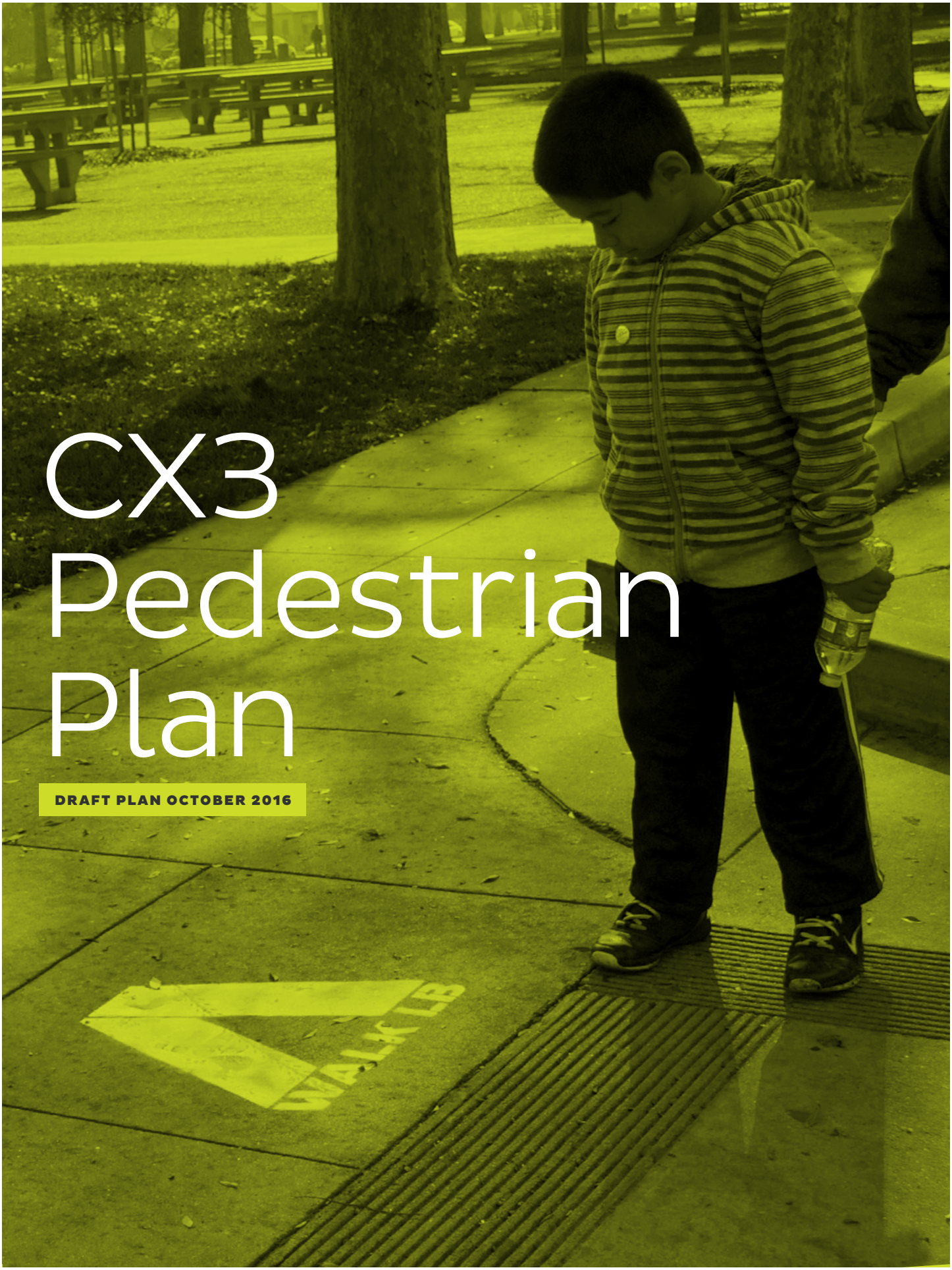

CX3 Pedestrian Plan

DRAFT PLAN OCTOBER 2016

This material was produced by the California Department of Public Health's Nutrition Education and Obesity Prevention Branch with funding from the U.S. Department of Agriculture's [USDA] Supplemental Nutrition Assistance Program-Education, known in California as CalFresh. CalFresh provides assistance to low-income households and can help buy nutritious food for better health. For CalFresh information, call 1-877-847-3663. For important nutrition information, visit www.CaChampionsForChange.net.

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CX3 Pedestrian Plan

DRAFT PLAN AUGUST 2016

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Department of Health & Human Services

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Department of Health & Human Services

Louisa Franco, Health Promotions Coordinator,
Long Beach Department of Health & Human Services

Ira Brown, Planner, Long BeachDevelopment Services,
Long Beach Planning Bureau

Nate Baird, Mobility & Healthy Living Programs Officer,
Long Beach Public Works Department

Steve Gerhardt, Program Manager,
Walk Long Beach

Brian Ulaszewski, Executive Director,
City Fabrick

CITY FABRICK

Brian Ulaszewski, Executive Director
Bakataash Sorkhabi, Designer
Alexander Jung, Designer
Angelica Meza, Designer

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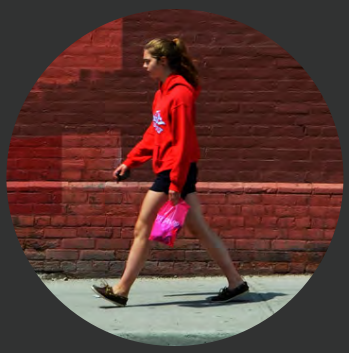
CHAPTER 1

Introduction

CREATING ENVIRONS WHERE PEOPLE CAN WALK TO THE PLACES WHERE THEY WORK, STUDY AND SHOP; TO MEET FRIENDS OR MAKE NEW FRIENDS; OR TO SIMPLY JUST WATCH THE PARADE OF LIFE.



The City of Long Beach is embarking on significant updates of its General Plan, including the recently adopted Mobility and Housing Elements, the newly established Community Health Improvement Plan and Historic Preservation Element. A new Urban Design Element is being developed while the Land-use Element is being updated. Together they will provide guidance toward Long Beach's growth and evolution over the next two decades.

From these core city planning documents, city staff in cooperation with local residents, community stakeholders and elected officials are developing implementation plans that more specifically identify

strategies, goals and actions. New specific plans that consider public and private development are being updated for Planned Development Areas in the Southeast and Central areas of Long Beach while infrastructure plans are being developed for major infrastructure in West Long Beach and the Downtown. The Mobility Element is spurring implementation plans for particular pieces of transportation infrastructure while the citywide bicycle master plan is being updated.

Similar to the bicycle master plan, the Mobility Element expressly calls to develop a citywide Pedestrian Master Plan that establishes a basic inventory of pedestrian infrastructure, comprehensively prioritizes pedestrian improvements, furthers the intent of the place-type designations, makes connections to other modes of travel, promotes public health and connects with open space features. The Department of Development Services and the Department of Public Works are creating the Transit District Pedestrian Improvement Master Plan, which identifies and prioritizes infrastructure projects for improving walkability in the Transit District around the Metro Blue Line light rail stations in Downtown and along Long Beach Boulevard.

I like to walk to keep healthy & lower my weight. Pacific Coast Highway isn't safe though.

WRIGLEY RESIDENT

At the same time, the Long Beach Department of Health and Human Services continues to move forward with implementing the Community Health Improvement Plan, which includes numerous elements related to the physical environment and engages in more in-depth action planning [CHIP Implementation]. As most goals within the Community Health Improvement Plan relate to how the built environment of the city affects accessibility, livability and physical activity, action planning includes a focus on active mobility infrastructure.

The Long Beach Department of Health and Human Services, with support from the Public

PHOTO COURTESY OF ERIC BETEILLE

Works and Development Services Department, has collaborated with the nonprofit design studio, City Fabrick, to develop a pedestrian plan that geographically builds upon the Transit District Pedestrian Improvement Master Plan to include portions of Central and West Long Beach. The CX3 Plan documents the walking conditions of the Long Beach communities with the greatest public health needs and presents recommendations as to improve their pedestrian experience. This pedestrian planning area consists of neighborhoods defined by local residents, excluding those within the Transit Oriented District pedestrian planning area. The CX3 Pedestrian Plan builds upon earlier community engagement projects and previous physical assessments of these neighborhoods through the CX3 program.

STRUCTURE OF THE PLAN

The CX3 Pedestrian Master Plan is structured like a story, as the introduction provides a foundation for a reader to understand why the plan is being developed and how it is being informed. The Existing Conditions chapter builds the narrative of where the challenges and opportunities lie within the community. The Design Toolkit chapter provides the substance of the solutions while the Initiatives section begins forming the strategy. The Implementation chapter identifies how and when these solutions are put in place with priorities and resources for execution.

The appendix section includes many of the resources and products that were developed for the CX3 Pedestrian Master Plan for potential use in the future. The document is structured in a manner adaptable for developing similar plans for other parts of Long Beach or for eventually expanding it citywide with substantial material from the Design Toolkit and Initiatives chapters globally applicable, while other chapters are structured for flexibility. Further effort would be necessary to analyze the existing conditions of the expanded area, along with research on relevant policy and plans and public engagement to identify concerns and priorities.

CX3 Study Area

Communities of Excellence in Nutrition, Physical Activity and Obesity Prevention [CX3] is a powerful tool developed by the California Department of Public Health that captures and communicates neighborhood-level data to promote healthier communities. The program provides tools for collecting and measuring food quality, availability and affordability in low-income communities. Armed with this data, health and nutrition advocates around the state are engaging and inspiring community members and partners to pursue healthy food. CX3 is a project of the Network for a Healthy California [Network] in partnership with local health departments.

LONG BEACH CX3 NEIGHBORHOODS

Communities of Excellence in Nutrition, Physical Activity and Obesity Promotion [CX3]: Neighborhood assessments are designed to provide data and set priorities to improve the food and physical activity landscape for low-income neighborhoods. Ten neighborhoods oriented around local schools have been assessed in the Downtown, Central and West Long Beach areas. Long Beach has many strong, active community groups who can use this data to make positive changes to create healthier neighborhoods. These neighborhoods are geographically oriented around school campuses, including: Cabrillo Reid, Renaissance and Poly High Schools, Washington and Franklin Middle Schools, and International, Lincoln, Lafayette, Burnett, Mary Butler, Whittier and Edison Elementary Schools as well as St. Mary Hospital.

Which parts of Long Beach did we study?

CX3 STUDY AREA

CITY

Long Beach is 50 square miles in area. It includes dozens of neighborhoods and commercial districts, an airport, seaport, and multiple marinas.

CX3

The CX3 area is made up ten neighborhoods in Central and West Long Beach supported by the Nutrition Education Obesity Prevention branch of the California Department of Public Health.

TOD

The Downtown and Central Long Beach Transit District follows the Metro Blue Line Station Locations.

THE CX3 PEDESTRIAN MASTER PLAN STUDY AREA ENCOMPASSES THE CX3 NEIGHBORHOODS NOT WITHIN THE METRO TRANSIT DISTRICT.

PURPOSE OF CX3 PEDESTRIAN MASTER PLAN

One of the key findings during the neighborhood assessments within the CX3 Neighborhoods was the lack of connectivity within the pedestrian environment as it relates to the design and conditions of public infrastructure. While these neighborhoods were developed during an era where jobs, services, schools and community amenities are located within walking distance of most residents, the transportation infrastructure has evolved over time to exclusively serve private automobiles traveling through these communities. The CX3 Pedestrian Improvement Master Plan provides the tools for improving walkability in these neighborhoods, promoting walking as physical activity and enhancing pedestrian access to healthy choices for food and recreation.

The intention of the plan is two-fold: 1-assess existing conditions of the CX3 areas and identify paths for improving the pedestrian environment and 2-lay out a framework of tools, project types, policies and programs for improving the CX3 neighborhoods. The Plan's approach is also applicable for other Long Beach neighborhoods or even citywide. This document can then provide a foundation for the Citywide Pedestrian Master Plan described in the Mobility Element implementation measures. Assessment of the existing conditions as well as application the projects, programs and policies will have to be further refined to suit the remaining portions of the city.

RELATION TO TRANSIT DISTRICT PEDESTRIAN MASTER PLAN

The Department of Development of Services has developed a Transit District Pedestrian Master Plan focusing on the Blue Line Light Rail stations in the Downtown area and along Long Beach Boulevard corridor. This plan assesses the existing conditions of the pedestrian environment and proposes capital improvement projects oriented towards improving pedestrian safety and comfort. While the CX3 Pedestrian Master Plan builds upon and expands the Transit District Plan, it does not duplicate it. The CX3 Pedestrian Master Plan includes all the CX3 neighborhoods not included in the Transit District Plan in order to avoid redundancy.

As these efforts take place on parallel paths within adjacent geographic areas [Transit District intersects the CX3 pedestrian planning area] they are closely coordinated. The CX3 Pedestrian Plan is designed to meet the unique needs of SNAP-Ed eligible residents whose voice is often missed during significant planning processes. Programs and policies relevant to one area are likely relevant to the other as projects will often travel through both areas. As the Mobility Element has identified the intention of a citywide pedestrian master plan, these two efforts can provide a foundation for an expanded effort.

20th St
21st St
21st St

Vision for Health & Mobility

The foundation for the CX3 Pedestrian Master Plan is provided by the Mobility Element and Community Health Improvement Plan—both recently adopted, well-informed guiding documents for Long Beach's future. While the two plans were developed through alternative lenses [health and mobility] and with different community partners, commonalities developed between their respective visions are carried through into the goals and objectives. An effective, active mobility network can benefit public health, improve the environment and relieve congestion through a city's transportation infrastructure.

COMMUNITY HEALTH IMPROVEMENT PLAN

The Community Health Improvement Plan [CHIP] is a long-term, systematic plan to address issues identified in the Community Health Assessment [CHA]. The purpose of the community health improvement plan is to describe how the Long Beach Department of Health and Human Services [LBDHHS] and the community will work together to improve the health of the population in Long Beach. The CHIP is more comprehensive than the roles and responsibilities of LBDHHS alone, and was developed together with participation from a broad set of stakeholders and partners. Stakeholders and partners utilized their knowledge and understanding of the Long Beach community, as well as information contained in the CHA, to set priorities.

COLLABORATION *We embrace our diversity and the unique contributions of our neighborhoods to our City's cultural fabric. Through our community partnerships, we develop positive relationships, foster innovative solutions and strengthen our capacity to accomplish our vision.*

HEALTH & QUALITY OF LIFE ACROSS THE LIFESPAN *We strive to address health across a person's lifespan to ensure that all individuals have a strong start in life, live to their fullest potential and that their legacies are celebrated in the latter stages of life.*

ACCESS FOR ALL *We harness our collective thinking and power to ensure that our communities have easy and frequent access to the health, educational, social and economic services they need to succeed in society.*

EQUALITY *We strive to achieve social and health equity by identifying and addressing the root causes of inequities. We seek to eliminate all forms of disparities by empowering people to transform their communities.*

MOBILITY ELEMENT

Today, the City of Long Beach has a bold vision for its future, one that requires substantial investment in local and regional transportation systems. This Mobility Element establishes the vision, goals, policies and implementation measures required to improve and enhance the City's local and regional transportation networks, transforming Long Beach into a community that offers:

MORE CONVENIENCE & CHOICE *Walking, bicycling and transit will become more convenient and desirable modes of transportation. You will have more opportunities to leave your car at home for more local and regional trips.*

BETTER STREETS *Various street corridors within your community will be improved to encourage walking, bicycling and/or transit. Street improvements will include trees, lights, landscaping, streetscape furniture, transit amenities, enhanced pedestrian crossings and bike lanes or routes.*

MORE MOBILITY FOR ALL *Everyone, especially children, persons with disabilities and seniors, will have more mobility options and will be less dependent on licensed drivers to travel to and from destinations, such as schools, medical appointments, work, parks, community centers and shopping.*

NEIGHBORHOOD SPECIFIC PLANS *Your elected and appointed officials will be able to consider the priorities and values of your local neighborhood when making policy decisions. They will have more flexibility to determine how to best solve or mitigate traffic problems.*

MORE CHOICES *A more multimodal, balanced and complete street network that provides more choices to take multiple modes of transportation.*

FEWER CARS *For families that choose to live within walkable neighborhoods and/or near transit, the option to live with fewer or no cars.*

SAFER NEIGHBORHOODS *Traffic-calming features that discourage high-speed, cut-through traffic and encourage drivers to stay on corridors where auto traffic is emphasized, resulting in safer and more livable neighborhoods.*

PEDESTRIAN-FRIENDLY IMPROVEMENTS *Street improvements along major transit routes will create a more attractive and pedestrian-friendly environment .*

ABOVE
Person riding their bicycle on Alamitos Avenue just before the City fully restriped the roadway to be more bicyclist and pedestrian-friendly.
PHOTO COURTESY OF CITY FABRICK

Project Goals

The CX3 Pedestrian Master Plan is intended to guide the improvement of the walking environment of Central Long Beach by connecting adopted city policies and plans, industry best practices and the community's voice. At its core, Central Long Beach wants to be a walkers' paradise with schools, parks, employment centers, public transit and daily services within relatively close proximity to residents. Over the years the infrastructure that was meant to serve pedestrians was built and rebuilt to predominantly serve the automobile travel through Central Long Beach and surrounding destinations.

The CX3 Pedestrian Master Plan builds from the recently adopted General Plan's Mobility Element and Community Health Improvement Plan to achieve greater transportation equity for these diverse communities. This improves the health and quality of life for residents of Central Long Beach by improving the pedestrian environment. The plan is developed to support the CX3 neighborhoods, but many of the programs, policies and project types can be applied to other parts of Long Beach.

TOP
Local residents discuss pedestrian priorities at a CX3 Planning Workshop.
PHOTO COURTESY OF CITY FABRICK

ABOVE INSET
A CX3 Resident takes an evening stroll along Pacific Avenue in the CX3 neighborhood
PHOTO COURTESY OF ALLAN CRAWFORD

FOUNDATIONAL GOALS

IDENTIFY PATHS FOR WALKING

CHIP GOAL 1 ***Ensure healthy active living by addressing preventable and treatable health conditions.***

Walking is perhaps the simplest form of physical activity and often serves the dual purpose of connecting people to destinations, but too often, residents are discouraged from walking based on conditions of the pedestrian environment. The CX3 Pedestrian Master Plan engages local residents and stakeholders as to what discourages and attracts walking as a form of transportation and physical activity and crafts methods for improving those conditions.

CONNECTING PEOPLE TO HEALTHY CHOICES

CHIP GOAL 2 ***Create safe social and physical environments that promote good health.***

Long Beach's development patterns largely support walking as a viable mode of transportation for a vast majority of trips whether for employment, school or daily services. The CX3 Pedestrian Master Plan focuses on connecting residents within these neighborhoods to greater choices for healthy eating and active living, specifically grocery stores, recreational opportunities and learning institutions.

EQUITY FOR ALL WALKERS

CHIP GOAL 3 ***Achieve health equity, eliminate disparities and improve the health of all Long Beach community members.***

Portions of Long Beach experience significant health disparities based on geography, socioeconomic conditions and historic development patterns. The CX3 Pedestrian Master Plan specifically focuses on such communities in order to identify the challenges and opportunities as well as the potential solutions for making these neighborhoods more walkable, based on the intention of applying similar measures city-wide.

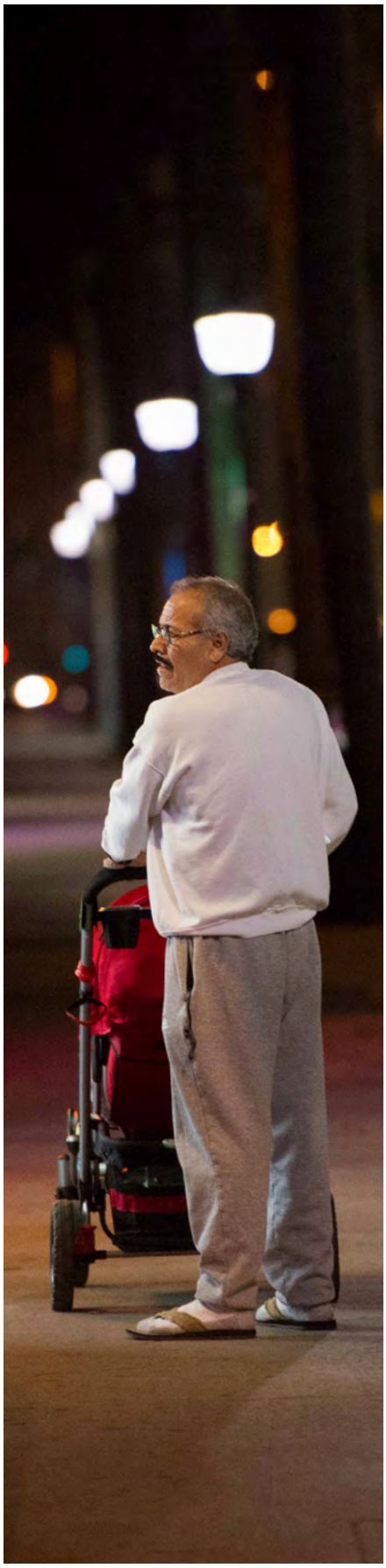
STANDARDS FOR IMPROVING PEDESTRIAN REALM

MOG GOAL 1 ***Create an Efficient, Balanced, and Multimodal Mobility Network.***

Long Beach's Mobility Element of the General Plan begins identifying strategies and some implementation measures for improving the city's pedestrian infrastructure as part of a balanced transportation network. The CX3 Pedestrian Master Plan delves deeper into the policies, programs and projects that can enhance the environment for walking in Central Long Beach.

CHIP Look for the Community Health Improvement Plan [CHIP] throughout this document.

MOP / MOG Look for these Mobility Element icons throughout this document.



Guiding Principles

The guiding principles help to create continuity through the entire document as well as the community engagement process. These principles define the purpose of a design element, how they are prioritized by community members and policy makers, and often determine the method of implementation. There are interrelationships between the guiding principles as a beautiful sidewalk is typically one that promotes social interaction, and livability can be about the environment, but also the principles attempt to be distinctive without being exhaustive.

These principles were developed from analysis of the Mobility Element and Community Health Improvement Plan but were expanded and refined through the community engagement process.

