	\$718,017	\$3,282,365
Buena Vista Avenue						
Central to Huntington	\$303,864	\$367,500	\$671,364	\$167,841	\$234,977	\$1,074,182
Underpass (Evergreen to Central)	\$59,950	\$443,000	\$502,950	\$125,738	\$176,033	\$804,720
Subtotal	\$363,814	\$810,500	\$1,174,314	\$293,579	\$411,010	\$1,878,902
TOTAL	\$2,912,624	\$2,799,715	\$5,712,339	\$1,428,085	\$1,999,319	\$9,139,742

[1] Includes a 15% deisng continency and a 20% construction contingency.

Source: MIG; Economic & Planning Systems

Summary of Key Findings

This section describes findings on the sources evaluated, focusing on the most promising funding methods for implementing the Plan. Subsequent chapters provide more detailed description of funding sources.

Overall Considerations

1. It is unlikely that any one funding source will fund all of the infrastructure. Instead, the City will likely need to pursue a mix of funding sources, including both project-based and district-wide measures as well as grant funding.

It is unlikely that the any one funding source will fund all of the plan. It is potentially possible if voters pass a broad-based citywide tax, like a sales tax measure. However, even if the City is able to pass such a measure, which is not guaranteed, it would need to distribute the funds throughout the City and potentially for a number of priorities. Instead, the City could consider focusing on a mix of different funding sources that includes project-based sources, like development agreements and the existing Town Center community benefit incentive zoning, as well as other district-based measures, like development impact fees as well as grant funding

2. Creating funding districts that cover larger sub-areas, including potentially the entire City, can take advantage of broader and more stable revenue bases, but will also likely need to account for competing interests and nexus considerations.

A number of the funding sources described in this report are or can be district or sub-area based. In such cases, the City could consider whether it is reasonable to combine subareas within the City – for example the Town Center and Duarte Station Specific Plan areas – to create larger districts. Larger districts will have broader revenue bases – spreading the cost over more people and creating a more reliable source of funding. Examples of such sources include development impact fees, community finance districts, improvement districts, and enhanced infrastructure financing districts. One potential downside of larger districts, at least in terms of the Plan, is that there will be more competing priorities for funding and a less direct nexus with the funding base.

3. The desired timing of street greening and traffic calming improvements will play an important role in selecting the appropriate funding source or mechanism.

The timing of when infrastructure is needed is an important consideration for what types of funding sources to use. Some infrastructure can be built over time either on a pay-as-you-go or on a project-by-project basis. If there is infrastructure that is needed or mostly efficiently built all at once, then upfront sources of funding

will be needed. Examples of upfront sources of funding include funds that can be bonded like property tax or tax increment financing revenues or, in some cases, grant funding.

Citywide Approval

4. The City is currently considering a sales tax increase, which could provide funding for these improvements.

Duarte's current sales tax rate is 9.5 percent, which is 0.75 percent below the State maximum rate. A number of other San Gabriel Valley cities have recently increased their sales tax rates to 10.25 percent, including Pasadena and Glendora. Duarte is also considering such an increase which could yield between \$1.1 million and \$3.4 million in annual revenues, depending on the level of the sales tax increase. While these revenues or more than sufficient to fund the Plan, it would require two-thirds voter approval and likely the inclusion of variety of other community funding priorities.

5. Other local taxes or fee increases can provide a source of matching funds to make grant applications more competitive.

Other local taxes or fee increases may provide relatively modest sources of funding for capital projects. However, these funds can be used as matching funds in grant applications, which can help make these applications more competitive.

City Council Approval

6. The City could explore the creation of a development impact fee to pay for infrastructure improvements.

The City could explore the use of a development impact fee to help fund planned greening and traffic calming improvements. EPS estimates that such a fee could fund between 9 and 22 percent of the planned infrastructure improvements.

Unlike a broad-based tax, development impact fees only require City Council approval – not voter approval. However, a key limitation to development impact fees is that they are paid over time and rely on development activity. As a result, they do not provide an upfront funding source for infrastructure. In addition, impact fees add additional cost burden to real estate development projects. An impact fee program applied to a larger geography – either citywide or the combination of several different specific plan areas, will distribute the costs more broadly.

7. The City will continue to use developer and community benefits agreements to fund infrastructure. The Community Benefits fund provides a significant source of funding for the plan.

The City will continue to use developer and community benefit agreements to fund infrastructure on a project-by-project basis. However, the Community Benefits Fund will provide a significant source of funding for infrastructure improvements in the Town Center Specific Plan area. In a recent agreement, the developer agreed to pay \$2.1 million into the Community Benefit Fund. This represents approximately 33 percent of the estimated total costs for the Plan.

Local Stakeholder Approval

9. The City could explore the use of an improvement district to provide ongoing operation and maintenance funding. The improvement district may also be able to fund some smaller capital projects.

Improvement districts, such as a business improvement district (BID) may be able to provide a source of ongoing operation and maintenance funding for the Plan as well as some smaller capital improvements. Formation of these districts requires property owner approval, and thus ultimately rests outside of the City's control. However, the City may incentivize the creation of a BID by providing organization support and even a mandatory "buy-in" requirement as a condition of approval for new projects. In any case, the success of a BID, or similar improvement district, would likely require a compelling benefit to the property and business owners of the area to incentivize participation.

A Mello-Roos Community facilities district (CFD) could also be created to cover the cost of both on-time capital and on-going operating expenses (e.g. facility maintenance). CFDs can be imposed over non-contiguous areas and, once approved, fees are required, rather than optional (as is the case of improvement districts). However, CFDs require a two-thirds vote amongst voters in the proposed district, making formation more difficult particularly in areas covering multiple property owners and residents.

Joint Powers Authority

10. The City is currently exploring the use tax increment financing (TIF). Importantly, TIF revenues can be bonded to provide a source of upfront capital.