The guiding principles were used to engage residents and community stakeholders as to how they would prioritize making their neighborhood more walkable. They helped to characterize the purpose of each design treatment within the Pedestrian Toolkit. These principles also define the initiatives for improving the pedestrian environment and ultimately establishes the priorities for the projects, programs and policies to implement.

How would you say I just like walking? I like walking along the Beach but it's too far to be convenient and I'd like to walk along the River

WHITTIER NEIGHBORHOOD RESIDENT
ORIGIN OF THE RECREATION PRINCIPLE

ENVIRONMENT

A sustainable city is a safe city, a healthy city, a city that has a high quality of life.

JANETTE SADIK-KHAN

Streets that reduce pollution, reuse rainwater and recycle. Walking is the most environmentally friendly form of transportation considering only human fuel is expended to support locomotion and the only necessary equipment is a comfortable pair of shoes. A pedestrian friendly environment also supports the urban ecology with sustainable stormwater management, limited light pollution and a rich local habitat.

SAFETY

The safety of the people shall be the highest law.

MARCUS TULLIUS CICERO

Streets that have slow traffic speeds, safe crosswalks and good nighttime lighting. The base line for any pedestrian friendly environment is one that is safe. Safety includes reducing conflicts between pedestrians and vehicles as well as being protected from criminal activity. Pedestrian friendly environments address actual as well as the perceived sense safety to attract walkers.

LIVABLE

Sidewalk contacts are the small change from which a city's wealth of public life must grow.

JANE JACOBS

Streets that are pleasant, quiet and shaded. People tend to walk where they feel most comfortable; their sense of smell, sight and sound will determine the quality of their experience. A pedestrian friendly environment limits light, noise, visual and air pollution from vehicles and adjacent uses while providing the most pleasant setting for occupants.

ACCESSIBILITY

Disability is not the problem. The accessibility is the problem.

MOHAMED JEMNI

Streets that have wide, smooth sidewalks with ramps. The importance of accessibility can be lost on the general public but those with impaired mobility whether through physical disability, age or accompaniment, they recognize quickly physical obstructions in the pedestrian realm. A pedestrian friendly environment serves the needs of all its users whether on two-feet, in a wheelchair or pushing a stroller.

ECONOMICS

The overwhelming majority of people who come to Times Square are not driving.

TIM TOMPKIN, TIMES SQUARE ALLIANCE

Streets that support and connect people to local businesses. A pedestrian friendly environment supports the local economy as it encourages customers to patronize multiple businesses with one trip. The most successful commercial districts are compact areas with businesses consistently accessed from bustling walkways, plazas and sidewalks.

SOCIAL

Walking with a friend in the dark is better than walking alone in the light.

HELEN KELLER

Streets where I can meet people and see my neighbors. Walking can be an incredibly social activity as the speed and openness encourages human interaction whether exchanging a glance and smile with a stranger or stopping to talk to a neighbor. The most social pedestrian environments often encourage interaction through seating and outdoor spaces.

RECREATION

If you go to a place on anything but your own feet you miss a thousand delicate joys.

ELIZABETH VON ARNIM

Streets that are fun places for play and physical activity. Walking is a low impact activity that can promote physical and mental health, whether it is a means of reaching a destination or for sake of walking. The Beach Path and trails of Signal Hill are just some of the most desirable places people can enjoy walking without interruption from the city's hustle and bustle.

BEAUTY

Give me odorous at sunrise a garden of beautiful flowers where I can walk undisturbed.

WALT WHITMAN

Streets that are beautiful, with trees, furniture and art. A beautiful pedestrian realm can provide a mental relief from daily stress, inspire creativity and promote positivity. Lush landscapes, mature trees, thoughtful urban design, unique geographies and attractive architecture can collectively craft the scenic pedestrian environment that would attract walkers near and far.

Foundation Policies and Plans

This Mobility Element seeks to make walking safe and pleasurable in all areas of Long Beach so that everyone – especially children, the elderly and people with disabilities – have a viable and safe way to travel. By making City-wide pedestrian improvements and by promoting land uses and building designs that encourage pedestrian activities, we can help make walking a truly viable means of transportation, recreation and exercise. As an added bonus, research shows that a more walkable city also contributes to the overall better quality of life and sense of community within a neighborhood.

The CX3 Pedestrian Master Plan builds upon the projects, policies and programs identified within the Mobility Element, going into greater detail and consideration while being structured for implementation. Along with the Community Health Improvement Plan and Mobility Element of the General Plan, the CX3 Pedestrian Master Plan includes reference material from other local plans as well as federally developed best practice manuals. These foundational documents in themselves are based on thousands of hours of expert input from local residents and stakeholders as well as planning and design professionals.

TOP
A pedestrian walks past a colorful bike rack near the Colorado Lagoon in East Long Beach.
PHOTO COURTESY OF ALLAN CRAWFORD

ABOVE INSET
A city traffic engineer discusses Bike Boulevard signage options at a community planning meeting.
PHOTO COURTESY OF ALLAN CRAWFORD

MOBILITY ELEMENT MOP MOG

Development Services
October 2013

The Mobility Element establishes the vision, goals, policies and implementation measures required to improve and enhance the City's local and regional transportation networks, transforming Long Beach into a community that balances the needs of all modes of transportation as well as the health and quality of life residents. This Mobility Element presents our future plan for improving the way people, goods and resources move from place to place.

The Mobility Element recommends the development of a Pedestrian Master Plan that details future improvements for the pedestrian environment, including the pedestrian priority areas. Additional direction for pedestrian improvements in specific areas of the City may also be provided in the City's neighborhood and community plans. The combined study areas of Transit District Pedestrian Improvement Master Plan and Pedestrian Safety Guidelines covers a third of Long Beach's residential population and approximately half of the Pedestrian Priority Areas as designated in the Mobility Element.

COMMUNITY HEALTH IMPROVEMENT PLAN CHIP

Health and Human Services
March 2014

The Community Health Improvement Plan [CHIP] is a long-term, systematic plan to address issues identified in the Community Health Assessment [CHA]. The purpose of the community health improvement plan is to describe how the Department of Health and Human Services [LBDHHS] and the community will work together to improve the health of the population in Long Beach. The CHIP is more comprehensive than the roles and responsibilities of LBDHHS alone, and was developed together with participation from a broad set of stakeholders and partners. Stakeholders and partners utilized their knowledge and understanding of the Long Beach community, as well as information contained in the CHA, to set priorities.

The development of the CHIP was a community-driven process and informed by data gathered and synthesized in the CHA. Long Beach used the Mobilizing for Action Through Planning and Partnerships [MAPP] as a framework for developing its CHA, CHIP and Strategic Plan. MAPP is not an agency-focused assessment tool; rather, it is an interactive process that can improve the efficiency, effectiveness and ultimately the performance of local public health systems. Facilitated by public health leaders, this tool helps communities apply strategic thinking to prioritize public health issues and identify resources to address them.

PEDSAFE – PEDESTRIAN SAFETY GUIDE

Federal Highway Administration 2004

The Pedestrian Facilities User Guide provides descriptions of unique engineering countermeasures or treatments that may be implemented to improve pedestrian safety and mobility. Included for each of the different treatments is a general description, purpose or objective, considerations for implementation, and estimated costs. While that level of information alone is useful to engineers, planners and other safety professionals, the guide also includes matrices that relates the treatments to specific performance objectives and specific types of collisions. These matrices provide practitioners with the ability to select the most appropriate treatment[s] if they have a well-defined crash problem or are trying to achieve a specific change in behavior.

BIKE MASTER PLAN UPDATE

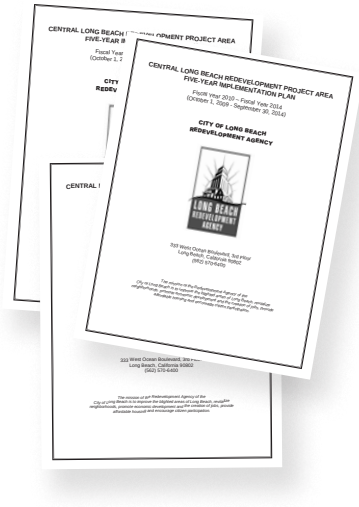
Public Works 2001

This Bicycle Master Plan serves as a policy document to guide the development and maintenance of bicycle friendly roads and bikeways and support facilities and other programs for Long Beach over the next 20 years. These policies address important issues related to Long Beach's roads and bikeways such as planning, community involvement, utilization of existing resources, facility design, multi-modal integration, safety and education, support facilities as well as specific programs, implementation, maintenance and funding. It is intended to be used as a guideline for projects and programs but does not substitute for engineering knowledge, experience or judgment.

WESTSIDE LIVABILITY PLAN

Public Works/Development Services February 2008 and 2015

Committing to develop and implement a Community Livability Plan for the I-710 corridor neighborhoods in the City of Long Beach is a natural outgrowth of a single crucial realization: neighborhoods within the I-710 corridor bear a disproportionate share of the negative impacts resulting from the operation of the I-710 Freeway and the Ports. Further, they receive few of the benefits derived from the $3 billion in goods that arrive through the two Ports and are transported through their neighborhoods. This Plan seeks to bring a better balance between residents' exposure to environmental and health hazards, and the benefits and investments they want and need in order to maintain a healthy environment in which to live, learn, work and play.



CENTRAL LONG BEACH STRATEGIC GUIDE FOR REDEVELOPMENT

Redevelopment Agency
June 2005

The Central Long Beach Strategic Guide for Redevelopment [Strategic Guide] is intended to serve as a framework of strategies to be used by the City of Long Beach Redevelopment Agency when making decisions regarding redevelopment opportunities in Central Long Beach. The Strategic Guide should be used as both an active and reactive tool. It should be consulted when development opportunities arise and it should be the road map for identifying and creating new redevelopment opportunities. The Strategic Guide identifies comprehensive strategies for the overall revitalization and redevelopment of Central Long Beach. The Plan was developed through the former Redevelopment Agency, yet is still relevant to these communities today.

WILLMORE DISTRICT IMPLEMENTATION PLAN

Redevelopment Agency
January 2005

The Willmore District Implementation Plan was created for the Redevelopment Agency of the City of Long Beach in partnership with the Willmore City Heritage Association. The purpose of the working document is to enable the Long Beach Redevelopment Agency to recognize a community vision and focus on implementation strategies dedicated to the improvement of the Willmore District and as a guide to make policy, complete future planning, establish phasing, implement specific projects and outlay funds. Projects include pedestrian enhancements on primary streets and the Courts & Ways improvements throughout the Willmore City neighborhood. The Redevelopment Agency is dissolved as of February 2012 pursuant to State legislation AB 1x26.

RIVERLINK PLAN

Development Services
January 2008 [updated 2013]

The RiverLink concept took root in January 2003, when the Department of Parks, Recreation and Marine contracted with the San Pedro Bay Estuary Project, a local nonprofit agency, to manage a study of the opportunities to create a continuous greenway along the east bank of the Los Angeles River. The west bank of the Los Angeles River was not included in the study due to the close proximity of the 710 Freeway and the discussions that were taking place regarding its potential redesign. However, it will be possible to transfer some of the design concepts to the west bank as the overall 710 Freeway plan is implemented. The City Council recently authorized staff to update the plan based on developments along the entire length of the Los Angeles River.

Engaging Walkers

The process for crafting the CX3 Pedestrian Master Plan was deliberately structured to balance industry best practices for creating walkable communities with standing and emerging polices and plans within the city and the community's voice.

This process was done with the understanding that each had their respective strengths and weaknesses: a resident can explain that there is consistent jaywalking at one corner at the same time every day because that is the most convenient crossing for the seniors living in one building to reach the store that sells lottery tickets. At the same time, there is a specific design treatment for reducing cut-through traffic while accommodating emergency vehicle access.

The intention has been to attempt to apply these community voices in the appropriate context, identifying challenges and opportunities and developing specific solutions.

The CX3 Pedestrian Master Plan begins to reach the detail of identifying specific treatments but also uses community input and analysis of the physical conditions to hone in on the issues and develop general strategies for improving the pedestrian environment. Further community engagement may be necessary when designing policies, programs and projects for implementation.

TOP
A resident is learning about Walk Long Beach, a program which works with communities to improve walkability in Long Beach.
PHOTO COURTESY OF CITY FABRICK

STAKEHOLDER ENGAGEMENT

MANY VOICES

At some point, everyone is a walker, whether that is one's sole mode of transportation or a transit rider's walks to the bus stop or a driver's walk to their car's parking spot. They each have different experiences and perspectives based on how often they walk, where they walk and their level of mobility. A variety of engagement methods were employed in order to reach the broadest cross section of local residents and stakeholders.

Specific attention was made to capture voices that are not typically included in the planning process in order to increase the diversity of perspective while encouraging their continued participation in the future. Technical assistance from experts and targeted stakeholder interviews, workshops stationed in front of grocery stores, school campuses and at community events insured that the engagement process went deeper into the community.

WALKING ASSESSMENTS

Building upon earlier work related to developing the CX3 Neighborhoods Assessments, walk audits were conducted along major corridors and neighborhood connectors to determine the physical conditions of the pedestrian environment. These assessments included actual conditions of sidewalk maintenance and distance between controlled pedestrian crossings as well as the qualitative sense of safety and comfort. Much of the data collection was inputted into the CX3 Pedestrian Assessment matrix for analysis. These were also conducted with the assistance of students from the Geography Department at California State University, Long Beach.

WALKING WORKSHOPS

The walking workshops were built as much for engaging local residents and stakeholders as educating them to critically observe the pedestrian environment. These workshops used walking tours customized for each neighborhood to share with participants how the physical characteristics of the public right-of-way and adjacent properties affect movement and influence behavior as well as feelings of comfort and safety. The resulting conversation focused on where residents enjoyed walking in their neighborhood and where they had concerns for safety or were uncomfortable. Based on this discussion, we collectively concluded why certain environments elicit particular feelings.

SIDEWALK WORKSHOPS

Instead of asking "who is not at the table?" the question became "whose table are we not at?" which is a paradigm shift in community engagement. One of the primary goals within the community engagement process has been reaching greater equity, by including the voice of those not currently heard in the planning process. To that end, community engagement included meeting these stakeholders where they were, at grocery stores, transit stops and on their way to schools, where a few moments can be spared in between destinations.

HEARING THE RESIDENTS

Nearly two hundred walking surveys were collected from local residents and stakeholders to better understand what projects and changes they would like to see implemented in their neighborhood. Several hundred other community members of all ages also pledged to help make their neighborhoods more walkable in one way or another.

COMMUNITY EVENTS

Long Beach is fortunate to have an active community event calendar spanning topics such as health, fitness, arts, culture, food and neighborliness among other exciting purposes to gather. Taking advantage of these gatherings, attendees were engaged at various levels of detail depending on their interest in the topic of walking. Simple dot exercises on the large map allowed participants to identify and prioritize what makes a walkable environment. From there, they were asked where they currently walk to and to describe those experiences while identifying what barriers are there to walking more . The quantity of public engagement could not have been as great without the partnership of community organizations like Building Healthy Communities, the Junior League of Long Beach and Century Villages at Cabrillo.

I would like to walk to many places in my neighborhood like the Los Angeles River and all the shops along Pacific Avenue, but I often feel unsafe because there are not enough crosswalks. I often end up jaywalking across the street.

WRIGLEY RESIDENT

COMMUNITY WORKSHOP

Intensive community workshops were organized towards the end of community engagement process to close the feedback loop. Data from all the previous community input was presented alongside quantitative and qualitative analyses of the existing conditions to test assumptions. The initiatives were presented in order as policies, programs and projects to determine how they connect with the community's priorities. Participants were able to begin seeing what safety improvements might make the most sense or how accessibility might be strategically improved. This process helped to set the priorities with greater geographically specificity for each CX3 Neighborhood.

TECHNICAL ADVISORY COMMITTEE

A Technical Advisory Committee [TAC] was formed to provide input on the development of the CX3 Pedestrian Master Plan. This group consisted of city staff from the Public Works, Development Services and Health and Human Services departments as well as local experts engaged around planning and active mobility. The TAC met on a monthly basis over 30 months formulating the plan, assisting with data collection, community outreach and oversight of the document itself. The comparative lens of planning, infrastructure and public health from experts within and outside of city government provided diverse perspective to insure relevance to the community as well as consequence for implementation.

COMMUNITY MEETINGS

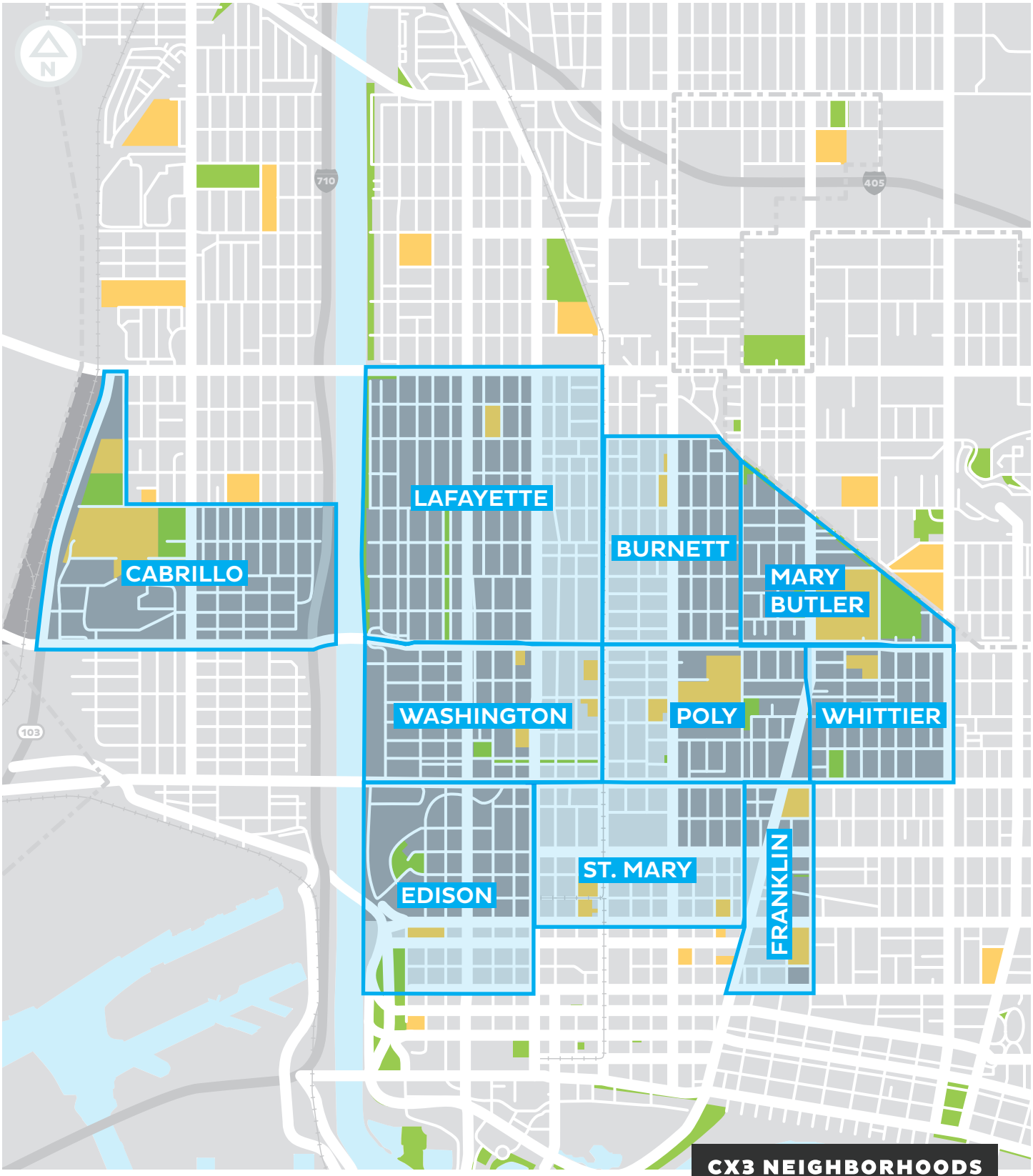
Active community groups were regularly engaged throughout the development of the CX3 Pedestrian Master Plan, including neighborhood associations, health-oriented organizations and advocacy groups to gather input from stakeholders. Theese regular stakeholders meetings provided opportunities to have simple discussions about walkability, which were often fitted to the context of their current concerns. The level of discourse provided valuable insight from those who are often engaged on a diverse array of issues including but not limited to quality of life, connectivity and economic development.

STAKEHOLDER INTERVIEWS

The diverse collection of voices that were collected through the various workshops, events and community meetings were augmented by interviews with targeted stakeholders including city officials, active mobility advocates and stakeholders specifically affected by walkability. The contents of some interviews focused on specific neighborhoods or corridors while others were more broadly scoped on the entire CX3 Pedestrian Master Plan area and even citywide discussions of walkability.

CX3 Neighborhood Snapshot

The common economic and public health indicators for selecting ten CX3 Neighborhoods naturally led to their clustering into a single continuous area encompassing Central Long Beach and the southern portion of the Westside. The CX3 Neighborhoods are represented by five of the nine City Council Districts [1, 2, 4, 6 and 7] and numerous neighborhoods associations and community organizations. While the CX3 Neighborhoods share common characteristics they also have also have unique assets and challenges.