The City is currently exploring the viability of using TIF financing in the form of an Enhanced Infrastructure Financing District (EIFD). The City could also consider exploring the use of CRIA, for which the Town Center area would be eligible - based on a preliminary review of the SCAG Eligibility Screening Tool. Unlike development impact fees or project-based funding methods, like development agreements, these TIF tools would potentially be a source of upfront capital in the

form of bonds underwritten by the projected TIF revenues. One of the key limitations of these new TIF tool is that to be most effective other taxing entities, particularly the County would need to “opt-in” in order to generate meaningful revenue stream.

Grant Funding

11. A number of regional and state source of grant funding exist for traffic calming and pedestrian improvements. Even if sources do not necessarily require them, the City could strategize how to provide matching funds.

A number of regional and state competitive grant funding sources exist for traffic calming and greening improvements. The City could explore the use of these sources. While many of the source do not require a local match, such matches can make the grant application more competitive. The City could begin to identify sources for this local match.

Table 3. Funding Evaluation Summary

Source	Likelihood	Findings	Key Considerations
Citywide Approval			
Sales Tax	Medium	Explore Further	<ul style="list-style-type: none"> • City currently exploring • High level of funding • Plan likely part of a broad range of funding initiatives
Property Tax	Low	Unlikely	<ul style="list-style-type: none"> • Unlikely as a source of funding
Other Taxes/ Fees	Medium	Explore Further	<ul style="list-style-type: none"> • Likely a low level of funding • Potentially a source of matching funds in a grant application
City Council Approval			
Development Impact Fee	High	Explore Further	<ul style="list-style-type: none"> • Partial funding (9-22%) • Consider broader geography area (e.g. city or multiple specific plan areas)
Development Agreements/ Community Benefits	High	Continue to Use	<ul style="list-style-type: none"> • Currently used • Community Benefit Fund is significant source of funding for the plan
Local Stakeholder Approval			
Improvement Districts	Medium	Explore Further	<ul style="list-style-type: none"> • Need business/property owner support • Potential source of operation and maintenance funds and some capital funds
CFD	Low	Unlikely	<ul style="list-style-type: none"> • Not likely in infill development scenarios, potentially used for operating revenues • Need to identify larger infrastructure projects that benefit the district • Consider broader geography area (e.g. multiple specific plan areas)
Joint Powers Authority			
EIFD/CRIA	Low to Medium	Explore Further	<ul style="list-style-type: none"> • City currently exploring • Need participation of other taxing entities to leverage their value
Grant Funding			
Regional and State Grants	Medium to High	Explore Further	<ul style="list-style-type: none"> • A number of sources of competitive grant funding • City could consider look to improve the likelihood of receiving these grants by including matching funds and other measure

2. Sources Requiring Citywide Voter Approval

Duarte can impose a variety of taxes to fund infrastructure. For example, local sales and property taxes, transient occupancy taxes, utility user taxes, and real estate transfer taxes all can be created or increased for this purpose. The resulting revenues can be used on a “pay-as-you-go” basis, as a source of reimbursement, or in some cases to support a municipal bond issue. However, initiatives that increase local taxes are limited by State constitutional requirements and statutes that require voter approval of 50 percent plus one (1) (hereafter “simple majority”) for “general taxes” and two-thirds plus one (1) (hereafter “super-majority”) approval for “special taxes” (i.e., revenues are earmarked for a particular purpose). Specifically, local ballot measures or initiatives that raise local taxes must follow one of two approaches:

- 1. General Tax:** The revenues from a General Tax are expended at the discretion of the local government’s governing body on any programs or services. Approval requires a simple majority.
- 2. Special Tax:** The revenue from special tax are dedicated to a specific purpose as defined in the ballot initiative. Approval requires super-majority voter approval.

Because the designation of revenues for specific purposes does tend to result in more “yes” votes (though often insufficient to garner a supermajority), some jurisdictions have attempted to improve the success rate of general purpose measures by adopting a so-called “A/B Strategy.” Under this approach, general purpose tax measures are accompanied by an advisory measure indicating the recommended use for the funds. This allows the measure to avoid the two-thirds supermajority threshold.

Another important consideration relates to the amount of revenue generated from each source and how it will be used to fund the desired projects. For example, while property tax increases may be sufficient to underwrite debt, sources with a lesser or volatile revenue potential may be not.

The following sections discuss the pros and cons of various local tax increases as a source of funding for greening and traffic calming, including issues related to implementation, revenue potential, and incidence (i.e., what activity or population[s] would be subject to the tax burden).

Table 4. Citywide Taxes Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Broad-based taxes, does not tax or disincentivize development in one particular district • Can fund debt service for bond issuances or used on a “pay-as-you-go” basis 	<ul style="list-style-type: none"> • Subject to Citywide approval • Adds additional tax burden • Depending on type, tax revenues can fluctuate

Sales Tax

Similar to property tax, Duarte residents could approve a measure to increase the sales tax rate to complete street improvements, including traffic calming and greening. While such a measure would also require two-thirds voter approval if dedicated to a specific purpose, one potential advantage of a sales tax measure is that the incidence or burden is more broadly based rather than restricted to property owners per se. However, this revenue source also tends to be less stable and subject to fluctuations in business cycle, competition, and other factors affecting the local retail sector (e.g., impact of internet sales).

Duarte’s current sales tax rate is 9.5 percent, which is 0.75 percent below the state maximum rate. A number of other San Gabriel Valley cities have recently increased their sales tax rates to 10.25 percent, including Pasadena and Glendora. Such an increase could yield between \$1.1 million and \$3.4 million in annual revenues to the City, depending on the level of the sales tax increase, as shown in **Table 5**.