CX3 NEIGHBORHOODS

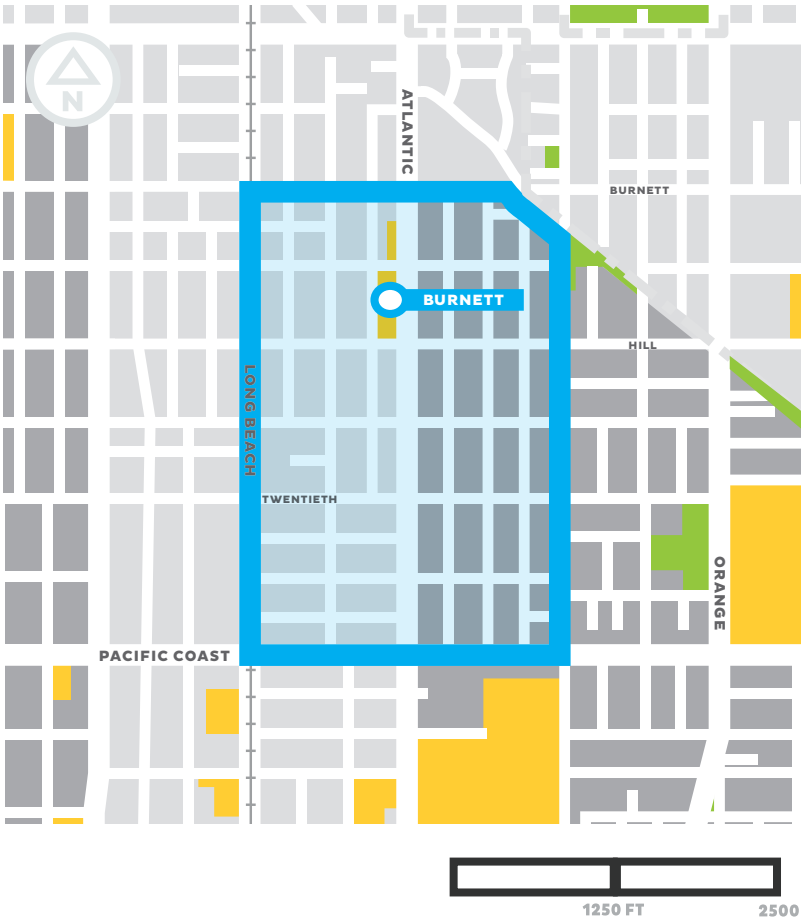
- Street Block
- CX3 Project Site
- Schools & Colleges
- Parks + Open Space
- CX3 Neighborhoods

0 0.5 mi 1 mi

Burnett

OVERVIEW

The Burnett Elementary School Neighborhood has two pocket parks: Officer Daryl Black Park and Fellowship Park totaling just a half acre of park space for every ten thousand residents. The residential neighborhoods range in density and over-crowding with the corridors hosting a mix of uses, transit-oriented development and one supermarket.



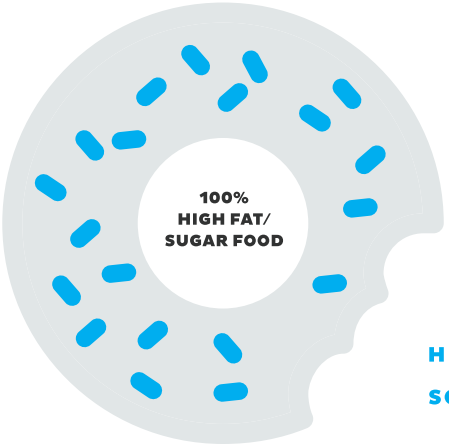
MAJOR STREETS

East Pacific Coast Highway East Burnett Street, Martin Luther King Jr. Ave, & Long Beach Boulevard.

POPULATION

2,078

RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	50%
SELLING QUALITY FRUIT	13%
SELLING QUALITY VEGETABLES	38%
SAFE, WALKABLE STREETS	18%

PARKS + PLAYGROUNDS

COMMUNITY GARDENS

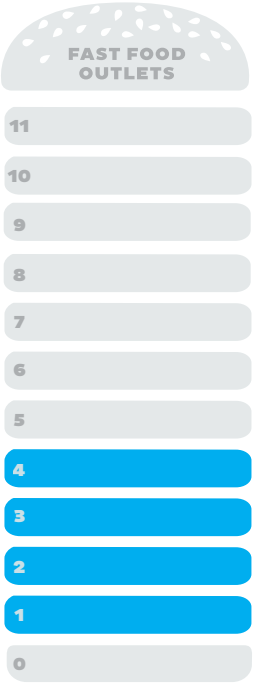
FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

CONVENIENCE STORES

FAST FOOD OUTLETS

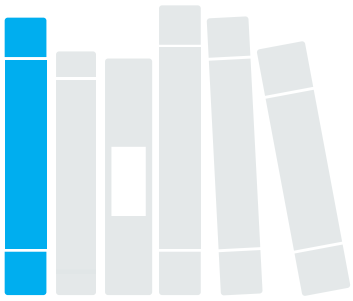


1:520
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY	66%
OVERWEIGHT ADULTS	58%
CAN WALK TO GROCERY STORE	80%

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

FROM SCHOOL

FROM PLAYGROUND

Cabrillo

OVERVIEW

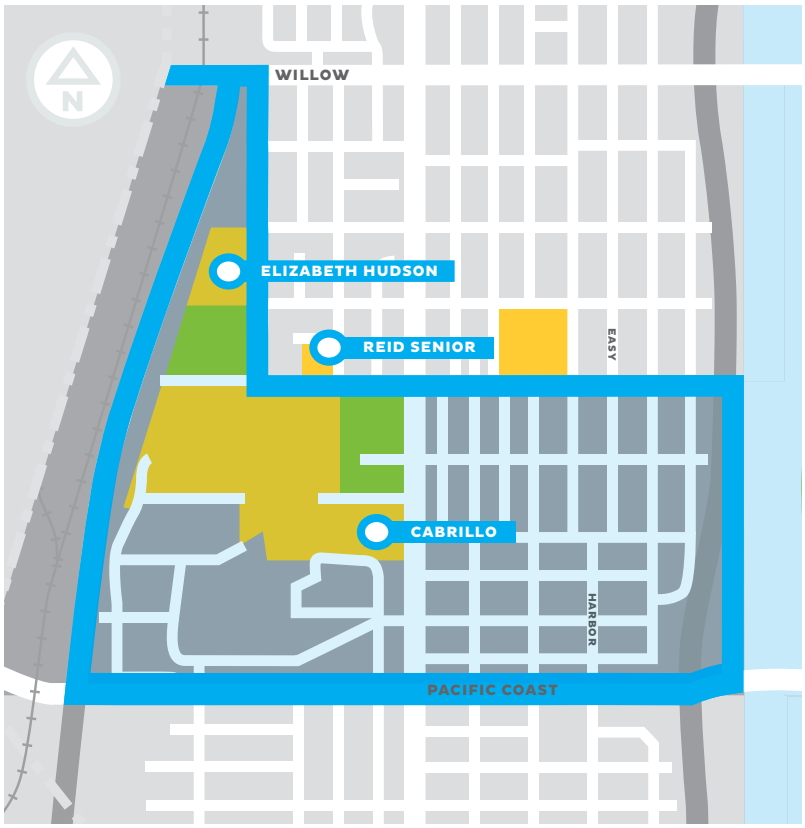
The Cabrillo High School neighborhood also has the Job Corp. campus and Admiral Kidd Park, a twelve acre park that serves over six thousand residents in the area. There is regional serving commercial activity and industrial uses along Pacific Coast Highway and a mix of commercial, residential and institutional uses along Santa Fe Avenue, the two primary thoroughfares. There is a mix of single family homes and medium density apartments in the neighborhoods and high density residential development on the Villages of Cabrillo campus at the southwest corner of the Cabrillo area.

MAJOR STREETS

West Hill Street, Pacific Coast Highway, & Webster Avenue.

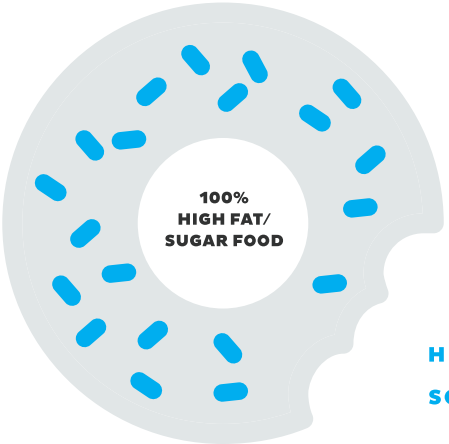
POPULATION

7,161



1250 FT 2500

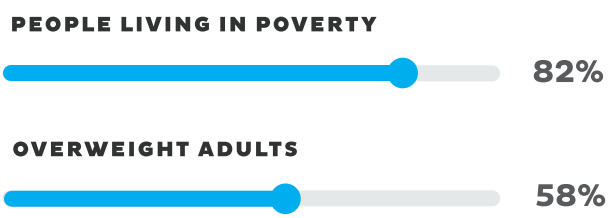
RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

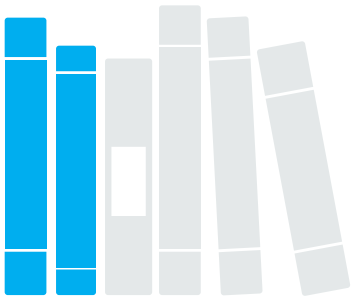
% OF STORES THAT MEET CRITERIA FOR

1:2,387
OUTLETS : PEOPLE



PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

Edison

OVERVIEW

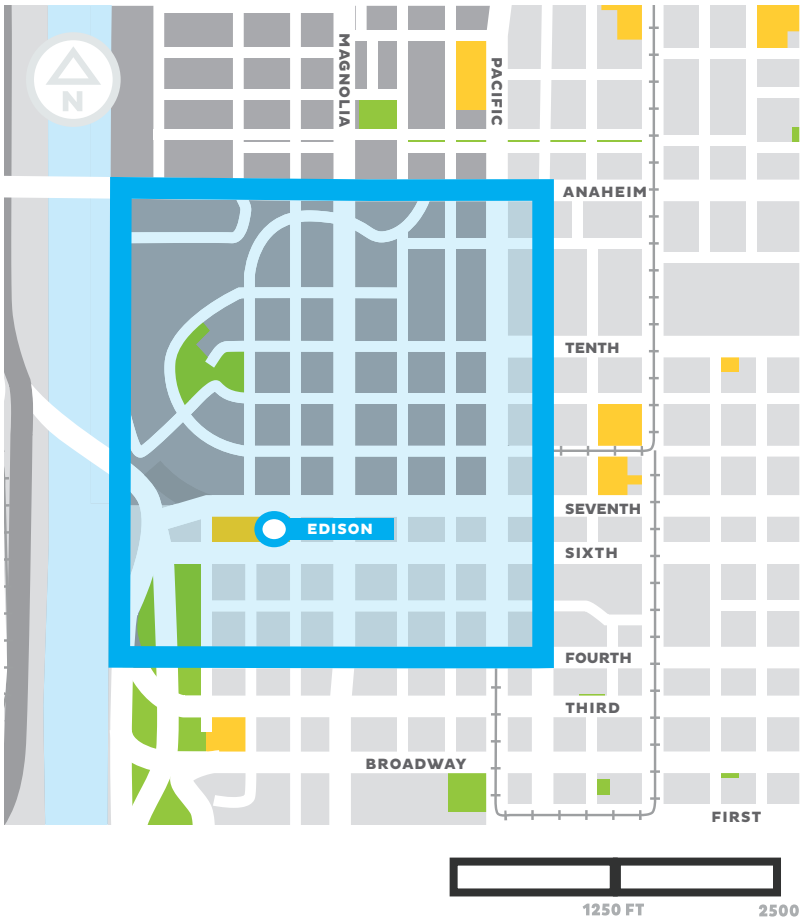
The Edison Elementary School Neighborhood also includes two community parks: Drake Park and Cesar Chavez Park, totaling 40 acres of park space, half of which are accessible to the public. There are plans to increase access to Cesar Chavez Park and expand Drake Park into a single greenbelt spanning the western edge of the Edison area. As the original historic core of Long Beach, the Edison neighborhood is made up of a rich tapestry of dense residential and mixed-use development. There is one grocery store to the southeast corner of the Edison area at 4th Street and Pacific Avenue.

MAJOR STREETS

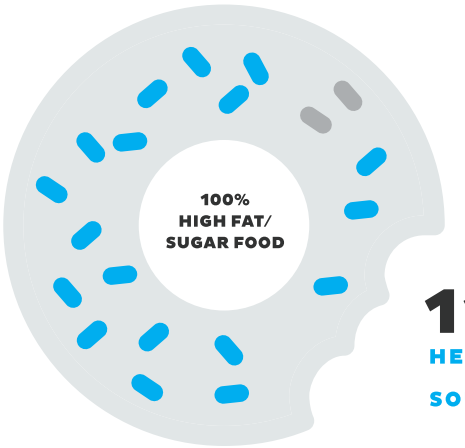
West Anaheim Street, West 4th Street & Pacific Avenue.

POPULATION

14,105



RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



11%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	56%
SELLING QUALITY FRUIT	11%
SELLING QUALITY VEGETABLES	22%
SAFE, WALKABLE STREETS	56%

PARKS + PLAYGROUNDS

COMMUNITY GARDENS

FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

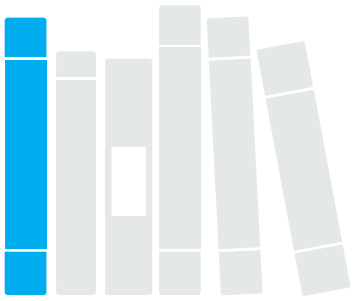
CONVENIENCE STORES

1 : 7,053
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY	81%
OVERWEIGHT ADULTS	58%
CAN WALK TO GROCERY STORE	60%

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

FROM SCHOOL

FROM PLAYGROUND

Franklin

OVERVIEW

The Franklin Middle School Neighborhood includes a second school campus, Lincoln Elementary School, as well as two museums: Museum of Latin American Art and Pacific Island Ethnic Art Museum. It consists of dense residential neighborhoods with corridors populated by residential, commercial and institutional uses. The recently completed Craftsman Village Park and under-construction Gumbiner Park provide just over one acre's worth of park space for over seven thousand residents.

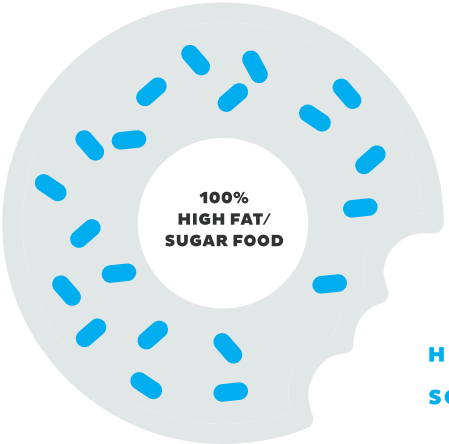
MAJOR STREETS

West Anaheim Street, West 4th Street & Pacific Avenue.

POPULATION

7,366

RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	80%
SELLING QUALITY FRUIT	10%
SELLING QUALITY VEGETABLES	30%
SAFE, WALKABLE STREETS	10%

PARKS + PLAYGROUNDS

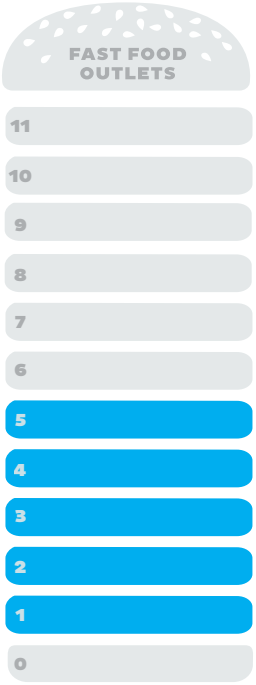
COMMUNITY GARDENS

FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

CONVENIENCE STORES

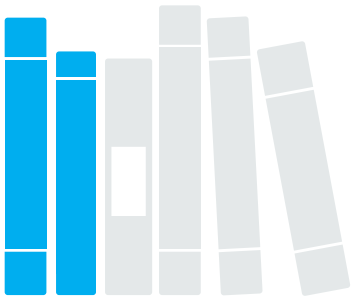


1:2,455
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY	72%
OVERWEIGHT ADULTS	52%
CAN WALK TO GROCERY STORE	92%

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

FROM SCHOOL

FROM PLAYGROUND

Lafayette

OVERVIEW

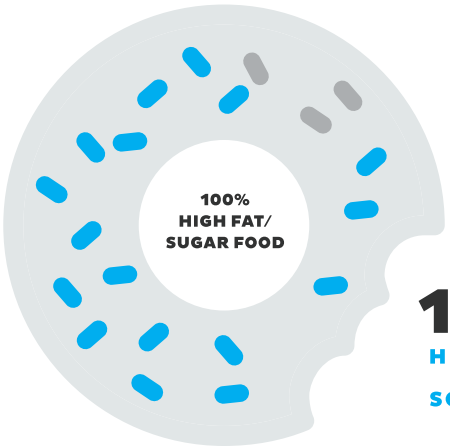
The Lafayette Elementary School Neighborhood also has the Holy Innocence Catholic School and three linear parks, Daisy Avenue Greenbelt, Cressna Park and 21st Park, the latter two lying on the east bank of the Los Angeles River. Single family homes on the western half of the Lafayette area transition to vintage apartments to the eastern residential interiors. Pedestrian oriented commercial uses flank Pacific Avenue, including one grocery store, while neighborhood serving and regional retail are located along Pacific Coast Highway and Willow Street.

MAJOR STREETS

West Anaheim Street, West 4th Street & Pacific Avenue.

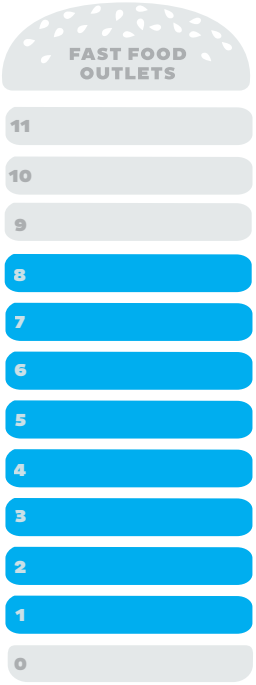
18,861

RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES

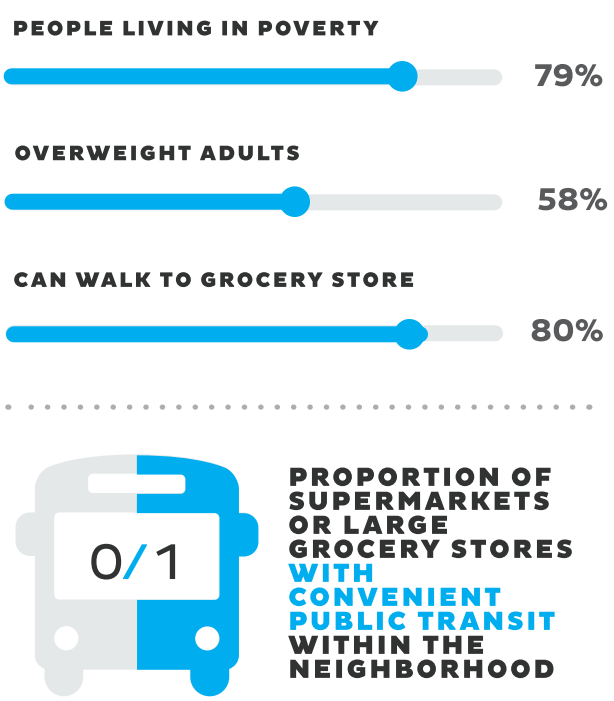


13%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

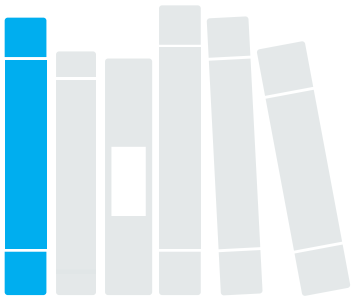


1:3,144
OUTLETS : PEOPLE



PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

Mary Butler

OVERVIEW

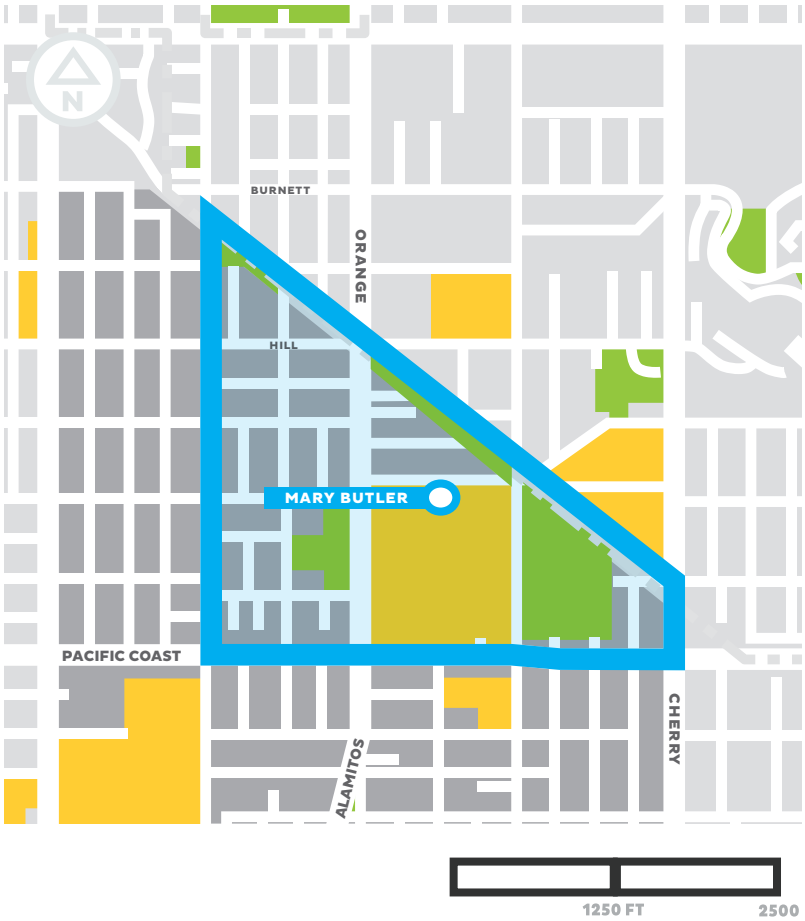
The Mary Butler Elementary School Neighborhood also includes Long Beach City College – Pacific Coast Campus and four parks: Martin Luther King Jr. Park, Jenny Rivera Park, Chittick Field and NAACP Freedom Park encompassing nearly 30 acres of open space for over four thousand residents. The Mary Butler campus had been serving as a temporary campus while Roosevelt Elementary School was rebuilt and will perform a similar role as Renaissance High School undergoes renovation. Commercial uses and institutions are predominantly located along Pacific Coast Highway while mixed density residential development populates the neighborhoods.