Interestingly, the recently passed SB1 or Road Report and Accountability Act of 2017 provides a one-time incentive grant to jurisdictions looking to pursue future sales tax measures as well as tolls or other fees. The total amount of the grant is based on the annual projected revenues of the initiatives with a minimum grant of \$100,000 and a maximum grant of \$5,000,000.

Table 5. Estimated Revenue from a Sales Tax Increase

Description	Annual	10-Year
Citywide Sales Tax (FY 2015-16) [1]	\$4,520,620	
Sale Tax Increase		
0.25%	\$1,130,155	\$11,301,550
0.50%	\$2,260,310	\$22,603,100
0.75%	\$3,390,465	\$33,904,650

[1] Latest year available from CA Board of Equalization (BOE).

Source: CA BOE; Economic & Planning Systems

Property Tax and General Obligation Bond

The voters of Duarte could approve a bond measure secured by a special or general property tax increase to fund greening and traffic calming improvements. Assuming such a measure was restricted to a specified set of improvements and/or was part of a general obligation bond issue, it would need to secure two-thirds voter approval, as noted above.

The incidence of burden of a restricted or general obligation bond secured by a property tax increase rests on all property owners in the issuing jurisdiction in proportion to the assessed value of their property (i.e., it is an “ad valorem” percent tax). This broad base of funding provides excellent security for special purpose or general obligation bonds, thus typically garnering the lowest interest rate of any municipal debt instrument. Credit rating agencies often consider a general obligation pledge to have very strong credit quality and frequently assign them investment grade ratings.

One factor that may play a role in the feasibility and scale of a bond measure funded property tax revenue is the City’s existing tax rate. It is often more difficult - for both political and financial reasons – for municipalities to secure additional property tax secured debt if the property tax rate is already well above the baseline 1 percent of assessed value.

Parcel Tax

A parcel tax is a flat annual charge applied to properties within a jurisdiction, sometimes with use-related variation and exemptions. The key distinction with property tax is that a parcel tax cannot be not levied on an “ad valorem” basis (i.e., not based on the assessed value of property). Parcel taxes, if used for general purposes including infrastructure investments, can be imposed with a

simple majority voter approval. If dedicated to special purposes, parcel taxes will require two-thirds voter approval. They may be used for funding ongoing services or pledged to debt service.

Parcel taxes can be structured to vary based on key property characteristics, such as number of separate dwelling units on a parcel (i.e. so that an apartment complex doesn't pay the same rate as a single-family unit) or total commercial square feet. Typically, parcel taxes include relatively strict allocation rules to ensure simplicity and parity among property owners. They also are commonly subject to a "sunset" date, and must be re-authorized periodically to maintain funding.

In practice, parcel taxes are often used to provide a broad-based source of funding for specified and highly-desirable city-wide public services and improvements (i.e. not general purpose) and are based on relatively modest levies. They also tend to generate a relative constant amount of revenue overtime, which doesn't fluctuate based on market appreciation or property enhancements. Consequently, the revenue generating potential of a parcel tax, though stable, is generally much lower than for property tax.

Other Potential Tax Measures

While property and sales tax increases represent the most common form of locally approved tax increases dedicated to special purposes and to secure municipal debt, this analysis also considers a number of other City taxes that are appropriate for complete street improvements in general and traffic calming and greening specifically. These sources are smaller and less stable revenue streams than the taxes described above, which make them less appropriate for debt financing. While these revenue sources currently accrue to the General Fund and could be increased with a simple majority voter approval, specific dedication to grade separation improvements would trigger a two-thirds super-majority voter threshold.

- **Dedicated Transient Occupancy Tax:** Some cities have approved measures that allocate all or a portion of their transient occupancy or "hotel tax" (TOT) revenues to specific public services or infrastructure. While a number of California cities have also dedicated TOT revenues to specific purposes, such action requires two-thirds voter approval. Duarte's TOT is currently levied at 10 percent of room revenues.
- **Property Transfer Tax:** Most California cities impose a one-time tax when a property changes ownership. In Duarte, this rate is currently set at \$0.55 per \$1,000 of sales price (e.g., a \$500,000 million real estate transaction would pay \$275) which accrues to the General Fund.
- **Utility Users Tax:** Many California cities impose a tax on utility bills (e.g., PG&E, water, cable, etc.). These tax rates can range between 1 to 11 percent of the current water, gas, telecommunications, and electricity charges to a

service user by a service supplier. Duarte currently does not currently impose this tax.

- **Business License Tax:** Duarte charges a flat and relatively small business registration fee along with an annual business license tax. The annual business license tax is equivalent to approximately \$30 per employee.
- **Permit Surcharge:** Duarte could also add a surcharge on construction permit fees as a way to increase revenues for Plan improvements.

3. Sources Requiring City Council Approval

The fee sources described in this chapter require City Council approval for their implementation.

Development Impact Fees

Overview

A development impact fee is an ordinance-based, one-time charge on new development designed to cover a “proportional-share” of the total capital cost of necessary public infrastructure and facilities. The creation and collection of impact fees are allowed under AB 1600 as codified in California Government Code Section 66000, known as the Mitigation Fee Act. This law stipulates that only the portion of costs attributable to new development can be included in the fee.

Consequently, impact fees commonly are only one of many sources used to finance a city’s needed infrastructure improvements. Fees can be charged on a jurisdiction-wide basis or for a particular sub-area of the jurisdiction. For their implementation, impact fees require a nexus study and City Council approval.

EPS estimates that the proportion of costs attributable to new development will be between 9 and 22 percent, as shown in **Table 6**. This percent range is based on looking at the current and future build-out of the City based respectively on SCAG forecasts and future build-out projections from the City’s specific plan areas. More detailed are included in **Appendix A**.

Table 6. Development Impact Fee Growth Allocation

Service Population [1]	Current Build-Out		New Growth		
			Growth	% Growth	% Build-Out
SCAG Forecast					
Residents	22,100	24,300	2,200	90%	9.1%
Employees	2,776	3,030	255	10%	8.4%
Total	24,876	27,330	2,455	100%	9.0%
Specific Plan Build-Out					
Residents	22,100	28,414	6,314	90%	22.2%
Employees	2,776	3,468	692	10%	20.0%
Total	24,876	31,882	7,006	100%	22.0%

[1] Residents w eighted as 100% and employees w eighted as 25% in service population calculation.

Source: LEHD; Tow n Center and Duarte Station Specific Plan; Economic & Planning Systems

Advantages and Disadvantages

Table 4 summarizes the advantages and disadvantages of development impact fees. In terms of advantages, development impact fees do not require voter approval and create a revenue source that can fund infrastructure project overtime. The key limitation of development impact fees is the timing of funding. Infrastructure often is needed “up-front” while fees are paid over time as development occurs. This means that other funding or financing methods are needed to close the timing gap. Fees also are irregular, as they depend on development activity that varies with economic conditions. In addition, impact fees will also only provide partial funding of the infrastructure, and do not provide upfront payments for infrastructure. Finally, impact fees add additional cost burden to a project. However, unlike, for example, an increase in property tax, this cost burden is not ongoing.

Table 7. Development Impact Fees Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> ● Nexus-based fee on developers to Pay a “Fair Share” for infrastructure ● “Pay-as-you-go” approach ● Can be set up to reimburse developers for “oversizing” infrastructure ● No voter approval required ● No on-going tax burden 	<ul style="list-style-type: none"> ● Typically, doesn’t provide full funding for infrastructure when needed ● “Bridge” funding measures required to fund infrastructure needed prior to development (water, sewer) ● Reimbursements may take years for other new development to pay fees ● Requires a “nexus study” and City Council approval ● Dependent on development activity ● Adds additional cost burden on development

Project Specific Agreements, Incentive Zoning, and P3s

Overview

With local authority over land use, California cities have a variety of tools at their disposal to exact financial contributions from property owners and developers in exchange for project or site-specific entitlements. These agreements can be between the City and the developer or, in the case of some community benefit agreements can be more systematic or policy-based, applying not just to one project, but to certain types of projects or in a designated area.

These sources are also sometimes referred to as “value capture” tools. The term “value capture” refers to a variety of funding tools and techniques that jurisdictions may employ to participate in the financial benefits conveyed by publicly supported infrastructure investments. Typically, when the public sector creates value through infrastructure investment or other means, landowners enjoy a financial gain. Value capture occurs when the public sector reclaims some of the value created by its activities. The term is particularly applicable to transportation improvements that provide improved market access, new development opportunities, and other economic value enhancements beyond what would exist under normal or baseline conditions.

In using these tools, it is important to consider overarching local land use and economic development policy objectives. Specifically, value capture funding tools largely rely upon recouping or financing public infrastructure investments through extracting funds from development projects that are commensurate with the private sector value increase enjoyed courtesy of the public investment. It is important for the City to strike this balance, otherwise developers will have less incentives to participate.

The sections below provide more detail into the advantages and disadvantages of different value capture mechanisms. These sections do not include a generalized value or funding amount achieved. This is because values will be based on a wide range of market as well as project specific variables. However, Duarte is currently using a community benefits program as part of the implementation of the Town Center plan, describe below. In addition, the City is currently using its land use authority to require new development projects within the Town Center Specific Plan area, to construct bulb-out and other sidewalk improvements, contributing to the implementation of the Plan.

Development Agreements

A Development Agreement (DA) is a voluntary and legally binding agreement between a local government and developer authorized by State statute (Government Code Section 65864 et seq.). These contractual agreements allow developers to secure entitlements for a particular project that would not be

obtainable through the normal conditions or zoning, in exchange for special contributions, generally including infrastructure improvements, amenities, or other community benefits. DAs are entirely discretionary on the part of the applicant and local government (there is no nexus requirement) and must be individually adopted by local ordinance.

The City has used a DA as part of the implementation of the Town Center Specific Plan’s community benefits program. In this agreement, the developer agreed to purchase property from the City (priced at \$3,743,640) and was responsible for a traffic signal (valued at \$250,000) and a piece of public art (valued at \$142,000). In addition, the developer was responsible for a \$2,164,360 payment into the Community Benefit Fund. In exchange, the developer gain control of the land and the entitlement to build an approximately 160 unit mixed used project. Outside of the DA, the project is also constructing a bulbout as part of the site development.

Table 8. Development Agreements Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Structured and approved with landowner • No nexus requirement • No voter approval required • Can handle complexity of multiple phases 	<ul style="list-style-type: none"> • Most applicable to individual projects / sites rather than for entire Specific Plan • Potentially undermines authority of Specific Plan • May require significant City resources to execute

Community Benefits

Community Benefit Incentive Zoning (CBIZ) programs can provide a more systematic and policy-based approach to “value capture”. Specifically, under these programs, cities configure their land use regulations in a manner that can provide incentives for additional private investments in local infrastructure and community benefits in exchange for entitlements beyond what would otherwise be obtainable.

The Town Center Specific Plan include a three-tiered CBIZ. Tier 1 is the standard, base zoning. Tier 2 is a lot consolidation bonus, where projects located in a Lot Consolidation Overlay Area that propose to consolidate up to the minimum size are allowed to develop residential and/or mixed-use projects. Finally, Tier 3 is a community benefit bonus where project gain additional height, density, and/or intensity by contributing to the community benefits program. The specific plan includes a menu of potential community benefits that the City can contribute, including to the Community Benefits Funds, public open space, a restaurant row (e.g. two or more restaurants), public art, event programming, mid-block pedestrian passageway, high-quality entertainment uses, and enhanced transportation demand management. As previously mentioned, a recent developer contributed a traffic signal (valued at \$250,000), a piece of public art

(valued at \$142,000), and a \$2,164,360 payment into the Community Benefit Fund.