MAJOR STREETS

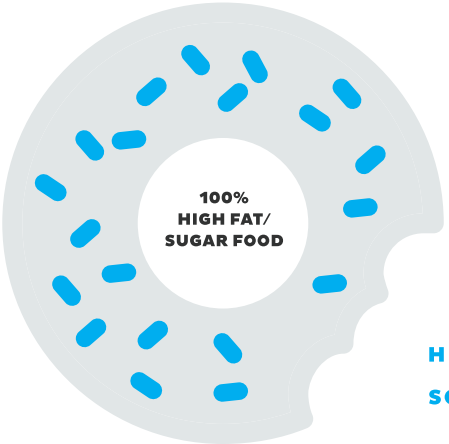
Anaheim, Martin Luther King Jr. Avenue, 7th Street, & Pine Street

POPULATION

4,265



RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	50%
SELLING QUALITY FRUIT	25%
SELLING QUALITY VEGETABLES	25%
SAFE, WALKABLE STREETS	0%

PARKS + PLAYGROUNDS

COMMUNITY GARDENS

FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

CONVENIENCE STORES

FAST FOOD OUTLETS

1:422
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY

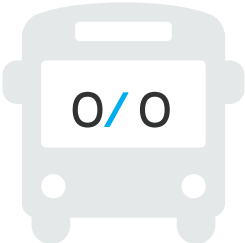
68%

OVERWEIGHT ADULTS

58%

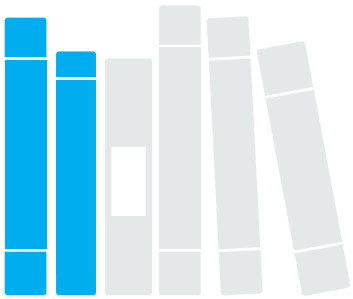
CAN WALK TO GROCERY STORE

0%



PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

FROM SCHOOL

FROM PLAYGROUND

Poly

OVERVIEW

The Poly High School Neighborhood also includes the recently reconstructed Roosevelt Elementary, as well as three parks: McBride Park, Peace Park and Rosa Parks Park which together provides less than 3 acres of park space for nearly eight thousand residents in this area. The neighborhoods of the Poly area are mixed density residential with a large diversity of uses along the various corridors. There is a grocery store located at the intersection of Anaheim Street and Atlantic Avenue.

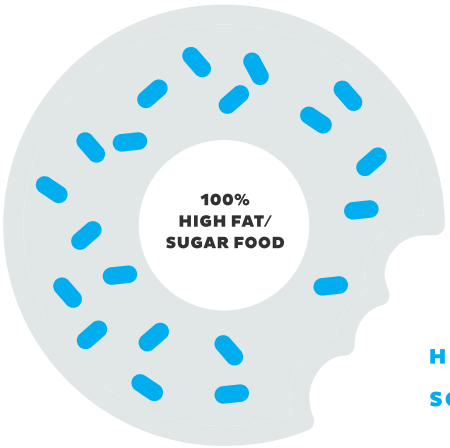
MAJOR STREETS

Pacific Coast Highway, Long Beach Boulevard, & Orange Avenue.

POPULATION

7,398

RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	88%
SELLING QUALITY FRUIT	50%
SELLING QUALITY VEGETABLES	50%
SAFE, WALKABLE STREETS	0%

PARKS + PLAYGROUNDS

COMMUNITY GARDENS

FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

CONVENIENCE STORES

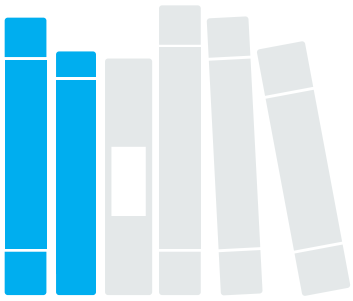
FAST FOOD OUTLETS

1:822
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY	80%
OVERWEIGHT ADULTS	58%
CAN WALK TO GROCERY STORE	90%

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

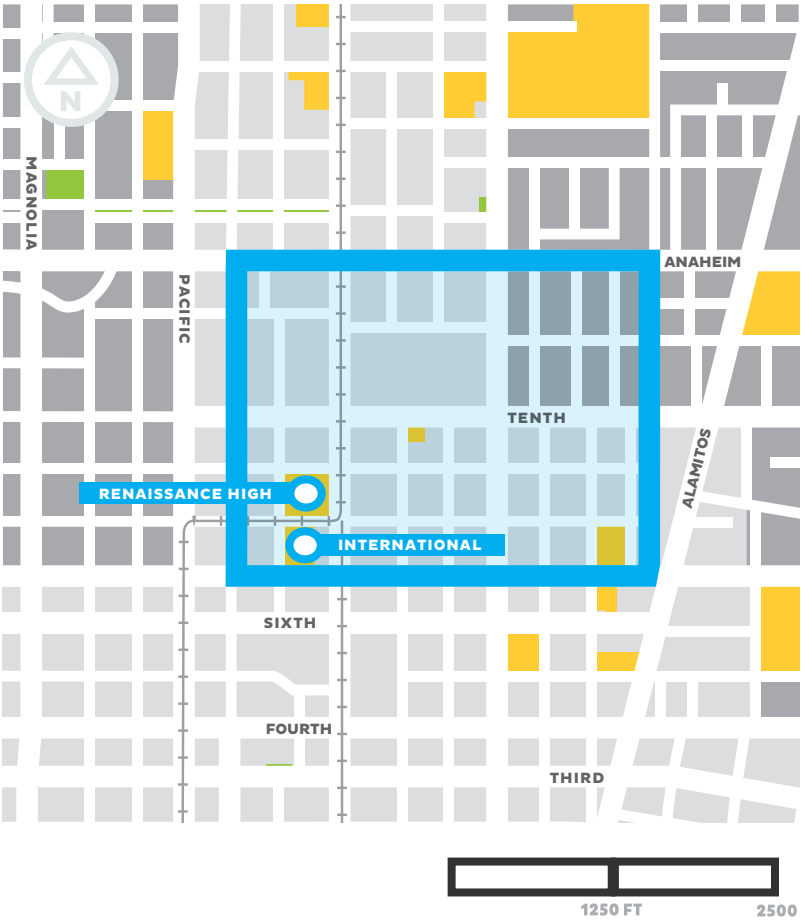
FROM SCHOOL

FROM PLAYGROUND

St. Mary

OVERVIEW

The St. Mary Hospital Neighborhood includes two school campuses, Renaissance High School and International Elementary School, yet no public parks for the area's nearly nine thousand residents. Being adjacent to the Downtown, the St. Mary area is made up of dense residential neighborhoods and mixed-use corridors. These corridors include senior housing, transit oriented development and one grocery store.



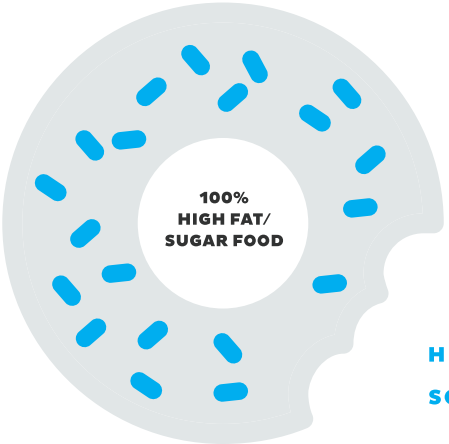
MAJOR STREETS

Anaheim, Martin Luther King Jr. Avenue, 7th Street, & Pine Street.

POPULATION

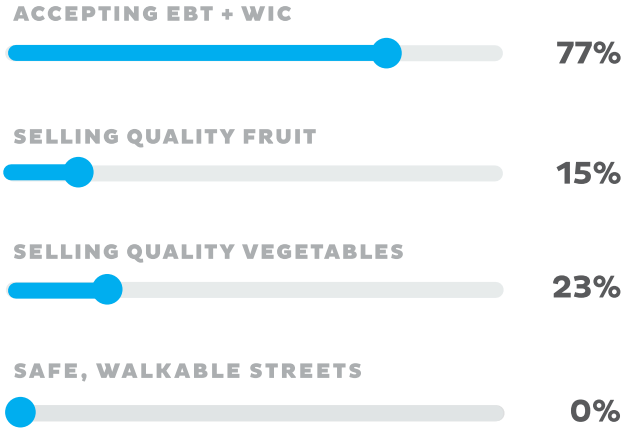
8,912

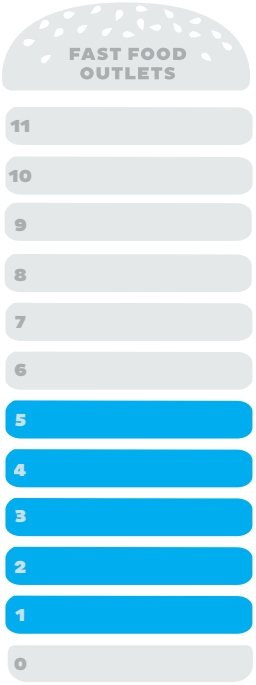
RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

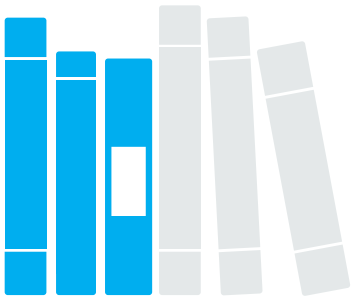




1:1,782
OUTLETS : PEOPLE

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS

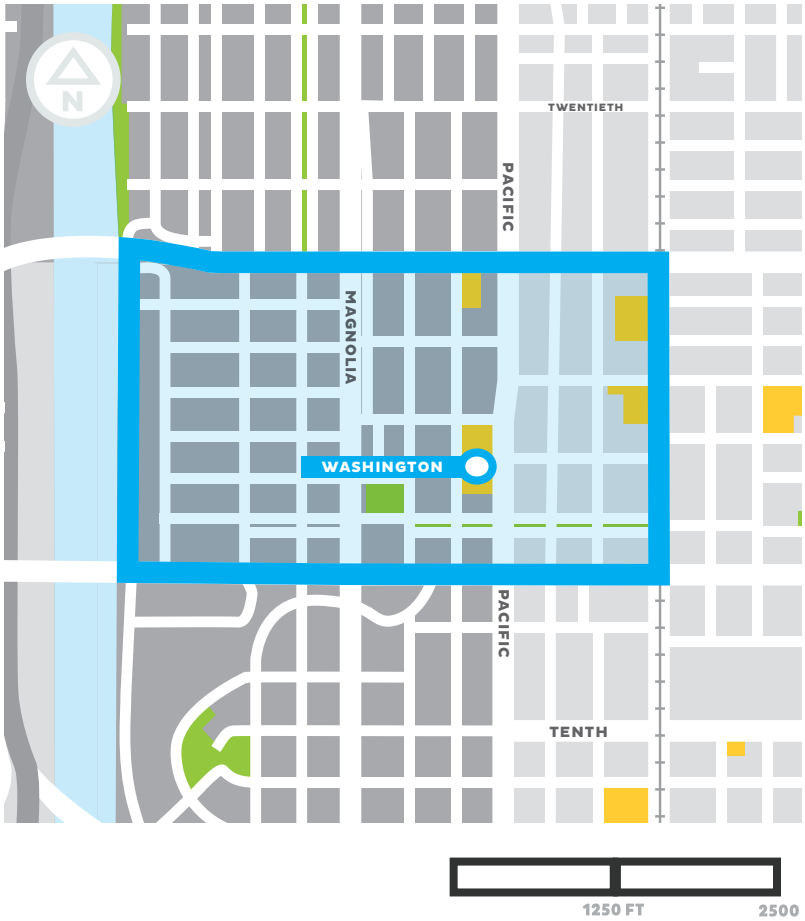


% OF FAST FOOD OUTLETS VISIBLE

Washington

OVERVIEW

The Washington Middle School Neighborhood also has the Poly PACE program campus on Long Beach Boulevard and two parks: 14th Street Park and Seaside Park encompassing over four acres of park space for over nine thousand residents. The Washington area has dense residential neighborhoods and an expansive mix of uses along its various corridors, including a concentration of neighborhoods serving retail along Anaheim Street.



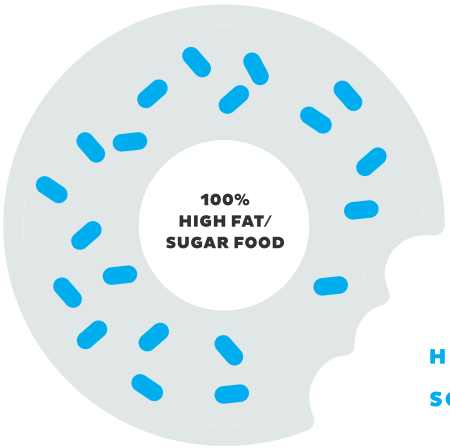
MAJOR STREETS

Pacific Coast Highway, Long Beach Boulevard, & East Anaheim Street.

POPULATION

8,912

RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES



0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

ACCEPTING EBT + WIC	45%
SELLING QUALITY FRUIT	20%
SELLING QUALITY VEGETABLES	20%
SAFE, WALKABLE STREETS	5%

PARKS + PLAYGROUNDS

COMMUNITY GARDENS

FARMERS MARKETS

SUPERMARKETS

SMALL MARKETS

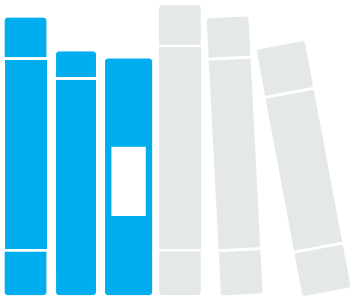
CONVENIENCE STORES

1:839
OUTLETS : PEOPLE

PEOPLE LIVING IN POVERTY	86%
OVERWEIGHT ADULTS	52%
CAN WALK TO GROCERY STORE	0%

PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

FROM SCHOOL

FROM PLAYGROUND

Whittier

OVERVIEW

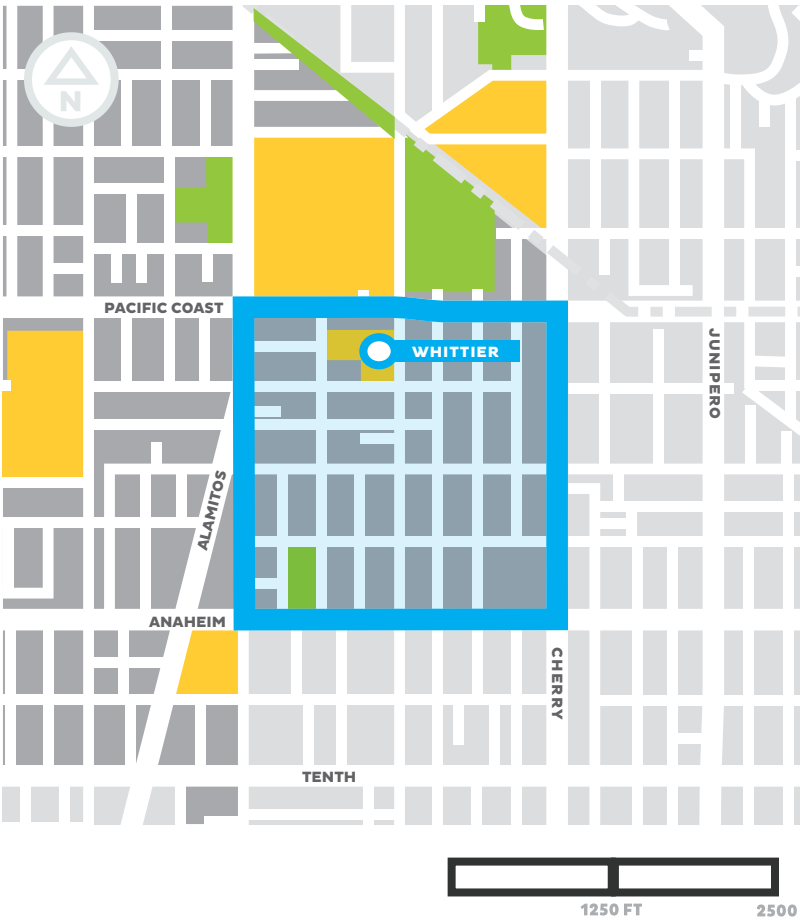
The Whittier Elementary School neighborhood has one park, the nearly four acre MacArthur Park, which serves nearly eight thousand residents. The neighborhood interiors are populated with apartment buildings and single-family homes, predominantly one or two stories tall, including a significant number of small vintage cottages along alley-courts. The thoroughfares have a significant amount of neighborhood and regional serving commercial activity, including one grocery store.

MAJOR STREETS

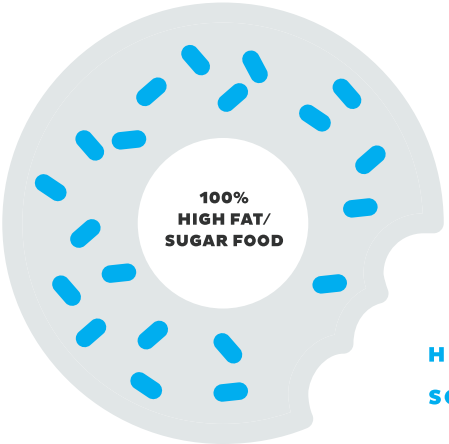
Pacific Coast Highway, Long Beach Boulevard, & East Anaheim Street.

POPULATION

7,398

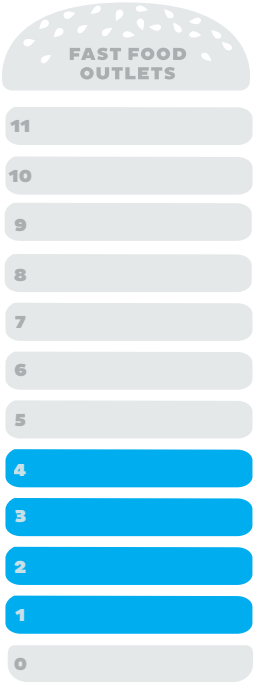


RATIO OF HIGH FAT/SUGAR FOOD SOURCES TO HEALTHY FOOD SOURCES

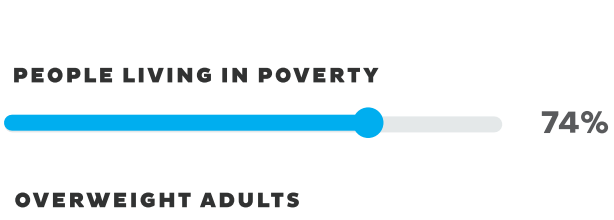


0%
HEALTHY FOOD SOURCES

% OF STORES THAT MEET CRITERIA FOR

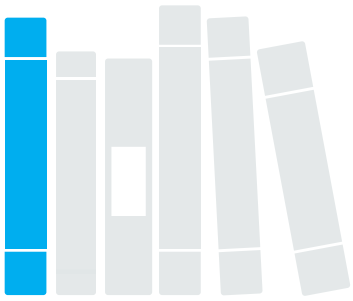


1:1,770
OUTLETS : PEOPLE



PROPORTION OF SUPERMARKETS OR LARGE GROCERY STORES WITH CONVENIENT PUBLIC TRANSIT WITHIN THE NEIGHBORHOOD

NUMBER OF SCHOOLS



% OF FAST FOOD OUTLETS VISIBLE

CHAPTER 3

Existing Conditions

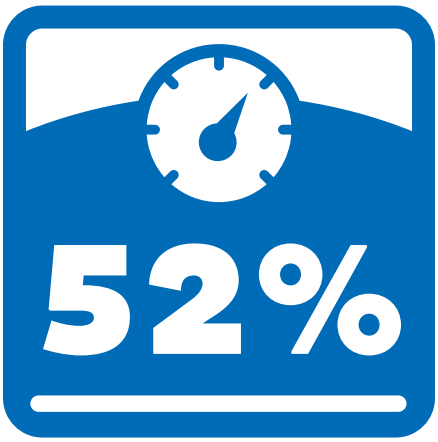
CREATING ENVIRONS WHERE PEOPLE CAN WALK & BIKE TO THE PLACES WHERE THEY WORK, STUDY AND SHOP; TO MEET FRIENDS OR MAKE NEW FRIENDS; OR TO SIMPLY JUST WATCH THE PARADE OF LIFE.

The portions of Central and West Long Beach within the pedestrian plan study area have largely been developed during the first part of the 20th Century, before cities were designed for automobiles. While these neighborhoods and commercial districts were originally built to be walkable, the streets and buildings have evolved to accommodate car travel, between the Downtown and other parts of Long Beach. At the same time, historic disinvestment of these communities had led to distressed residential populations as evident socioeconomically as well as public health indicators. Throughout all of this, the foundation of a walkable community still remains.

CX3 Snapshot

UNDERSTANDING THE PROBLEM
The nation is facing an epidemic of obesity as more than half of all adults in the United States are overweight or obese. Nearly 1 in 3 children [ages 2-19] in the nation are overweight or obese, putting them at risk for serious health problems. The likelihood of being overweight is influenced by the environment in which you live, from your ability to be physically active to your access to healthy food options. When comparing fast food restaurants and liquor stores to grocery stores and markets, there are four times as many unhealthy food outlets as healthy outlets in California.
Low-income communities tend to have the poorest food choices with even greater densities of restaurants and stores selling processed foods versus fresh produce. For these communities, the easiest choice, if there is one, is most often not the healthy one.

SELECTING CX3 NEIGHBORHOODS
To be a part of the CX3 area, the neighborhood must have at least 50% or more of the resident population at or below 185% Federal Poverty Level [based on 2010 Census]. Selected Long Beach neighborhoods have at least 50% are at or below 130% Federal Poverty Line as these residents suffer the greatest levels of poverty. Each neighborhood is



MORE THAN HALF OF ALL CX3 ADULT RESIDENTS ARE OVERWEIGHT OR OBESE.

DESIGNED FOR DISEASE: THE LINK BETWEEN LOCAL FOOD ENVIRONMENTS AND OBESITY AND DIABETES. CALIFORNIA CENTER FOR PUBLIC HEALTH ADVOCACY, POLICYLINK AND THE UCLA CENTER FOR HEALTH POLICY RESEARCH. APRIL 2008.

based around an elementary, middle and/or high school, or in one case, St. Mary Medical Center.

Based on the data collected, the neighborhoods are clustered within Central Long Beach and the southern portion of the Westside. This delineation generally followed similar place-based investments from programs like the former Redevelopment Agency Central Project Area and Building Healthy Communities Long Beach, an initiative of the California Endowment. These neighborhoods have recognized defining geography, typically major thoroughfares, physical landmarks or municipal boundaries, and have organized the political will to make positive change in their respective communities. The geographic size of each of these CX3 neighborhoods were generally consistent to provide relatively consistent comparison of data sets.