The successful implementation of Community Benefits Policies remains most prevalent in cities enjoying a relatively strong market position and/or favorable period in a business cycle. Locations lacking strong market demand and a recent track record of high value development are less likely to be able to negotiate significant Community Benefits Packages. Moreover, high development costs relative to revenue potential have constrained the implementation of community benefits program even in strong markets.

Recent agreements in the Town Center Specific Plan area suggest that the City's Community Benefits Program is well-tailored and balanced to the current market realities in the City. However, the City should continue to monitor the program to ensure that this balance is maintained.

Table 9. Community Benefit Programs Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • City has large degree of control over program design • Does not impose a new tax on property • No voter approval required • Best for project area amenities (e.g. above base requirements) 	<ul style="list-style-type: none"> • Requires City to deal with uncertainty of establishing a base zoning for Specific Plan, with optional incentives that may or may not be utilized • Can add administrative burden to application review process • Typically, doesn't provide full funding for infrastructure when needed • Not appropriate for backbone infrastructure

4. Sources Requiring Property and Business-Owner Approval

The funding sources describe in this chapter require the approval of property and business owners for their implementation.

Improvement Districts

Overview

Through the formation of special benefit districts, the City has opportunities to generate revenues specifically in support of sub-area improvements and services. Formation of these districts and approval of special benefit assessments are subject to property owner vote, but revenues generated are invested directly in service and improvements in the district, offering a “return-to-source” funding technique that may generate needed support. The special benefit districts identified below offer key opportunities to generate revenues for capital improvements as well as services that may improve the development environment and ability for the corridor to attract additional investment.

Property and Business Based Improvement District (PBID)

A Property and Business Based Improvement District (PBID) places a special assessment on property within the district boundaries to fund specific services and improvements within the district. Funds collected by the local government are then directed to the PBID, which is operated by a nonprofit entity formed by district property owners. Revenues are commonly used to augment district services, e.g. sanitation, security, marketing and economic development initiatives, but can also be used to fund small- and large-scale capital improvements. Improvements may also be financed via issuance of bond debt supported by benefit assessments.

The formation process for a PBID and special assessment levy requires voter approval and typically requires up to 12 months. District proponents (typically representatives of District business and property owners) will need to prepare a Management Plan identifying the district boundaries, assessment rates and methodology, activities and budget. The Management Plan is then submitted to the City Council, and must be accompanied by a petition signed by property owners representing at least 50 percent of the proposed assessment value. District formation then follows a Proposition 218 compliant balloting process, whereby property owners have the opportunity to object to district formation. If fewer than 50 percent of property owners (as weighted by assessment valuation) object, the district is approved.

Multifamily Improvement District

Multifamily Improvement District law is modeled on PBID enabling statutes, but focus on providing services to benefit apartments, condominiums, mobile home parks, and other high-density residential uses. These types of districts are most commonly used in disadvantaged communities to augment existing services and promote activities beneficial to the district. MID assessments may pay for a variety of activities and improvements, including supplemental security services and improvements, parking, sidewalks, street lighting, and landscaping. Improvements may also be financed via issuance of bond debt supported by benefit assessments.

Formation requires a petition signed by two-thirds of the property or business owners within the proposed district and a detailed Management Plan identifying the proposed assessment methodology and other pertinent elements of the proposed District. If approved by a two-thirds majority via a weighted ballot election, the MID will be in place for 5 years and can be renewed for successive 10-year periods.

Advantages and Disadvantages

Table 8 summarizes the advantages and disadvantages of improvement districts. The main advantages are that improvement districts do not require Citywide approval and that revenues generated within these districts are invested directly into the district. These funds can be used to finance infrastructure improvements, and revenues can even be used to underwrite bond issuances.

In terms of disadvantages, while not requiring Citywide approval, the districts still require approval of property and business owners and require the formation of a separate BID non-profit entity. The district also adds additional burden to the area, which can disincentivize economic activity. Finally, the districts are best to augment district services, either through added operation and maintenance or through investment in additional amenities. While districts are likely not appropriate for backbone infrastructure, they can be uses for other types of greening and calming measures.

Table 10. Improvement Districts Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Not subject to Citywide approval • Revenues generated invested directly into the district • Can be used to fund/reimburse costs of infrastructure improvements • Can fund debt service for bond issuances or used on a “pay-as-you-go” basis 	<ul style="list-style-type: none"> • Approval of property and business owners required; potentially challenging to organize across multiple landowners • Requires formation of a non-profit entity • Adds additional tax burden to area • Not appropriate for backbone infrastructure

Mello-Roos Community Facilities District (CFD)

Overview

The Mello-Roos Community Facilities Act of 1982 (*authorized by Section 53311 et. seq. of the Government Code*) enables the formation of a CFD by local agencies, with two-thirds voter approval (or landowner approval when there are fewer than 12 registered voters in the proposed district), for the purpose of imposing special taxes on property owners. The resulting special tax revenue can be used to fund capital costs or operations and maintenance expenses directly, or they may be used to secure a bond issuance, the proceeds of which are used to fund capital costs. Because the levy is a tax rather than an assessment, the standard for demonstrating the benefit received is lower, thus creating more flexibility. In addition, the boundaries of a Mello Roos CFD need not be contiguous, which allows for flexibility in tailoring a project area likely to receive sufficient votes.

Since their establishment in the early 1980s, CFDs have become the most common form of land-secured financing in California. A Mello Roos CFD in particular provides a well-established method of securing relatively low-cost tax exempt, long-term, fixed rate, fully-assumable debt financing. The owners or users of real estate pay assessments or special taxes that are recorded on the property. By adding to the cost of ownership, the assessment or tax may affect the price a buyer is willing to pay for a home or commercial property, in which case the cost incidence is shared with the builder, land developer, or landowner. However, experience suggests that less than 100 percent of the financing burden is recognized by buyers.