KEY NEIGHBORHOOD FINDINGS

Residents and local stakeholders identified a number of key finds when assessing the CX3 Neighborhoods:

- There is limited access to affordable, healthy foods!
- Stores and Fast Food Outlets do not meet standards for health.
- Residents often pay more for fruit and vegetables compared across the County.
- Most liquor stores do not comply with California's signage law [Lee's law].
- Most neighborhoods are lacking safe places for play.
- Areas around schools have high concentration of unhealthy food choices.

I would enjoy having smoother sidewalks where I live. Also, I have a baby and the sidewalk is too rough for a stroller.

LONG BEACH RESIDENT

CX3 NEIGHBORHOOD PRIORITIES

Improve Walkability: Residents and local leaders voted overwhelmingly that the need to improve safe, active transport in the neighborhoods was a top priority. This includes creating dedicated bicycle facilities and improving safety and accessibility for pedestrians.

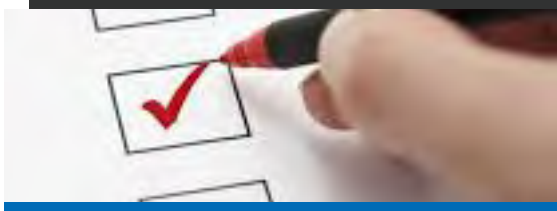
Access to Healthy Foods: Increasing access to healthy, affordable foods – specifically fruits and vegetables – was the number one priority! Recognizing that there are more fast foods restaurants and liquor stores than markets and grocers, residents want to see more, healthy, affordable food options.

MAPPING THE NEIGHBORHOOD

A wide range of indicators were used to understand our neighborhoods nutrition environments. Using Geographic Information Systems software, site visits, interviews and store surveys, health officials and volunteers examined factors ranging from healthy food access and availability to marketing practices and product quality.

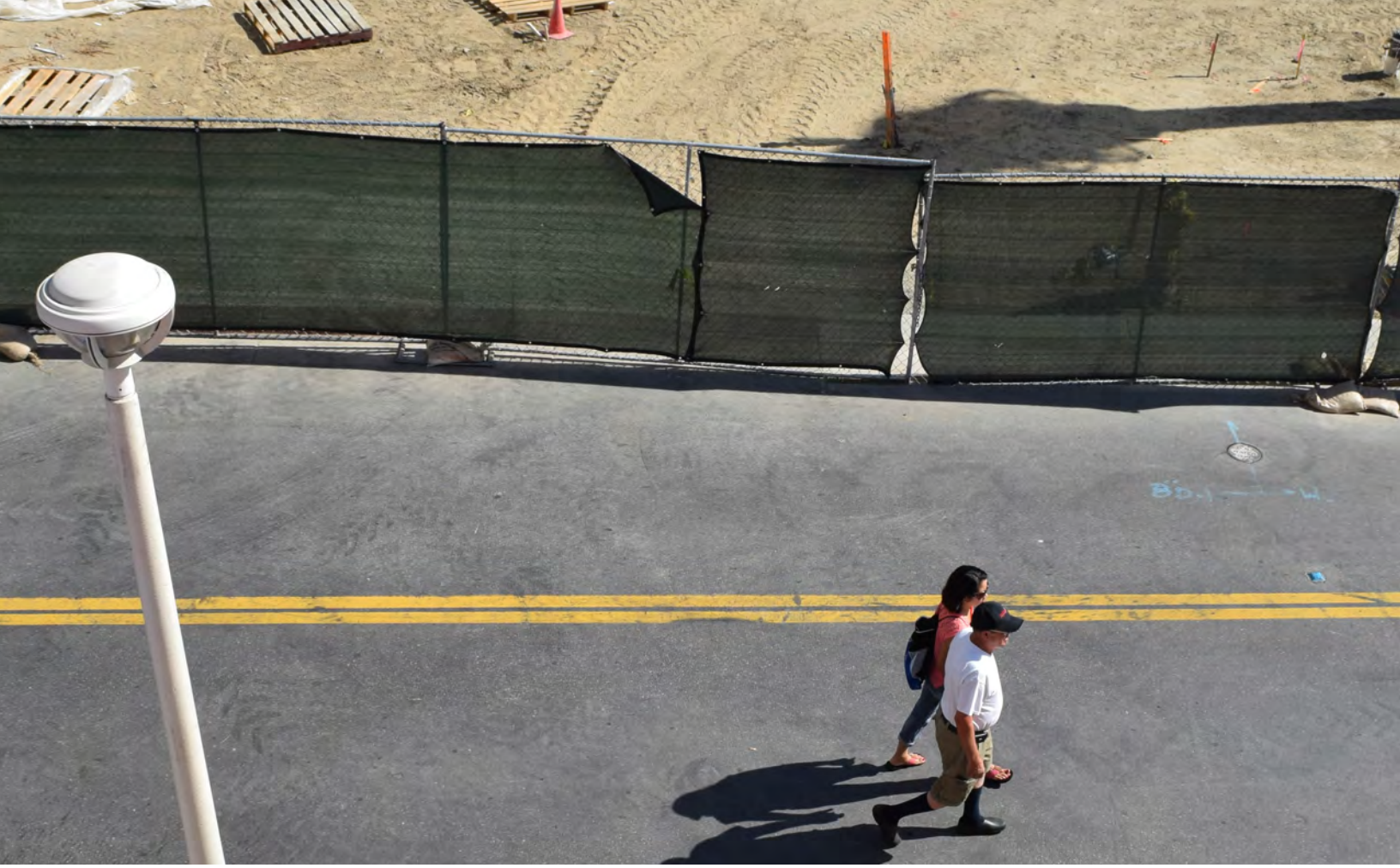
WHAT DID WE LOOK AT?

- All types of food stores
- Fast Food Outlets
- Walkability
- Parks and Schools
- Transit
- Outdoor Media
- Healthy Foods
- Emergency Food Outlets



QUALITY CRITERIA

- Food Access
- Food Price
- Food Availability
- Nutrition Information
- Exterior Advertising
- Interior Advertising
- Promotions
- Walkability



Pedestrian Environment

The public right-of-way is the space between public and private parcels; it is made up of the roadway, sidewalks, parkways and medians; its character affects how users behave within it. Wide streets tend to lead to drivers traveling at higher rates of speed, while narrow sidewalks tend to preclude crowds from walking in a commercial district. As nearly a quarter of Long Beach's fifty square mile land area is made up of the public right-of-way, the policies, programs and design standards for it can have significant consequence on mobility, economic conditions, the environment, public health and quality of life.

The pedestrian plan study area, which encompasses Central Long Beach and portions of the Westside, was largely developed in the early part of the 20th Century, before cities' transportation network became dominated by automobiles. Much of the area was served by trains and a streetcar network, which at the time was part of the most extensive metropolitan transit network in the world. Most streets within the study area were constructed as two-lane roadways with flanking sidewalks and parkways on either side. Some streets had wider roadways, as more significant thoroughfares or in some cases to carry fixed rail transit.

Transportation trends have altered how these streets function as increasing automobile volumes and speeds led to a greater number and severity of conflicts with other cars as well as pedestrians and cyclists. Some roadways have been made wider for automobile traffic, at the expense of sidewalk width. Most Central Long Beach and Westside streets remain intact, providing a strong foundation to build a walkable community. The focus area's traditional pattern of compact, mixed-use development, dense transit network and generally even distribution of community amenities also lends itself to walking.

Environmental Factors

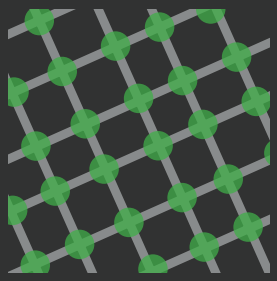
EVOLUTION OF THE STREET GRID

PED FRIENDLY INTERSECTION

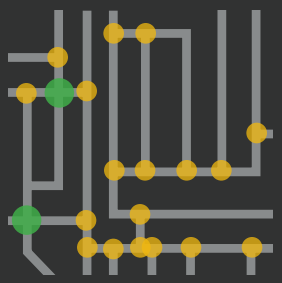
CAR DEPENDENT CUL-DE-SAC

"T" INTERSECTION

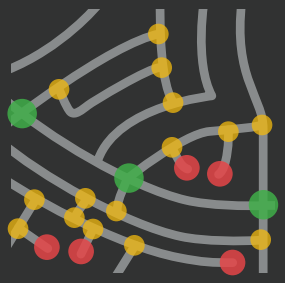
1900: GRIDIRON



1950: FRAGMENTED PARALLEL

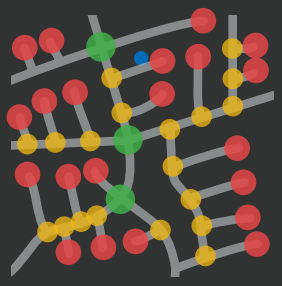


1960: WARPED PARALLEL



1970: LOOPS & LOLLIPOPS

1980: LOLLIPOPS ON A STICK



STREET NETWORK

The consistency and density of the street network often determines how walkable an area can be.

Communities defined predominantly by large, impermeable blocks or populated by significant numbers of cul de sacs and dead-end streets tend to be difficult for pedestrians to navigate. Finer block structures and consistent street networks provide more options for traversing neighborhoods to a desired destination. Major public infrastructure or job centers can pose challenges for walkability if they are designed as closed campuses or without interruptions.

WALK SCORE, WHICH USES INTERSECTION DENSITY, BLOCK LENGTH AND POPULATION DENSITY TO MEASURE THE WALKABILITY, GIVES LONG BEACH A SCORE OF 69, SOMEWHAT WALKABLE.

WALKSCORE.COM, 2016

Central Long Beach was largely developed with a varied street grid but consistently walkable block structures. The primary grid is based on quarter mile increments in both north and south directions with finer, varied street networks in between. Most blocks in the downtown have a nearly square dimension of 400-440 feet distances. Outside of the downtown area, the grid more often has a rectilinear bias with the narrow direction being less than 400 feet and the long direction being closer to 800. In the focus area Commercial districts are more linear Main Streets along thoroughfares.

While the traditional nature of the street network creates mostly walkable neighborhoods and commercial districts, there are breakdowns in the street grid that isolate some neighborhoods. The most significant interruption is the Los Angeles River and Interstate 710 Freeway, that together create a near impermeable quarter mile wide barrier with few connections between Central and West Long Beach. Additional breakdowns of the street network accommodate large institutions, including Poly High School, Long Beach City College and former Cabrillo military housing complex, now Cabrillo High School, Job Corp., Villages at Cabrillo and Long Beach State Technology Park.

N
WARDLOW
710
405
SPRING
SANTA FE
MAGNOLIA
PACIFIC
LONG BEACH
ATLANTIC
ORANGE
CHERRY
WILLOW
JUNIPERO
PACIFIC COAST
ANAHEIM
NINTH
TENTH
SEVENTH
SIXTH
PICO
FOURTH
THIRD
BROADWAY
FIRST
OCEAN
PINE
HARBOR
BLOCK STRUCTURE
Street Block
CX3 Project Site
0
0.5 mi
1 mi

STREET HIERARCHY & WIDTH

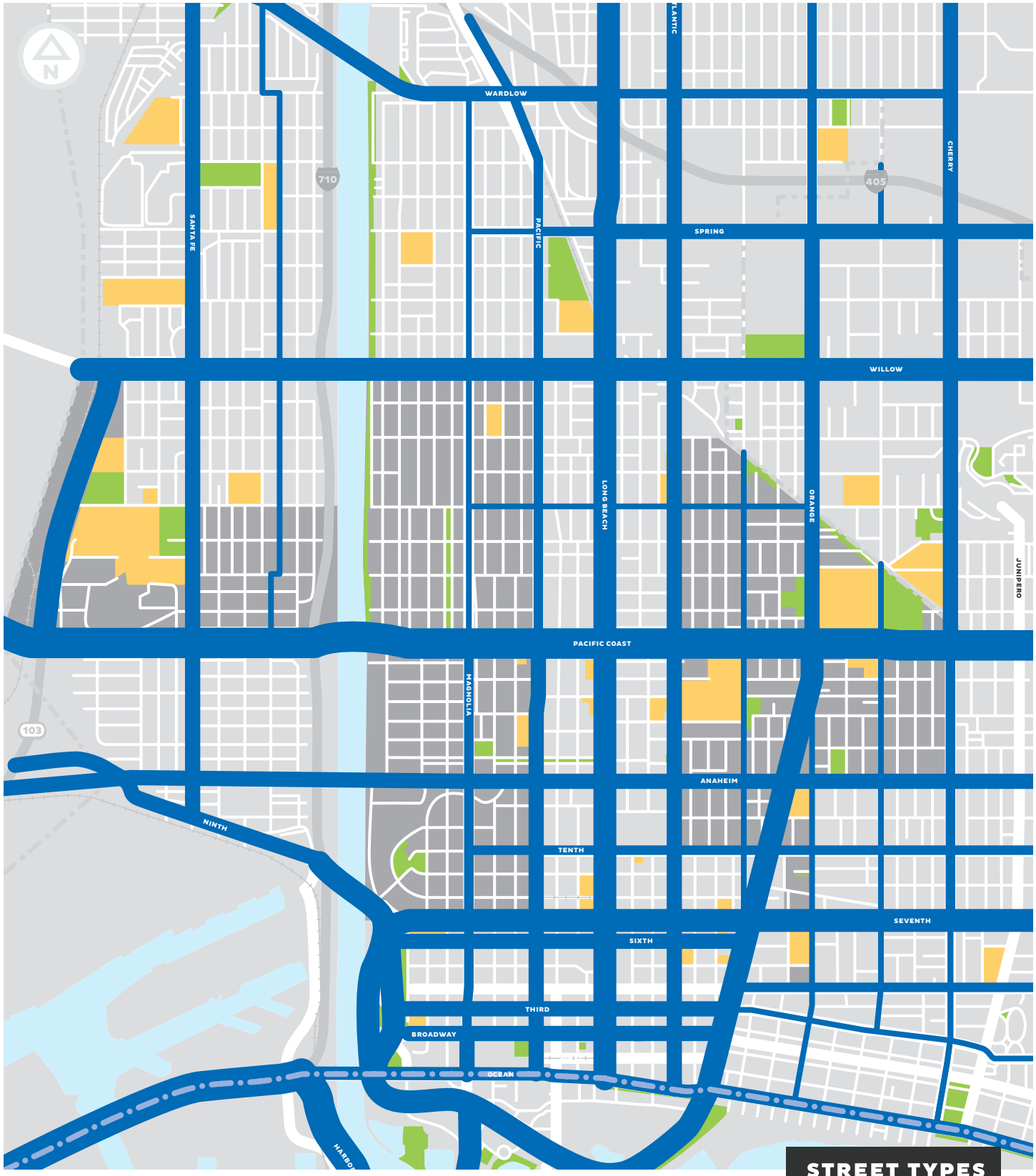
While streets are typically intended to accommodate all users, many are designed to emphasize specific types of transportation.

Street widths and configuration change are based on their intended purpose, alleys are designed to provide service to the rear of properties, while neighborhood streets that offer local connections from major thoroughfares move transit and cars regionally. Well-functioning transportation networks have a street hierarchy that serve different transportation demands while also accommodating the well-being of the local community.

The hierarchy of streets in Central and West Long Beach are established by regional corridors including the Interstate 710 Freeway and Pacific Coast Highway with a consistently spaced grid of boulevard and avenues. The major connections through Central and West Long Beach are the north-south thoroughfares Pacific, Atlantic, Alamitos and Santa Fe Avenues, along with east-west corridors 7th, 10th, Anaheim and Willow Streets. Easy, Magnolia, Martin Luther King Jr., Walnut Avenues and Hill Street serve as secondary connections. These are often designed similarly to local streets which has led to impacts to both the transportation network as well as the communities they travel through.

The width of the street will often determine how it will be used: wide streets tend to promote high rates of vehicle speed, narrower streets promote greater pedestrian permeability, as just a couple examples. Roadways with surplus vehicle carrying capacity have been modified to create bicycle facilities, expand pedestrian amenities, add landscaping and increase vehicle parking by manipulating the width and number of lanes.

The streets designed to carry higher traffic volumes in Central and West Long Beach tended to be the wider, with Pacific Coast Highway, Willow Street, Long Beach Boulevard, Pacific Avenue and Santa Fe Avenue being the widest. Perception varies between them as the well-landscaped raised medians on Pacific and Santa Fe appear more intimate than that of Pacific Coast Highway and portions of Willow Street. Not including a few streets that, due to prior issues, once had train tracks that led to wider roadways, such as Martin Luther King Jr. and Daisy Avenues, local streets are generally appropriately sized.

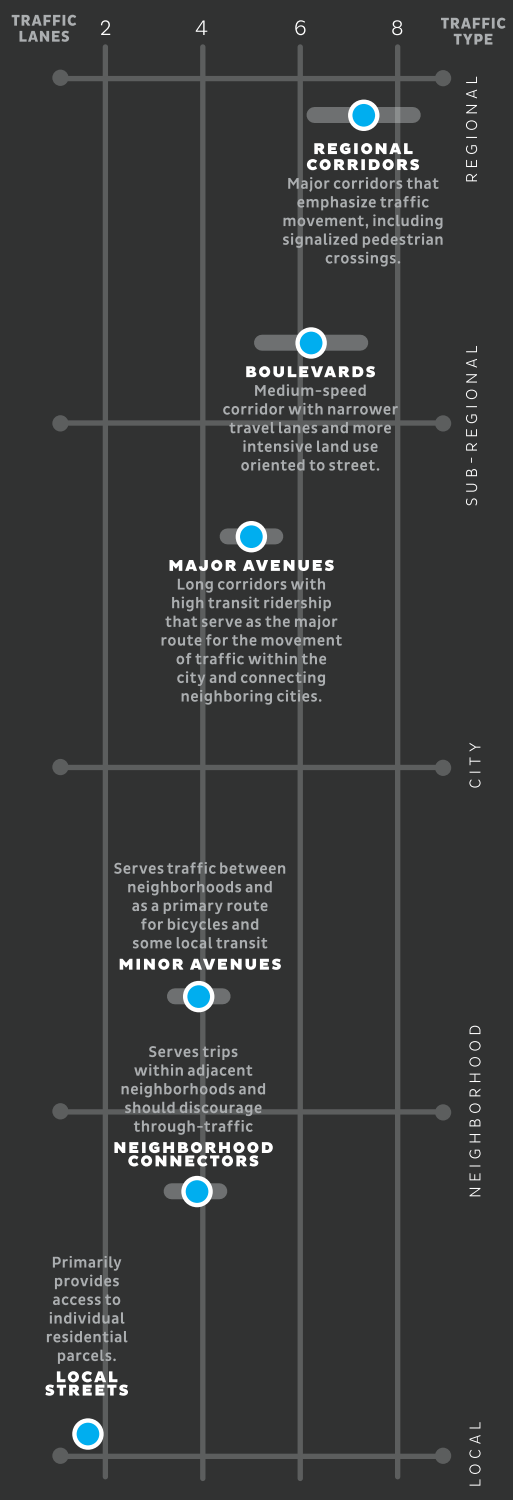


STREET TYPES

- Street Block
- CX3 Project Site
- Neighborhood Connector
- Minor Avenue
- Major Avenue
- Boulevard
- Regional Connector
- Scenic Route

0 0.5 mi 1 mi

STREET TYPOLOGIES & TRAFFIC



From the City of Long Beach Mobility Element Table 4: Contest Sensitive Classification System Definitions, P. 74

TRAFFIC VOLUME

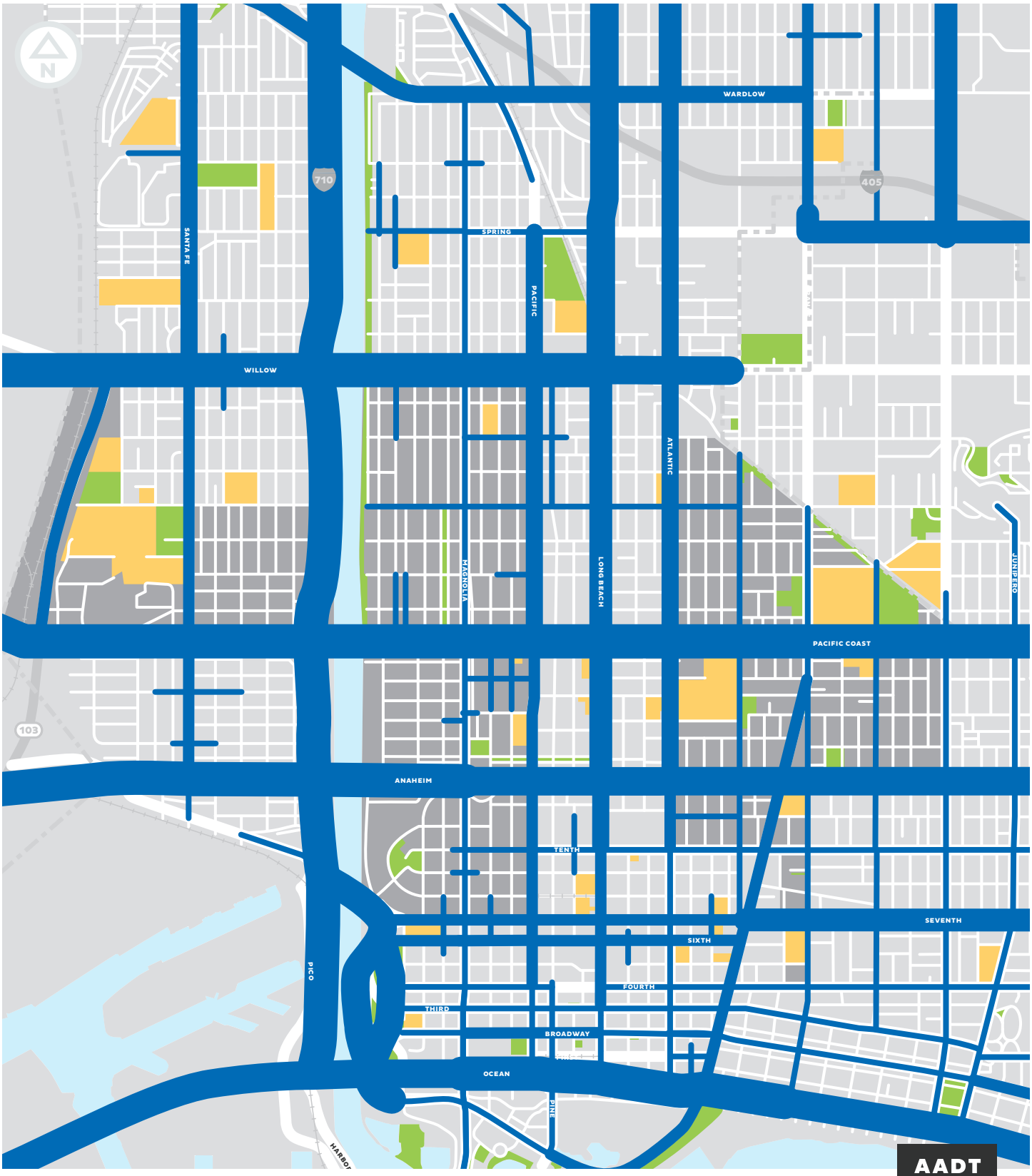
The street network hierarchy's is largely based on its ability to accommodate volume of traffic safely and efficiently.

The Boulevards and Avenues are designed to carry more vehicles using multiple travel lanes as well as active traffic controls like signals. Local streets carrying fewer cars tend to be narrower with a single travel lane in either direction with stop signs providing more passive traffic control. Current land-use planning often support these traffic patterns with regional and neighborhood serving commercial uses and other more intensive development like office buildings and residential complexes on major thoroughfares, while local streets serve residential neighborhoods and smaller scale development.

Central and West Long Beach focuses the majority of vehicle traffic on these thoroughfares with the local streets serving those immediate needs. The primary east-west corridors of 7th Street, Anaheim Street, Pacific Coast Highway and Willow Street carry twice the volume of the secondary routes 4th, 10th and Hill Streets. The north-west corridors more evenly distribute vehicle traffic volume between Santa Fe, Pacific Avenue, Long Beach Boulevard, Atlantic Avenue and Alamitos Avenue and Easy, Magnolia, Martin Luther King Jr. Avenues carry more local traffic volumes. East-west traffic volumes generally remain consistent throughout Central and West Long Beach while north-south volume tends to be less until reaching the Downtown.

The traffic volume andspeed makes walking in this area feel really unsafe, especially at the crosswalks.

WASHINGTON RESIDENT



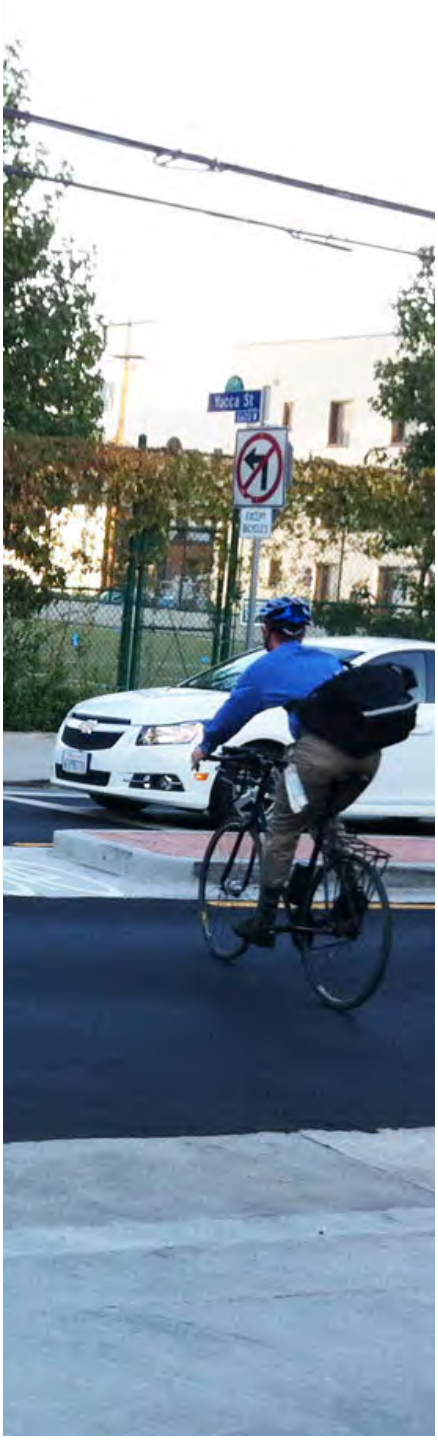
Street Block
CX3 Project Site
5,001 - 10,000
10,001 - 15,000
15,001 - 20,000
20,001 - 25,000
25,001 - 30,000
30,001 - 35,000

0 0.5 mi 1 mi

AADT is the annual average daily travel which indicates the amount of vehicle travel per day with data taken over the span of a year.

SPEED LIMIT

As streets are designed to carry different types of traffic they each have designated maximum travel speeds for vehicles reinforcing their respective local to regional purpose.

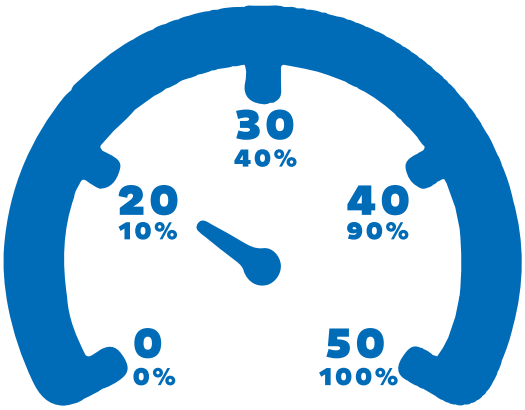


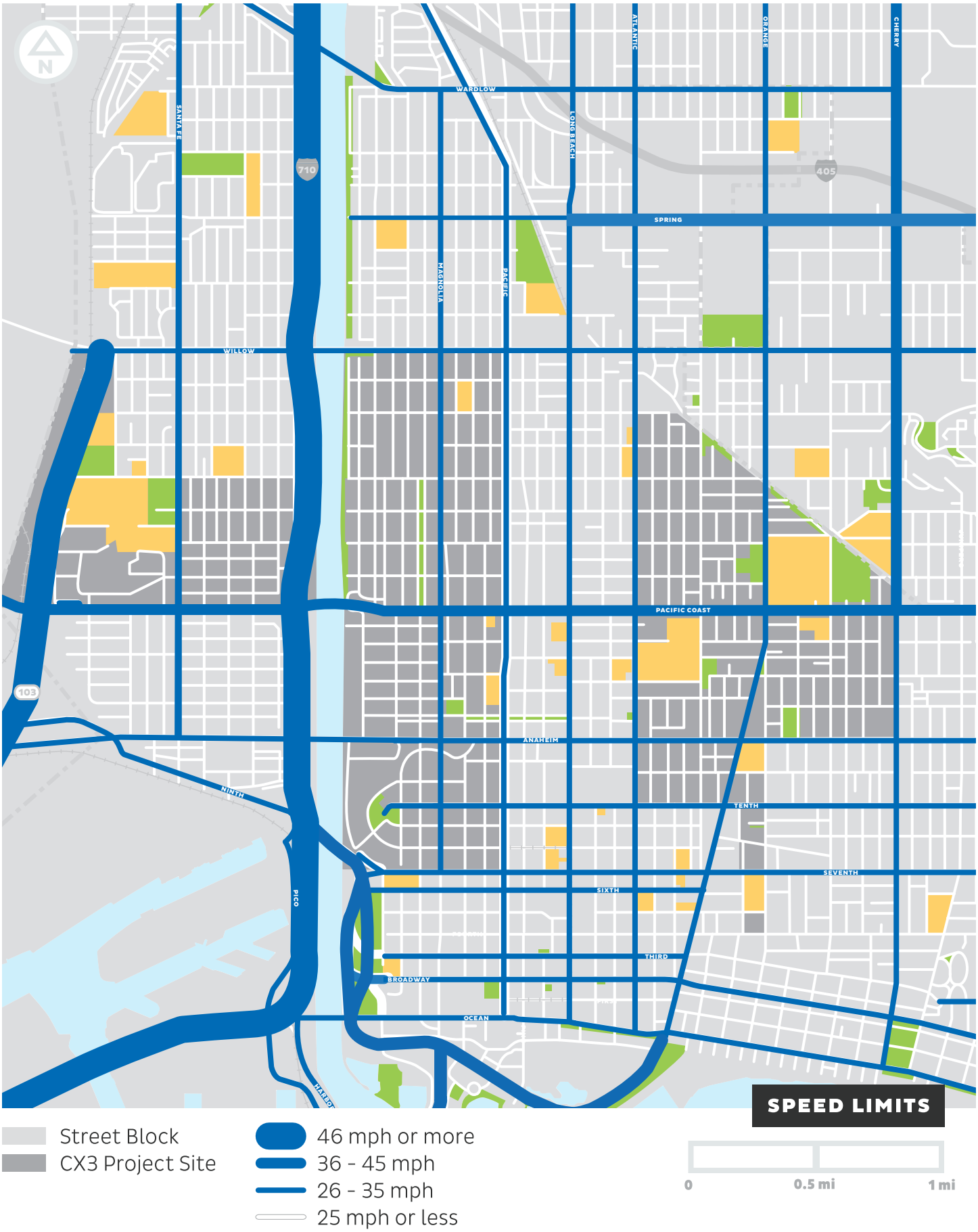
Major thoroughfares that connect regional distances tend to have higher speed limits between 30 and 40 miles per hour while local streets tend to have lower speed limits as vehicles tend to travel shorter distances on to their ultimate destination, typically a residential neighborhood or school. The actual speed of vehicle traffic will affect the safety as well as the sense of comfort for pedestrians occupying the adjacent sidewalks.

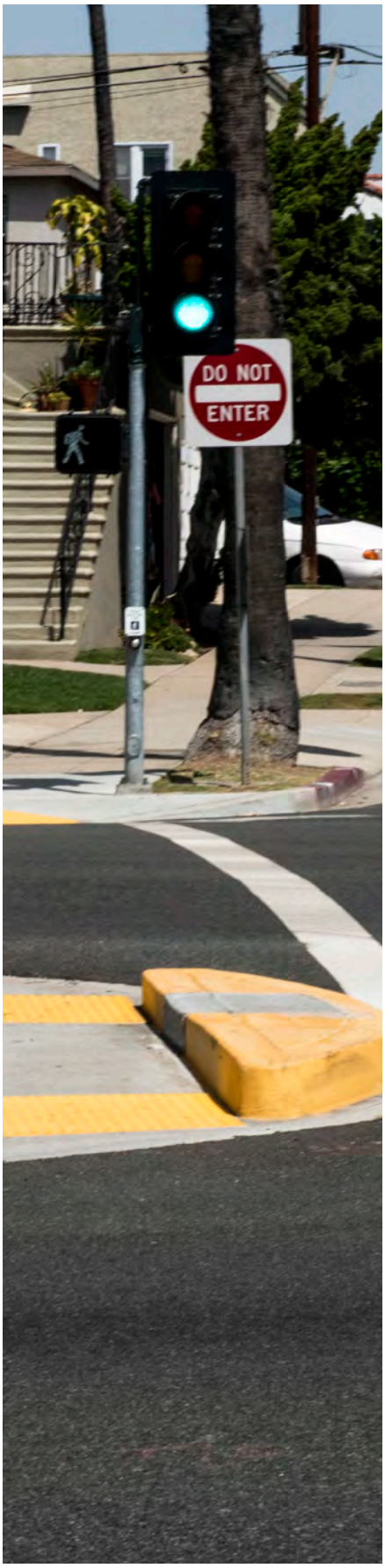
The majority of thoroughfares in Central and West Long Beach have posted speed limits of 30-35 miles per hour with some streets observing 25 mile per hour reductions when children are present around nearby schools. Local streets are limited to 25 mile per hour vehicles speeds though there are a few streets in West Long Beach with 15 mile per hour speed limits posted. There are a number of streets where average travel speeds significantly surpass the posted limit, often due to surplus roadway capacity, distance between traffic controls or reduced friction from peak traffic period restrictions to on-street curbside parking.

WHEN STRUCK BY A CAR, PEDESTRIANS HAVE A SURVIVAL RATE OF 90% AT 20 MPH AND A MORTALITY RATE OF 90% AT 40 MPH.

U.S. DEPARTMENT OF TRANSPORTATION LITERATURE REVIEW ON VEHICLE TRAVEL SPEEDS AND PEDESTRIAN INJURIES, 1999




N
SANTA FE
710
WARDLOW
LONG BEACH
ATLANTIC
ORANGE
CHERRY
405
SPRING
MAGNOLIA
PACIFIC
WILLOW
PACIFIC COAST
103
ANAHEIM
NINTH
TENTH
SEVENTH
SIXTH
PICO
THIRD
BROADWAY
OCEAN
HARBOR
SPEED LIMITS
Street Block
CX3 Project Site
46 mph or more
36 - 45 mph
26 - 35 mph
25 mph or less
0
0.5 mi
1 mi



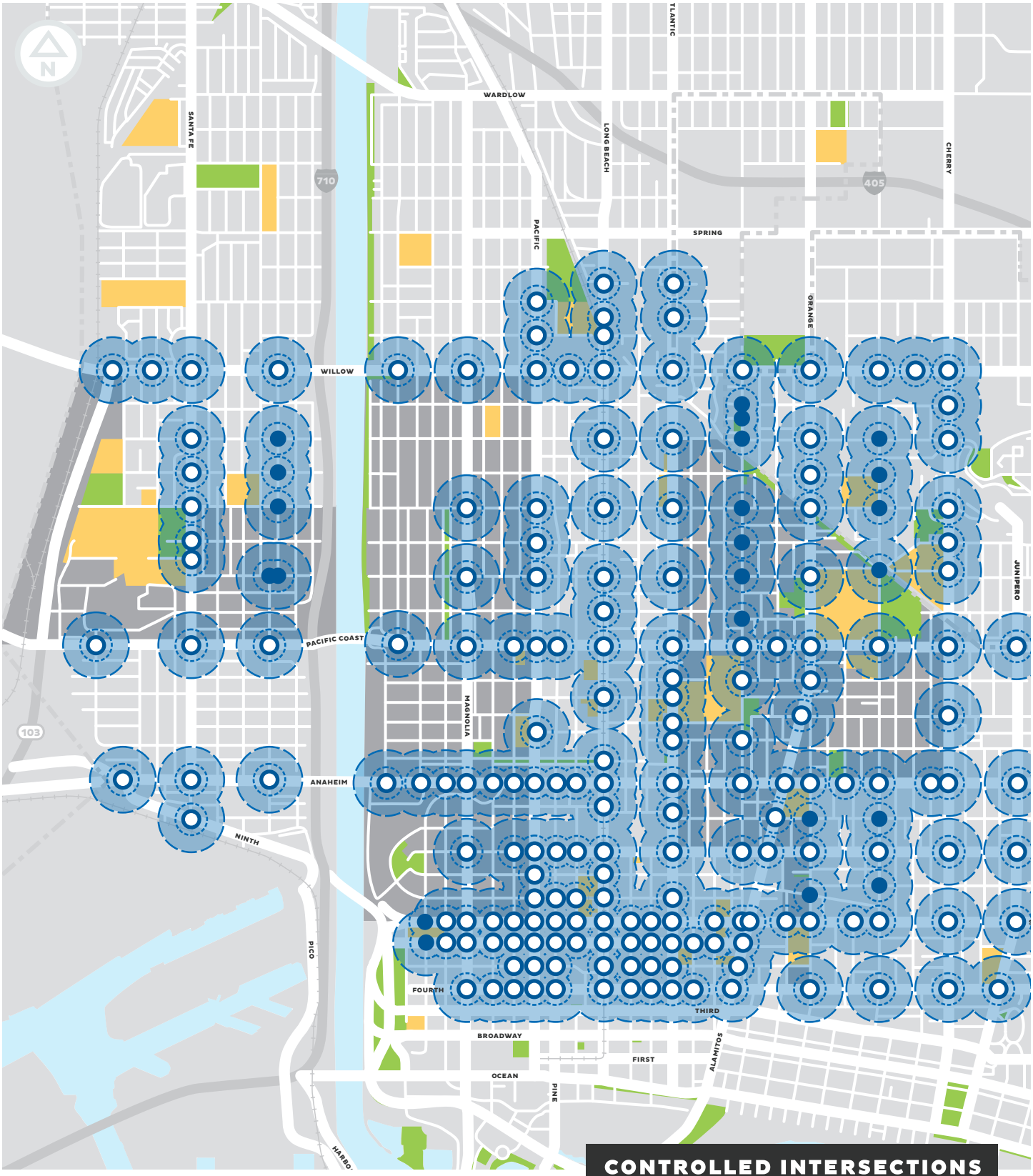
CONTROLLED CROSSINGS

Most modern intersections of streets have traffic controls to manage who, whether vehicle or pedestrian, has the right of way to enter and travel through first.

As traffic volume and speeds increase, the need for controls between directions and types of traffic become more necessary. On local streets, these controls can be provided by little more than a stop sign for two or more directions of travel, but Avenues and Boulevards need traffic signals with appropriate markings to safely manage vehicle and pedestrian movement. Often these signalized intersections are limited to serving the needs of vehicle movement which can be detrimental to pedestrians who typically need shorter increments of controlled opportunities to safely cross major streets.

> **Last year, there was a pedestrian that died trying to cross the street. There is no traffic signal and the crossing distance is really long.**
>
> WASHINGTON RESIDENT

Consistency within the street grid of Central Long Beach lends to diverse options for traversing through and between neighborhoods. Traffic controls are provided at the intersections of boulevards and avenues to focus automobile traffic out of the neighborhoods. The limited number of traffic controls at secondary intersections on major streets has led to longer distance between pedestrian crossings along some corridors intended to be Pedestrian Priority Areas according to the Mobility Element.



CONTROLLED INTERSECTIONS

Street Block
CX3 Project Site
Stop Signs
Traffic Signals
1 Block Radius
2 Block Radius

0 0.5 mi 1 mi

PEDESTRIAN ACCESSIBILITY

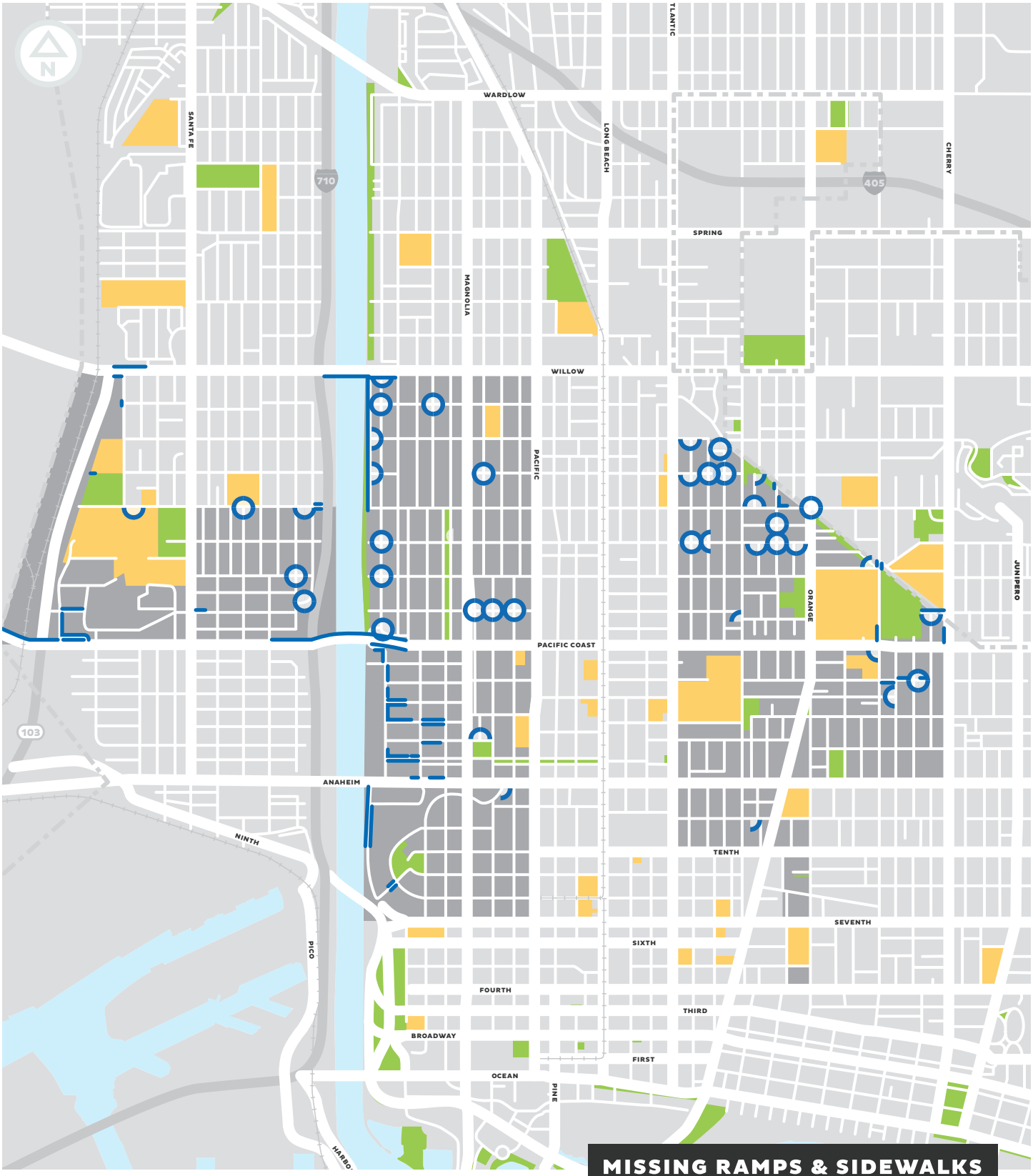
The traditional street will have sidewalks flanking the roadway, built upon raised curbs.

The sidewalks are designed to provide safe pedestrian facilities separated from the vehicles traveling at higher rates of speed. The sidewalks' availability and navigability will determine how accessible a community is for those with limited mobility whether due to age, disability or families walking with children. With raised sidewalks, properly designed ramps at all corners of an intersection is essential to accommodate this same audience.