There can be a number of challenges associated with establishing measurable and specific benefits to particular properties. In addition, land-secured financing adds financing costs (e.g., cost of issuance and program administration). Further, while land-secured financing has been widely used in greenfield development where landowner approval is the norm, achieving a two-thirds voter approval in infill areas with numerous property owners is typically a barrier to use of the tool. As a result, a CFD may not be a highly viable option for the Town Center Specific Area.

If the City does wants to pursue a CFD as a way to fund, for example, large and infrastructure improvement, the it may need to consider pooling areas of growth, including the City of Hope Master Plan area, the Duarte Station Specific Plan area, and the Duarte Town Center Specific Plan area for infrastructure financing purposes and to achieve the necessary economies of scale.

Advantages and Disadvantages

Table 9 summarizes the advantages and disadvantages of CFDs, which are similar to those of an improvement district, except a CFD is a tool designed specifically to fund infrastructure. Like improvement districts, the main advantages are that CFDs do not require Citywide approval and that revenues generated within these districts are invested directly into district infrastructure. These funds can be used to finance infrastructure improvements, and revenues can even be used to underwrite bond issuances.

In terms of disadvantages, while not requiring Citywide approval, the districts still require voter approval of landowner, and obtaining this approval across multiple land owners can be challenging, in particular in infill situations where there are typically a greater number of established landowners compared to greenfield development. The districts also add additional burden to the area, which can disincentivize economic activity. Developers may also need to advance some upfront costs, including costs of bond formation and sale.

Table 11. Land Secured Financing Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Not subject to Citywide approval • Provides a secure source of funding for public infrastructure • Can be used to fund/reimburse costs of initial infrastructure improvements • Can fund debt service for bond issuances or used on a “pay-as-you-go” basis 	<ul style="list-style-type: none"> • Voter approval required; potentially challenging to organize across multiple landowners • Adds additional tax burden to land • Exposure to the developer for initial payment of the special assessments/taxes for debt service • Requires costs to be advanced for formation and bond sale

5. Sources Requiring Formation of a Joint Powers Authority

This chapter describes tax increment financing (TIF) tools that require the formation of a Joint Power Authority (JPA) – a separate government entity consisting of cooperating cities, counties, and other taxing entities. If the City is the only participating taxing entity than the JPA will only require City approval.

Tax Increment Financing

Overview

The 2012 dissolution of Redevelopment Agencies eliminated a key tax increment financing vehicle that local governments had long relied upon to fund infrastructure and revitalize communities. Under Redevelopment, tax increment financing allowed local jurisdictions to capture incremental increases in property tax revenues generated within a defined Redevelopment Area and reinvest those revenues in Redevelopment Area improvements.

New forms of tax increment financing have since emerged; however, these mechanisms are generally more limited, requiring affected taxing entities to “opt-in” in order to capture their share of property tax revenue increases. As a result, cities only have control over their local TIF revenues (typically around 20 percent of total property taxes) for the funding of infrastructure and other eligible costs. Other taxing entities, like LA County, that represent the majority of the tax revenues may or may participate. If counties and other taxing entities do not participate, this significantly limits the amount of available fund and the ability of these new vehicles to fund new infrastructure.

Another key limitation of all tax increment financing mechanisms is the timing of revenue generation. Property tax increases resulting from revitalization, investment, and new development may take a long time to materialize. For this reason, it is often necessary to couple that tax increment financing techniques with near-term funding approaches (such as grant funding opportunities). Up-front infrastructure investments have the potential to help stimulate investment and accelerate property tax gains and thus TIF funding.

Enhanced Infrastructure Financing District

Enhanced Infrastructure Financing Districts (EIFDs) provide an emerging form of tax increment financing available to local public entities in California. Cities and other local agencies may establish an EIFD for a given project or geographic area in order to capture incremental increases in property tax revenue from future development and assessed value appreciation. In the absence of the EIFD, this revenue would accrue to the city's General Fund (or other property-taxing entity revenue fund). Unlike prior TIF/Redevelopment law in California, EIFDs do not provide access to property tax revenue beyond the share agreed to by participating jurisdictions (e.g., City and County).

The establishment of an EIFD requires approval by every local taxing entity that will contribute its property tax increment. EIFDs require 55 percent voter approval to issue bonds, but may be formed and gain access to unlevered (debt free) revenue without a vote. Revenues generated by an EIFD may be used to provide funding and financing for a broad range of infrastructure projects, provided those projects have a useful life of 15 years and are of "community-wide" significance. Capital improvements do not have to be located within the boundaries of the district, but must have a "tangible connection" to the district.

- *Duarte is currently examining the potential of EIFDs in this sub-area, including estimating its revenue creation potential.*

Community Revitalization and Investment Authorities

Local agencies (a city, county, or a special district - or any combination of these via entering a joint power agreement) may establish a Community Revitalization and Investment Authority (CRIA) to revitalize disadvantaged communities by capturing incremental increases in property tax revenues to fund infrastructure improvements and upgrades; economic development activities; and affordable housing. Based in part on the former community redevelopment law, the revitalization area comprising a CRIA must meet the following criteria:

1. Areas where not less than 80 percent of the land contains census tracts or census block groups meet both of these conditions:
 - a. An annual median household income that is less than 80% of the statewide annual median income; and
 - b. Three of four following conditions:
 - i. Non-seasonal unemployment at least 3 percent higher than statewide average.
 - ii. Crime rates at least 5 percent higher than statewide median.
 - iii. Deteriorated or inadequate infrastructure, and
 - iv. Deteriorated commercial or residential structures.
2. A former military base that is principally characterized by deteriorated or inadequate infrastructure or structures

Formation of a CRIA is subject to a public hearing process and protest proceedings, but if approved, is authorized to issue debt without voter approval. Once established, CRIAs are authorized to use tax increment revenues to fund (without limit) infrastructure improvements, improvements to existing buildings, affordable housing, brownfield remediation, and acquire and transfer property. Notably, a CRIA has the authority to acquire property under eminent domain.