Due to predominantly being developed as a streetcar community, Central and West Long Beach are fortunate to have sidewalks flanking most streets. Missing sidewalks on thoroughfares crossing the Los Angeles River and I-710 Freeway and throughout some of the industrial areas pose significant impediments to connectivity. Narrow sidewalks on Alamitos Avenue and Pacific Avenue can make these corridors inaccessible where sloping driveways and infrastructure encroach on pedestrian paths of travel. The majority of intersections in the study area do have curb ramps though some intersections of local streets are lacking one or more corner ramps.

The ADA Standards for Accessible Design provides regulations to the design, construction and alteration of public facilities to be readily accessible and usable by individuals with disabilities. These facilities include curb ramps, sidewalks, public transportation facilities, etc.

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN



MISSING RAMPS & SIDEWALKS

Street Block
CX3 Project Site
Missing Curb Ramp
Missing Sidewalk

0 0.5 mi 1 mi

LOCAL NEWS: RISING NUMBER OF PEDESTRIAN FATALITIES AND INJURIES

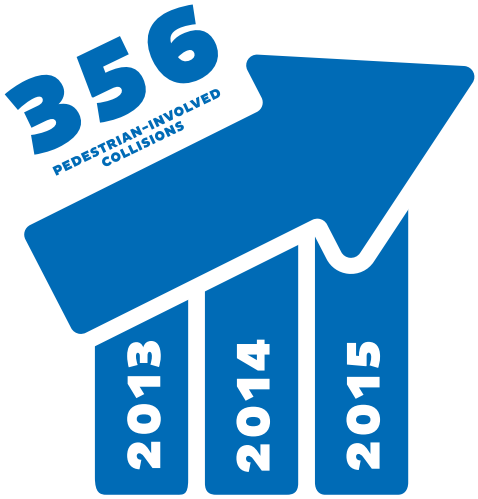
According to statistics provided by the Long Beach Police Department, vehicle-versus-pedestrian collisions have dramatically risen over recent years. Experts attribute the rise in pedestrian fatalities to smartphone distractions, driving or walking while intoxicated, speeding, jaywalking and walking around in dark clothing at night.

TOP
Two boys illegally cross the street at a red light in Long Beach, risking being hit by a vehicle.
PHOTO COURTESY OF LA STREETSBLOG

Americans cities have had a historic decline of the number traffic and severity of collisions due to increased safety technology and trend towards slowing and controlling traffic.

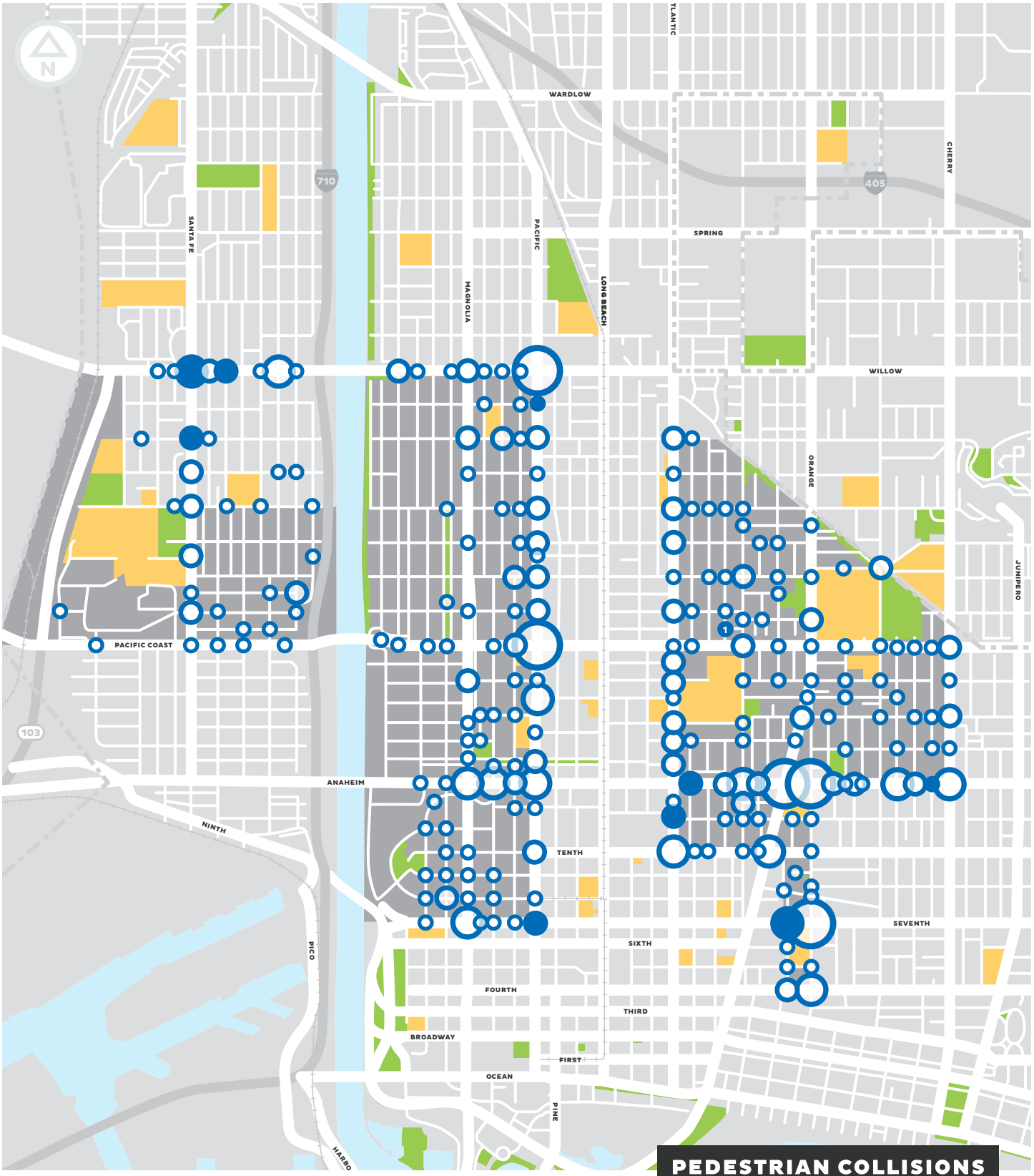
But the combination of distractions from mobile devices and increased trips due to a recovering economy has led to increasing number of collisions resulting more often in severe pedestrian injury and death. These accidents tend to happen where major thoroughfares travel along high pedestrian generators, including schools, major transit nodes, dense residential neighborhoods, job centers and business districts.

Pacific Coast Highway, Anaheim Street and 7th Street are major vehicle thoroughfares with significant pedestrian activity. This has to do with the street and sidewalk design and instead more to do with the concentration of schools, commercial activity and residents. These conflicts have resulted in the majority of Long Beach's pedestrian involved collisions taking place along these three corridors. There are also specific safety hotspots outside of these corridors at the intersection of 4th Street at Orange Avenue near the Senior Center and Willow Street at Pacific Avenue and Long Beach Boulevard.



PEDESTRIAN-INVOLVED COLLISIONS IN LONG BEACH CLIMBED FOR THE THIRD CONSECUTIVE YEAR IN 2015, UP TO 356, AND WERE UP MORE THAN 25% SINCE 2011.

JOSH DULANEY, LONG BEACH PRESS TELEGRAM



Severe Pedestrian Collisions [2004 – 2014]

Street Block
CX3 Project Site

Fatality
1 - 2
3 - 5
6 - 9
10 or more

0 0.5 mi 1 mi

CASE STUDY:
1ST & 4TH STREET LONG BEACH

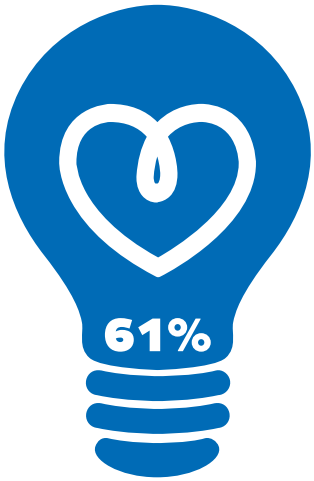
In 2009, the City and the Long Beach Redevelopment Agency installed 92 energy-efficient pedestrian lights in the East Village, particularly along 1st Street. Former East Village Association President Richard Lewis said the improvements will go a long way to making the area pedestrian-friendly and improve public safety perceptions. Additionally in 2010, the Redevelopment Agency Board approved the installation of 12-foot pedestrian lights along 1st and 4th Streets.

TOP
Pedestrian lighting located at the intersection of 4th and Linden next to Long Beach Transit bus shelter.

STREET LIGHTING

Street Lighting is an essential component to any safe street and pedestrian environment, though often is considered the least when developing complete street designs.

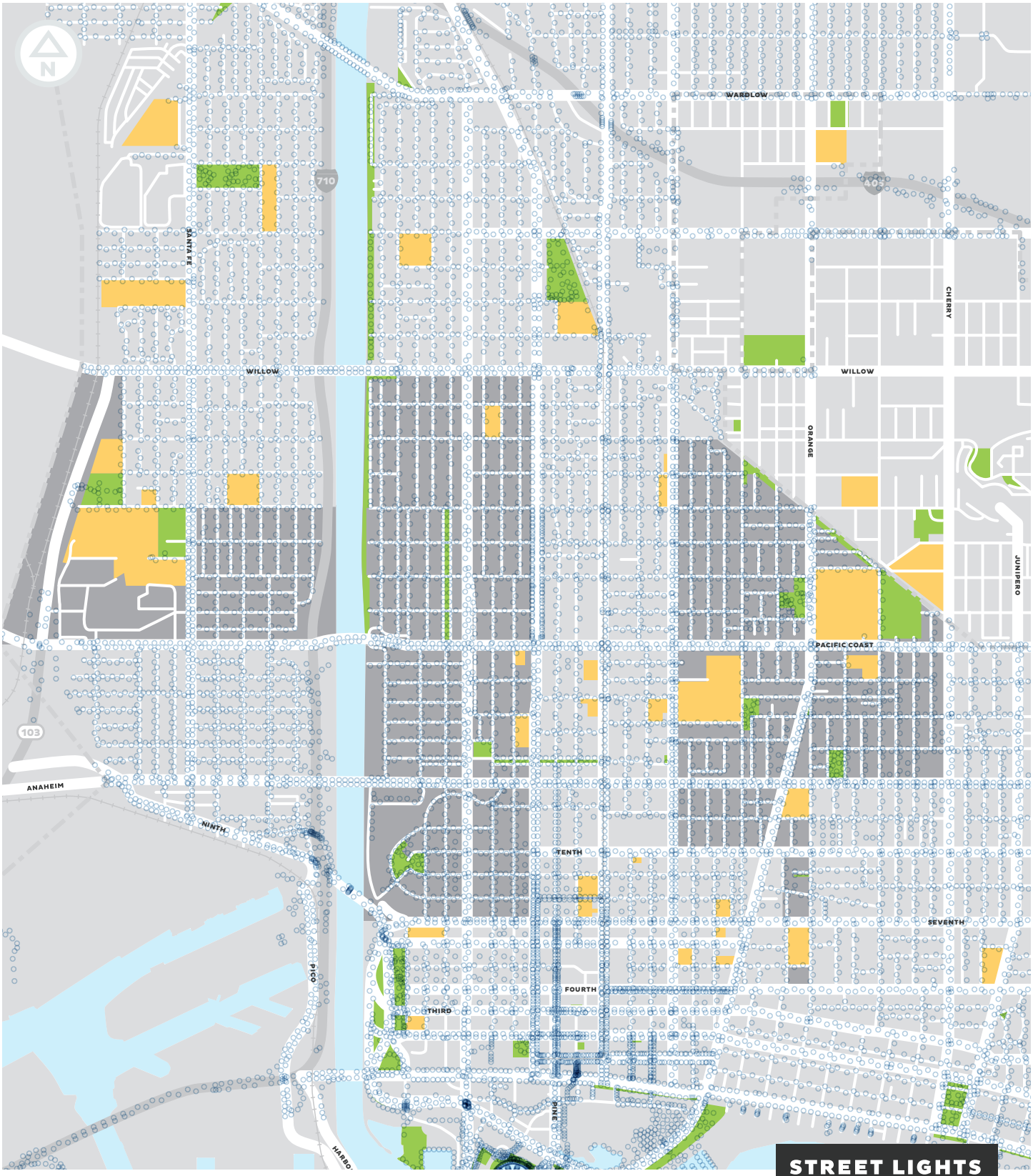
Local agencies will often develop standards for the placement, type of light fixtures and color of the light emitted to respond to various conditions, some have evolved those standards to include additional consideration of pedestrian safety. These considerations should include lighting of crosswalks and intersections as they relate to potential conflicts between pedestrians and vehicles, as well as safety as it relates actual and perceived crime, by making sure the entire pedestrian realm is well-lit and that there are no dark corners. One consideration of street lighting is light pollution, particularly in residential areas where it may not sensitive to have lights on throughout the night. Motion-sensor street lighting can be an appropriate response to this as the lights would only activate if there is a person within its proximity.



61% OF PEOPLE FEEL EITHER 'MORE SAFE' OR 'MUCH MORE SAFE' WITH THE ADDITION OF PEDESTRIAN LIGHTING.

THE INFLUENCE OF STREET LIGHTING ON CRIME AND FEAR OF CRIME, 1991

Long Beach has street lighting design standards in place to respond to varied conditions including neighborhood streets and major thoroughfares. The city is currently transitioning the standard street lights to LED, which will emit a cooler, brighter light than the metal-halide lamp that has characterized the city's orange glow at night. The Wrigley Village portion of Pacific Avenue is the only sustained part of the study area equipped with pedestrian scale lights that augment the standard street lights which provide well-lit environment for evening walking.



STREET LIGHTS

Street Block
CX3 Project Site
Street Light

0 0.5 mi 1 mi

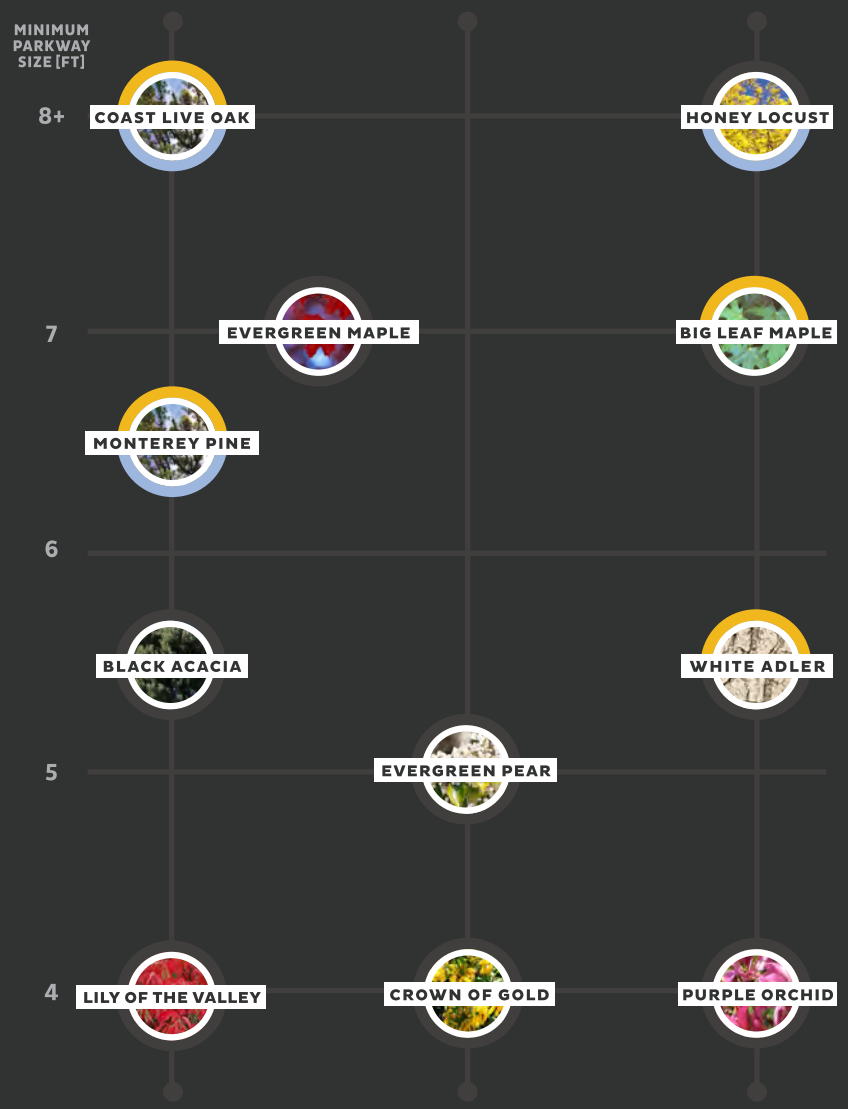
A GUIDE TO LONG BEACH STREET TREES

PARKWAYS SMALLER THAN 4 FT SHOULD BE AVOIDED

DROUGHT TOLERANT

CALIFORNIA NATIVE

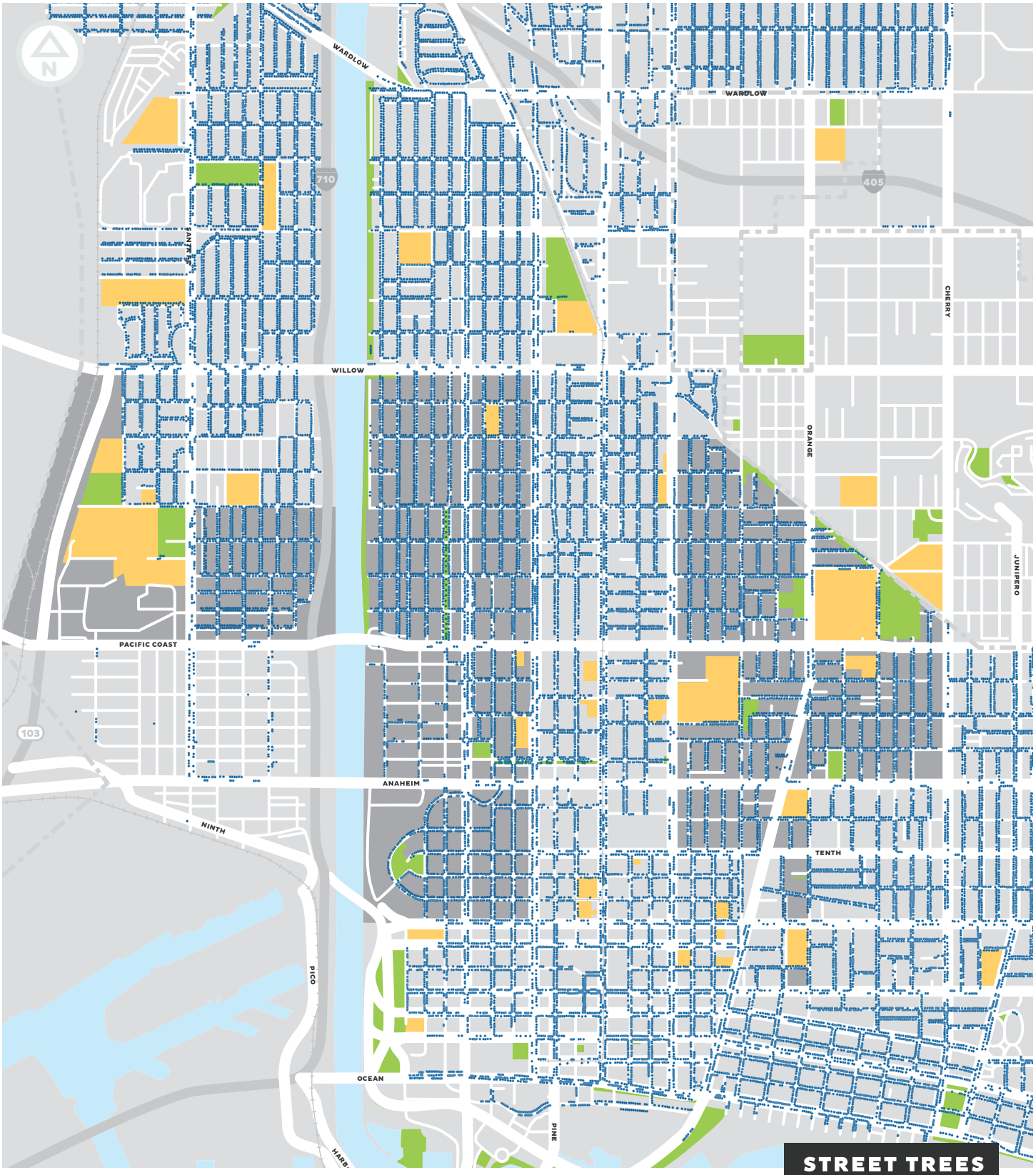
The City of Long Beach Public Works Department is responsible for preserving and protecting the community's urban forest and promoting the health and safety of City trees throughout their life span.



These trees have been approved by the City of Long Beach Public Works Department as viable street tree options. For more information on other species of trees allowed by the City, www.longbeach.gov/pw/

With limited municipal budgets for road and sidewalk maintenance, as well as other city services, streets trees have often been considered an amenity to local infrastructure. There is more understanding of the value these trees have to traffic calming, pedestrian comfort, local environmental health, with growing public and private investment in urban forestry within the public right-of-way. Due to limited space and underground utilities in urban environments, there are often barriers to planting trees that can grow and be healthy.

Long Beach has an extensive urban forest between its parks, streets and private properties, though in the historic parts of the city the tree canopy thins. This is due to the combination of far fewer acres of park space outside of the Eastside, greater lot coverage from denser development and narrower planting areas on the city streets. Primary thoroughfares like 7th Street, Anaheim Street and Willow Street currently have very limited area within the pedestrian environment for planting trees, which result in stunted growth for trees and/or conflicts with maintenance of the pavement conditions due to root growth. Pacific Coast Highway and Alamitos Avenue have no available planting area as the sidewalks are only wide enough to provide the necessary clear path of travel.



Street Block

CX3 Project Site

Street Tree

0 0.5 mi 1 mi

Pedestrian Generation

The design of the street network and public right-of-way is part of defining the pedestrian environment; the design and uses of adjacent properties also have a significant impact on the walkability of a community. Denser communities with a mixture of land-uses typically promote more walking than sprawling, single-use areas. Neighborhoods with large youth and senior populations tend to see more pedestrians as they often do not have access to vehicles. Schools and high quality parks tend to generate pedestrian activity, as do large employment centers and well-designed commercial districts.