- *A preliminary review based on SCAG's screening tool suggested that the Town Center Specific Plan area would meet the CRIA criteria.*

Advantages and Disadvantages

Table 10 summarizes the advantages and disadvantages of TIF. In term of advantages, unlike other types of district structures like improvement districts or CFDs, TIFs do not impose a new tax on property and, as a result, do not increase the overall tax burden. Tax increment can also be leverage to secure debt issuance and fund upfront infrastructure costs.

In term of disadvantages, while neither EIFDs or CRIA require voter approval, EIFDs do require that 55 percent of owners or residents within the district approve debt issuances. They also both rely of development to occur for there to be available tax increment. It may take a number of years for development to occur, resulting in small amounts of available revenue in the early years after district formation. Finally, while TIF does not increase tax burden, it does take away revenues from public agencies.

Table 12. Tax Increment Financing Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none"> • Does not impose a new tax on property • Allows for the use of property tax increment to fund infrastructure without increasing overall tax burden for property owners • Can be leveraged through the issuance of debt 	<ul style="list-style-type: none"> • EIFDs requires 55% approval by owners or residents within district to issue debt • Must negotiate with • Relatively small amounts of revenue available during early development • Unproven bond market; small district implies high-risk profile • Takes revenues away from public agencies for services funding (police, fire, road maintenance)

6. Regional and State Grant Funding

This chapter focuses on competitive regional and state grants available to fund the greening and traffic calming improvements. The sources are organized by the geographic level of administration, not by, for example, the source of the funding. LA Metro administers many of the regional grant programs available for these types of improvements in LA County, and the California Department of Transportation (Caltrans) administers many of the State competitive grant programs. The chapter doesn't include BUILD grants – formerly known as TIGER Discretionary Grant, which the federal Department of Transportation administers. BUILD grants are extremely competitive, and require a minimum project cost of \$5 million, and are an unlikely funding source for this plan.

The chapter is not meant to be a comprehensive list. Further, EPS has not done an exhaustive analysis of the eligibility and evaluation criteria to determine whether or not these projects would be eligible and competitive for each of the source. Instead, the chapter provides a list of potential funding sources that can be used to fund complete streets and pedestrian improvements. In addition, while these source can provide a meaningful contribution to the funding of infrastructure, their appropriation is largely outside the control or discretion of the City and, instead, subject to a competitive process. **Table 11** summarizes some of the advantages and disadvantages.

Table 13. Federal, State, and Regional Grants Advantages and Disadvantages

Advantages	Disadvantages
<ul style="list-style-type: none">• Reduces burden on developer/ enhances project feasibility	<ul style="list-style-type: none">• Highly competitive and difficult to predict• Less likely for on-site infrastructure or utilities• Likely linked to specific sponsoring agency requirements

Regional

Measure M

LA County votes approved Measure M, a half-cent sales tax in perpetuity in November of 2015. The program is estimated to generate \$860 million per year. In addition to a local return, the Measure dedicates 2 percent of annual funding to active transportation projects. These funds will be allocated in a competitive bidding process, which Metro is in the process of designing. Funding priorities include the Regional Active Transportation Network, first/last mile policies, bike share policies, and design for safety/vision zero funds.

Highway Safety Improvement Program	
Program Administer	LA Metro
Next Funding Cycle	Unknown
Local Match	Unknown
Grant Amounts	Unknown
Eligible Project types	Seven Modal Categories

LA Metro Call for Projects

LA Metro is responsible for allocating discretionary federal, state, and local transportation funds from a variety of sources – including Congestion Mitigation and Air Quality funds, the Surface Transportation Block Grant Program funds, and others. The program is a competitive process, where Metro staff rank eligible projects and present preliminary scores to Metro’s Technical Advisory Committee and Board of Directors. There are seven modal categories that applicants can apply under, but they include projects to fund pedestrian improvements. With the passage of Measure M, LA Metro’s Call for projects is on hold, as Metro assesses its funding programs and long-range plan. Previously, Metro held its call for projects on a biannual basis.

Highway Safety Improvement Program	
Program Administer	LA Metro
Next Funding Cycle	Unknown, program on hold
Local Match	20%
Grant Amounts	NA
Eligible Project types	Seven Modal Categories

State

Highway Safety Improvement Program (HSIP)

HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The program aims to improve pedestrian and bicycle safety, install vehicle-to-infrastructure communication equipment, pedestrian hybrid beacons, roadways that provide separation between pedestrians and motor vehicles, and other physical infrastructure.

HSIP funds must be used for safety projects that are consistent with the State's strategic highways safety plan and that correct or improve a hazardous road location or feature or address a highway safety problem. Caltrans administers the program with a call for projects one to two years with the next anticipated cycle in April/May 2020.

The minimum grant amount is \$100,000, and the maximum grant amount is \$10,000,000. Local matches are encouraged, but not required. Out of the total project cost, at least 90 percent must fund safety improvements, and the remaining percentage can fund non-safety related funding improvements.

Highway Safety Improvement Program	
Program Administer	Caltrans
Next Funding Cycle	April/May 2020
Local Match	Encouraged, not required
Grant Amounts	Minimum = \$100,000 Maximum = \$10 million
Eligible Project types	Safety Related Infrastructure

Active Transportation Program

Caltrans the Active Transportation Program (ATP), which consolidates existing federal and state transportation programs, including the Transportation Alternatives Program, Bicycle Transportation Account, SB1, and State Safe Routes to School, into a single program. Eligible projects include those that encourage increasing the proportion of trips by biking and walking, increasing safety and mobility for non-motorized users, advancing the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals, enhancing public health, ensuring that disadvantaged communities fully share the benefits of the program, and providing a broad spectrum of projects to benefit many types of active transportation users.

Program requirements will shift from cycle to cycle. Overall, project must encourage increased use of active transportation modes, which including bike and walking. The program typically encourages but does not require matching.

Funding can be for both infrastructure and non-infrastructure projects, and preference is given to disadvantages communities. The minimum project amount is \$250,000

Active Transportation Program	
Program Administer	Caltrans
Next Funding Cycle	2020
Local Match	Encouraged, not required
Grant Amounts	Minimum = \$250,000
Eligible Project types	Increase Active Trips

Strategic Growth Council Affordable Housing and Sustainable Communities Program

The Strategic Growth Council (SGC) Affordable Housing and Sustainable Communities (AHSC) Program funds land-use, housing, transportation, and land preservation projects to support infill and compact development that reduce greenhouse gas emissions. The AHSC Program will assist project areas by providing grants and/or loans, or any combination thereof, that will achieve GHG emissions reductions and benefit disadvantaged communities through increasing accessibility of affordable housing, employment centers, and key destinations via low-carbon transportation resulting in fewer vehicle miles traveled through shortened or reduced trip length or mode shift from Single Occupancy Vehicle use to transit, bicycling, or walking. Project area types include Transit Oriented Development (TOD), Integrated Connectivity Project (ICP), and Rural Innovation Project Area (RIPA).

The program does not require a match, and both capital project and programs costs are eligible for program funds. The minimum grant amount is \$1 million and the maximum is \$20 million.

Active Transportation Program	
Program Administer	Strategic Growth Council
Next Funding Cycle	2020
Local Match	N/A
Grant Amounts	Minimum = \$1 million Maximum = \$20 million
Eligible Project types	Reduce VMT, emphasis on affordable housing and benefiting disadvantage communities

Non-Competitive Local Returns

In addition to competitive regional and State grant. There are also a number of non-competitive state and regional funds that are locally returned and which the City can use to fund traffic calming and greening project. However, Duarte has already allocated the use of these funds to a number of projects and using these funds for the Town Center greening and traffic calming project compete with other City priorities.

- **Air Quality AB 2766 Program:** Department of Motor Vehicle Registration fees generate AB 2766, and the State distributes a portion of these funds back to Duarte. There use is restricted to activities that service to improve air quality. These include pedestrian facilities. In fiscal year 2018-19, Duarte estimates that it will receive \$29,500.
- **Metro Funds:** Metro disburses funding on a per-capita basis to be used for bicycle and pedestrian projects. These include funds from Proposition A (25 percent local return); Proposition C (20 percent local return); Measure R (15 percent local return); and Measure M (17 percent).
- **Community Development Block Grant (CDBG):** The Federal Department of Housing and Urban Development's (HUD) CDBG Program provides a flexible source of funding to address community and public infrastructure needs, including pedestrian improvements. In fiscal year 2018-19, Durant estimates that it will receive \$220,000 and plans to outlay \$50,000 for ADA curb ramps and \$170,000 for street improvements.
- **SB1:** SB 1 or the Road Report and Accountability Act of 2017 appropriates \$200 million annually. Of these fund, 50 percent are distributed to a competitive program (see the Active Transportation Program) and 50 percent to local jurisdictions. In 2018-19, Duarte estimates that it will receive \$371, 200 from this program.



Appendix A: Development Impact Fee Estimate

Table 14. Service Population Factor Estimate

Description	Service Population		Weight [1]	Resident Equivalence	
	Amount	% Total		Weighted Avg.	Normalized [2]
		a	b	c = a*b	
Duarte Residents					
Work INSIDE Duarte	830	4%	77%	3%	
Work OUTSIDE Duarte	9,011	41%	77%	32%	
All Other Residents	11,991	55%	100%	55%	
Total	21,832	100%		90%	100%
Duarte Employees					
Live INSIDE Duarte	830	7%	23%	2%	
Live OUTSIDE Duarte	10,516	93%	23%	21%	
Total	11,346	100%		23%	25%

[1] Weight based on percent of annual number of hours [24 hrs*365 days] relative to time at job [40 hrs*50 weeks]

[2] Residents equal 100%.

Source: LEHD; Economic & Planning Systems

Table 15. Specific Plan Growth Estimate

Description	Max. Allowable Development			Factor	Total Growth
	Town Center	Duarte Station	Total		
Residential Units	800	1,400	2,200	2.87 [1]	6,314
Commercial Square Feet	703,000	112,500	815,500	300 [2]	2,718

[1] Average household size for renter occupied units.

[2] Estimated employees per square foot in commercial space.

Source: ACS 5-Year 2017; Economic & Planning Systems

Table 16. Growth Allocation Estimate

Description	Factor	Current Build-Out		New Growth		
				Growth	% Growth	% Build-Out
SCAG Forecasts						
Unweighted Population						
Residents		22,100	24,300	2,200	69%	9.1%
Employees		10,900	11,900	1,000	31%	8.4%
Total		33,000	36,200	3,200	100%	8.8%
Service Population						
Residents	100%	22,100	24,300	2,200	90%	9.1%
Employees	25%	2,776	3,030	255	10%	8.4%
Total		24,876	27,330	2,455	100%	9.0%
Specific Plan Build-Out						
Unweighted Population						
Residents		22,100	28,414	6,314	70%	22.2%
Employees		10,900	13,618	2,718	30%	20.0%
Total		33,000	42,032	9,032	100%	21.5%
Service Population [1]						
Residents	100%	22,100	28,414	6,314	90%	22.2%
Employees	25%	2,776	3,468	692	10%	20.0%
Total		24,876	31,882	7,006	100%	22.0%

[1] Weights residents and employees based on the proportion of time spent in Duarte.

Source: LEHD; Town Center and Duarte Station Specific Plan; Economic & Planning Systems