Central Long Beach was largely developed during a time where the primary form of transportation was walking, though areas have since become automobile-oriented. Most neighborhoods in the study area have schools and parks, commercial nodes and even medical services within reasonable walking distances. The CX3 neighborhoods struggle with many of the factors that lead to unhealthy populations including environmental impacts from industry and freight transportation, food deserts and crime. These stressors can led to high levels of obesity as well as asthma and cancer.

TOP
Local residents walk on a narrow sidewalk, forcing some of them off into the parkway.
PHOTO COURTESY OF CITY FABRICK

ABOVE INSET
Woman and child walk home from school on the sidewalk underneath shade-providing trees.
PHOTO COURTESY OF CITY FABRICK

Pedestrian Factors

TRANSIT RIDERSHIP

PUBLIC FACILITIES

COMMERCIAL & EMPLOYMENT CENTERS

LOW INCOME HEALTH FOOD ACCESS

RESIDENTIAL POPULATIONS

OBESITY

ENVIRONMENTAL BURDEN

TRANSIT RIDERSHIP

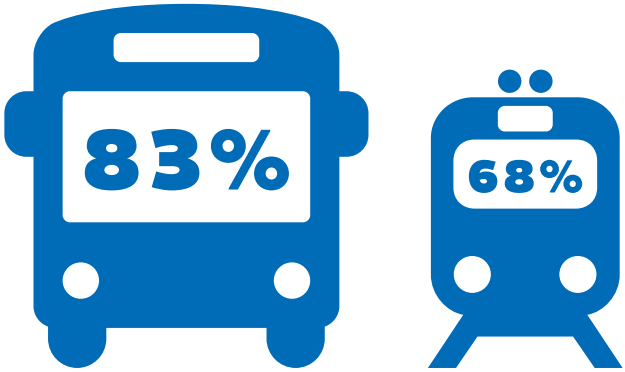
An effective public transit system generates pedestrian traffic as the majority of bus riders walk to and from their bus stops.

They also activate the public realm as they occupy the bus stop while waiting for their bus or train to arrive. Corridors with high transit ridership and nodes with concentrations of high boarding transit stops are often active pedestrian areas.

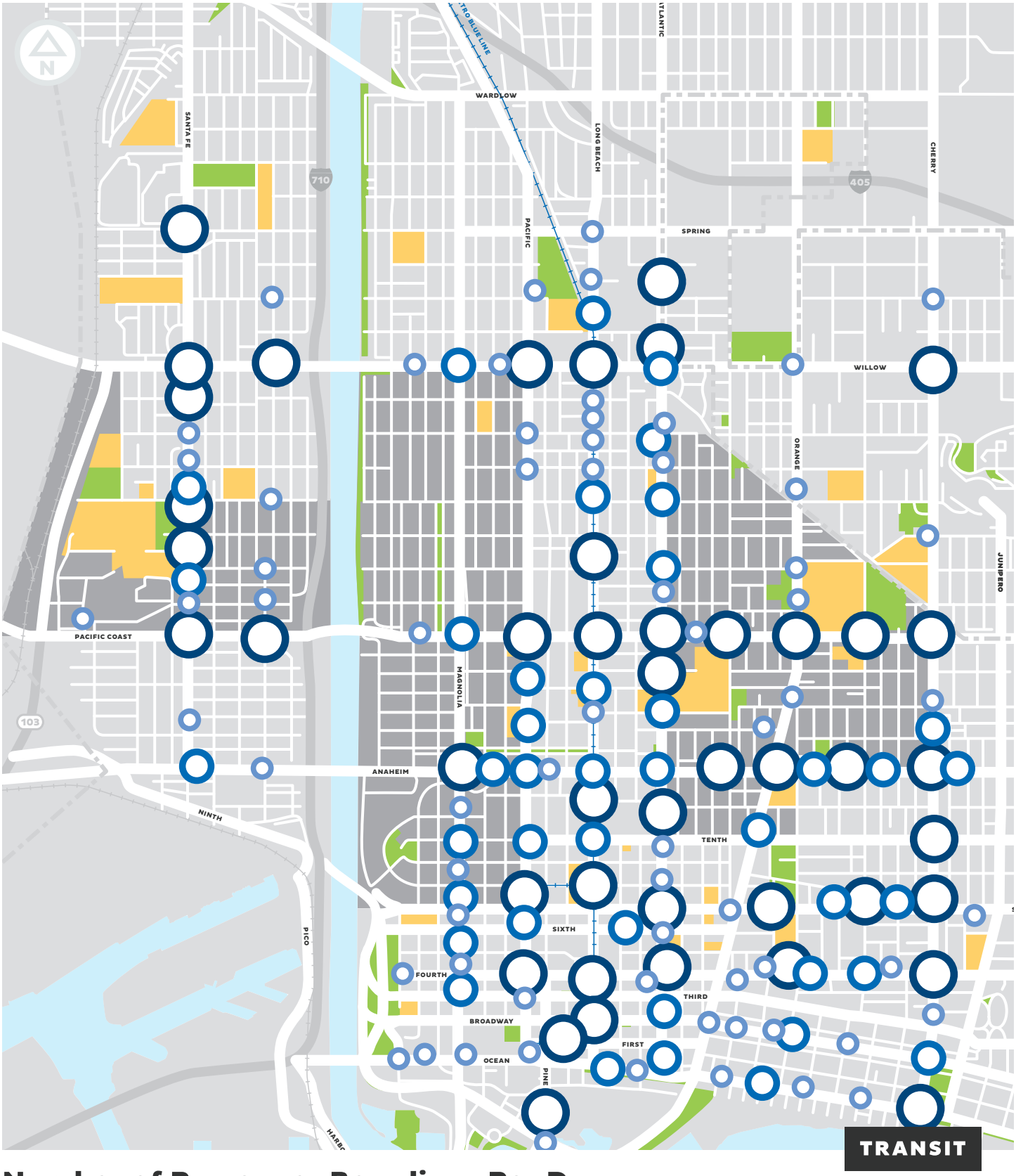
While several of the most significant transit nodes are at the Metro Blue Line light rail stations, there are high rider transit stops around the Long Beach City College Pacific Coast Campus at the Pacific Coast Highway and Orange Avenue intersection, in front of Poly High School on Atlantic Avenue and Cabrillo High School on Santa Fe Avenue. Other significant transit nodes at Pacific Avenue and Willow Street and adjacent to the Villages at Cabrillo campus serve riders where a convergence of multiple transit lines intersect.

83% OF BUS RIDERS AND 68% OF TRAIN RIDERS IN LA COUNTY BEGIN THEIR TRIP BY WALKING.

METRO SPRING 2015 COMMUNITY SURVEY



The Long Beach Transit network extends to every corner of the city with most residents within a quarter mile of a bus line. The bus route network is denser in Central Long Beach and the Downtown with bus stops no more than a few blocks apart. Anaheim and 7th Streets are significant east-west bus corridors while Atlantic Avenue and Long Beach Boulevard predominantly carries north-south transit routes.



Number of Passenger Boardings Per Day

Street Block
CX3 Project Site

21 - 50
51 - 100
101 +

0 0.5 mi 1 mi

The locations shown are the number of passenger street boardings at intersections only.

PUBLIC FACILITIES

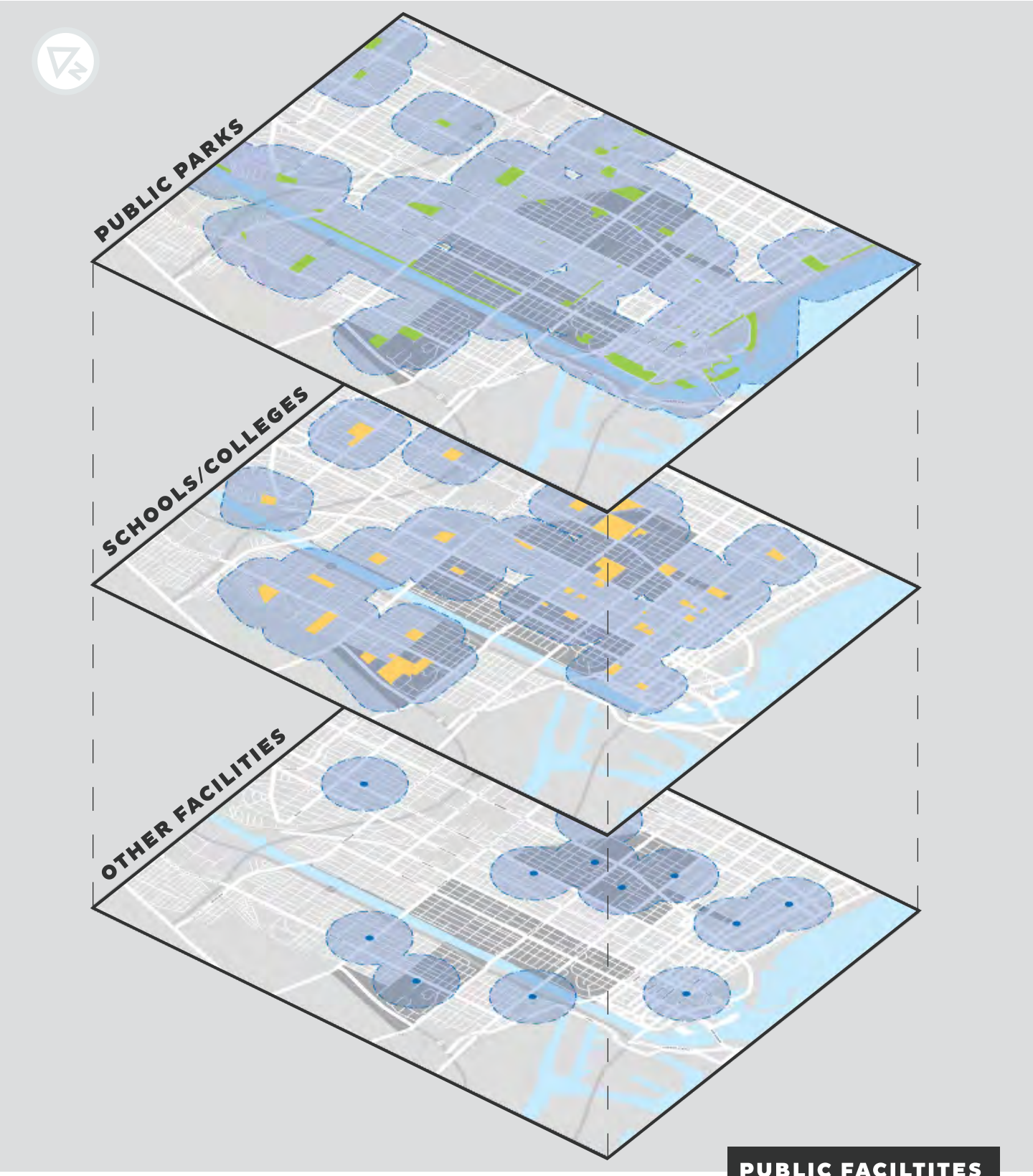
In densely populated communities, the public parks and civic assets become even more essential to residents' quality of life and ability to socially interact.

To support their health and wellness, some type of publicly accessible open space should be within walking distance of every resident. While distribution is part of the equation, maintaining accessible infrastructure that safely connects residents to these parks is another part.

While Central and West Long Beach is underserved by total acreage of open space and park amenities relative to the city as a whole, the existing park network is distributed evenly so that most every resident is within a 10 minute walk of park. The larger clusters of park space are located in the southwest, northeast and northwest corners of the study area with pocket parks scattered throughout the interior.

Typically, traditional residential neighborhoods have a local school within walking distance of the local student body. Because of their proximity, the schools served as community centers as well as academic institutions. As school development standards evolved and school districts centralized, new campuses were developed to serve larger cache areas that related less to geography and more to preferences.

Central Long Beach is fortunate to have a public school located within walking distance of most every neighborhood. The CX3 Neighborhoods were in most cases named by the Elementary School located within them. There are also two Middle Schools [Franklin and Washington], three High Schools [Poly, Cabrillo and Renaissance] and Long Beach City College's Pacific Coast Campus in the study area, which progressively serve larger student bodies.

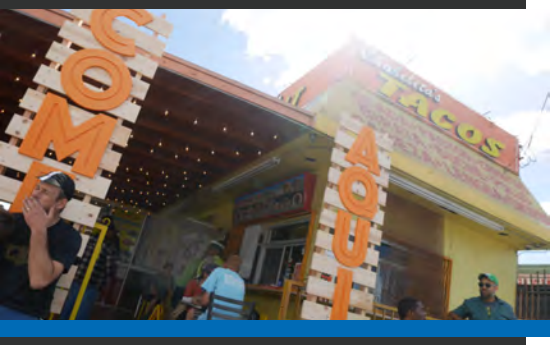


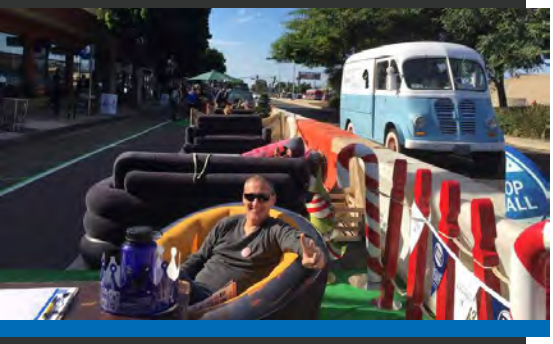
PUBLIC FACILTITES

- Street Block
- CX3 Project Site
- Public Parks
- Schools/Colleges
- Libraries & Community/Health Centers
- 1/4-Mile Walk

CASE STUDY: GREAT STREETS LOS ANGELES

Los Angeles Mayor Eric Garcetti launched the LA Great Streets Initiative to revitalize 15 of the city's neighborhood centers by focusing improvements on their main commercial street. One of the priority goals is to improve access and mobility for all users, including pedestrians. Improving a person's ability to walk in these commercial centers improves the local economy and helps to decrease dependence on vehicles.





TOP
Chabelitas Restaurant on the LA Great Street of Van Nuys Boulevard. As part of the program, a grant was awarded to highlight the potential of this quasi-public space with colorful signage, lighting and a faux-tile pattern.
PHOTO COURTESY OF LA GREAT STREETS

MIDDLE
On the LA Great Street of Reseda Boulevard, several temporary improvements have been made on building facades, awnings and sidewalks to improve the overall walking experience of this commercial main street.
PHOTO COURTESY OF LA GREAT STREETS

BOTTOM
Small businesses on the LA Great Street of Venice Boulevard using temporary furniture to take over the street for its Small Business Saturday.
PHOTO COURTESY OF LA GREAT STREETS

COMMERCIAL & EMPLOYMENT CENTERS

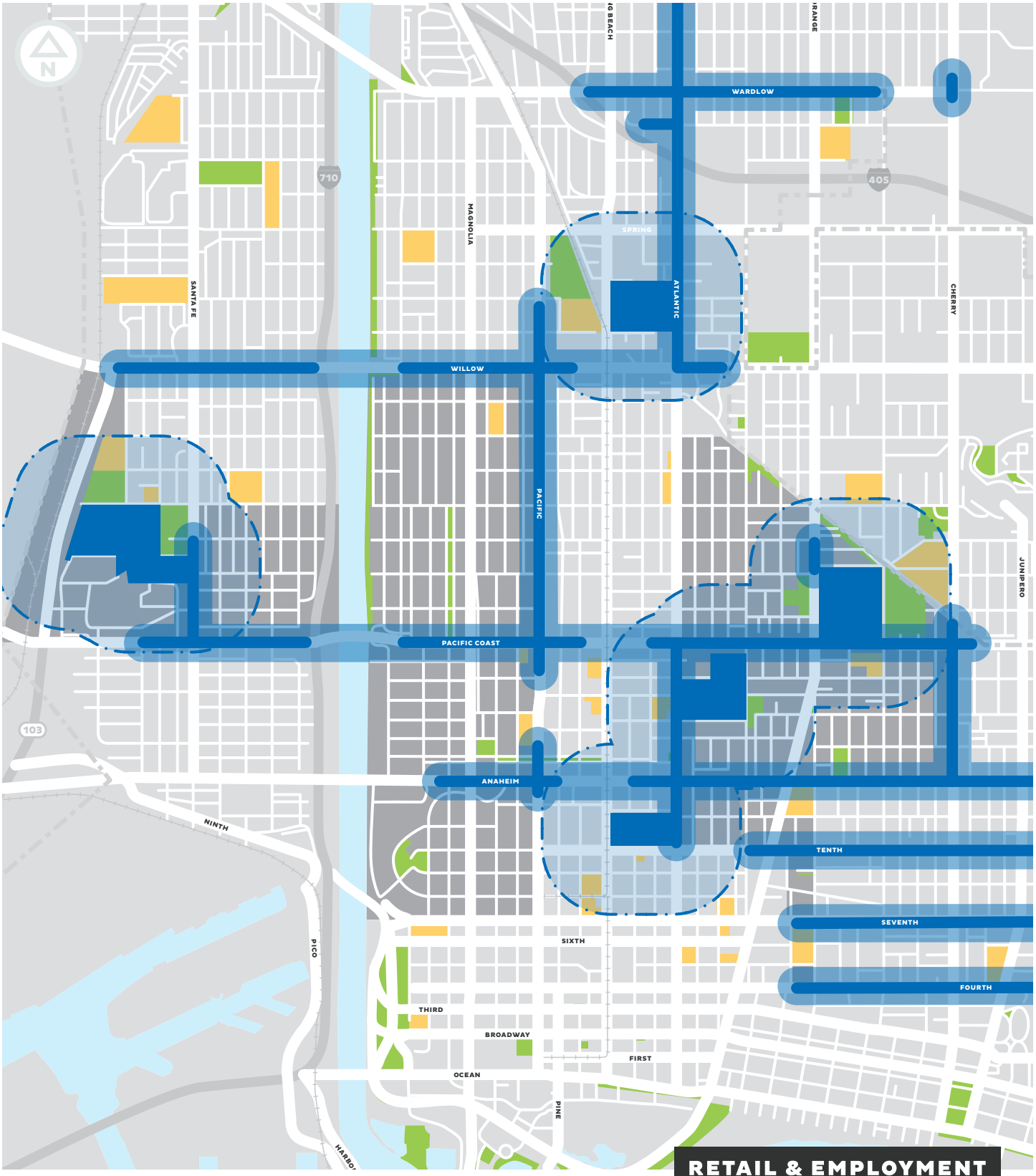
According to the latest US Census, walking to work continues to shrink relative to biking, driving and riding transit.

The pedestrian commute modal share halving proportionally over the past year can be attributed to many factors including the rise of suburban office parks and growth of decentralized metropolitans across the nation, among other reasons. The placement of large job centers in or near multi-use communities tends to facilitate more walking as employees are provided a choice of walking to places to shop, eat and live.

Central Long Beach is situated between major job centers of the Downtown commercial district, Westside and Magnolia Industrial Area and multiple major medical centers. While generating pedestrian traffic from patrons in commercial districts and students around schools, there are also significant employment centers whose staff also walk, whether on their break or to and from work. Based on a national average walking commute time of just under twelve minutes these employment centers can reasonably serve the communities within a half mile radius.

Concentrations of commercial services tend to promote pedestrian activity as patrons will visits multiple businesses on foot. Car parking, bicycle facilities and public transit service will bring customers to the commercial district while the condition of the pedestrian environment will determine their willingness to walk between destinations. Traditional Main Streets were developed on the basis of concentrating diverse businesses and connecting them with good sidewalks, safe streets and welcoming public amenities. While the experience had since been similarly manufactured in shopping centers of all shapes and sizes. Main Street is being reinvigorated as neighborhood commercial districts and regional destinations.

There is a mix of commercial districts and corridors in Central Long Beach providing a variety of experiences and services. Pacific Avenue and Willow Street in Wrigley Village and stretches of Anaheim Street and Pacific Coast Highway have consistent commercial activity while there are sporadic concentrations of retail uses along Atlantic Avenue, 7th Street and 10th Street. Neighborhood scale business districts on Daisy Avenue in Wilmore City, Santa Fe Avenue adjacent to Admiral Kidd Park, Orange Avenue next to Long Beach City College and the 1400 block of Cherry Avenue are essential activity centers for local residents.



RETAIL & EMPLOYMENT

Street Block
CX3 Project Site
Large Job Centers
Significant Commercial Corridors
1/4-Mile Walk

0 0.5 mi 1 mi

CHILDREN WITH ACCESS TO FREE OR REDUCED LUNCH

LBUSD SCHOOLS		FRPM* [TOP 40]
Addams	K-5	94.7%
Washington	6-8	94.4%
Burnett Smith	K-5	94.3%
Robinson	K-8	93.9%
Garfield	K-5	93.7%
Willard	K-5	93.3%
Dooley	K-5	92.9%
Stephens	6-8	92.9%
Lindbergh	6-8	92.4%
Webster	K-5	92.3%
Franklin	6-8	91.8%
McKinley	K-5	91.6%
Cesar Chavez	K-5	91.3%
Signal Hill	K-5	90.9%
Burbank	K-5	90.7%
Barton	K-5	90.5%
Jefferson	6-8	90.3%
Harte	K-5	90.1%
Edison	K-5	90.0%
Colin Powell	K-8	90.0%
Hamilton	6-8	89.8%
International	K-5	89.4%
Lee	K-5	89.3%
Perry Lindsey	6-8	88.8%
Jessie Nelson	6-8	88.6%
Lincoln	K-5	86.4%
Stevenson	K-5	86.4%
King	K-5	85.9%
Beach	9-12	85.2%
Alvarado	K-5	84.4%
Hill Classical	6-8	82.8%
Muir	K-8	80.5%
Mann	K-5	80.4%
Cabrillo	9-12	80.3%
Roosevelt	K-5	80.2%
Hudson	K-8	80.1%
Grant	K-5	79.7%
Lafayette	K-5	79.6%
Whittier	K-5	79.6%
Jordan	9-12	78.9%

LBUSD Schools in CX3

*Percentage of students that are eligible for the Free or Reduced Lunch program

CITY OF LONG BEACH DEPARTMENT OF HEALTH AND HUMAN SERVICES

LOW INCOME HEALTH FOOD ACCESS

Access to fresh produce and nourishing food options is essential to the health of the residents.

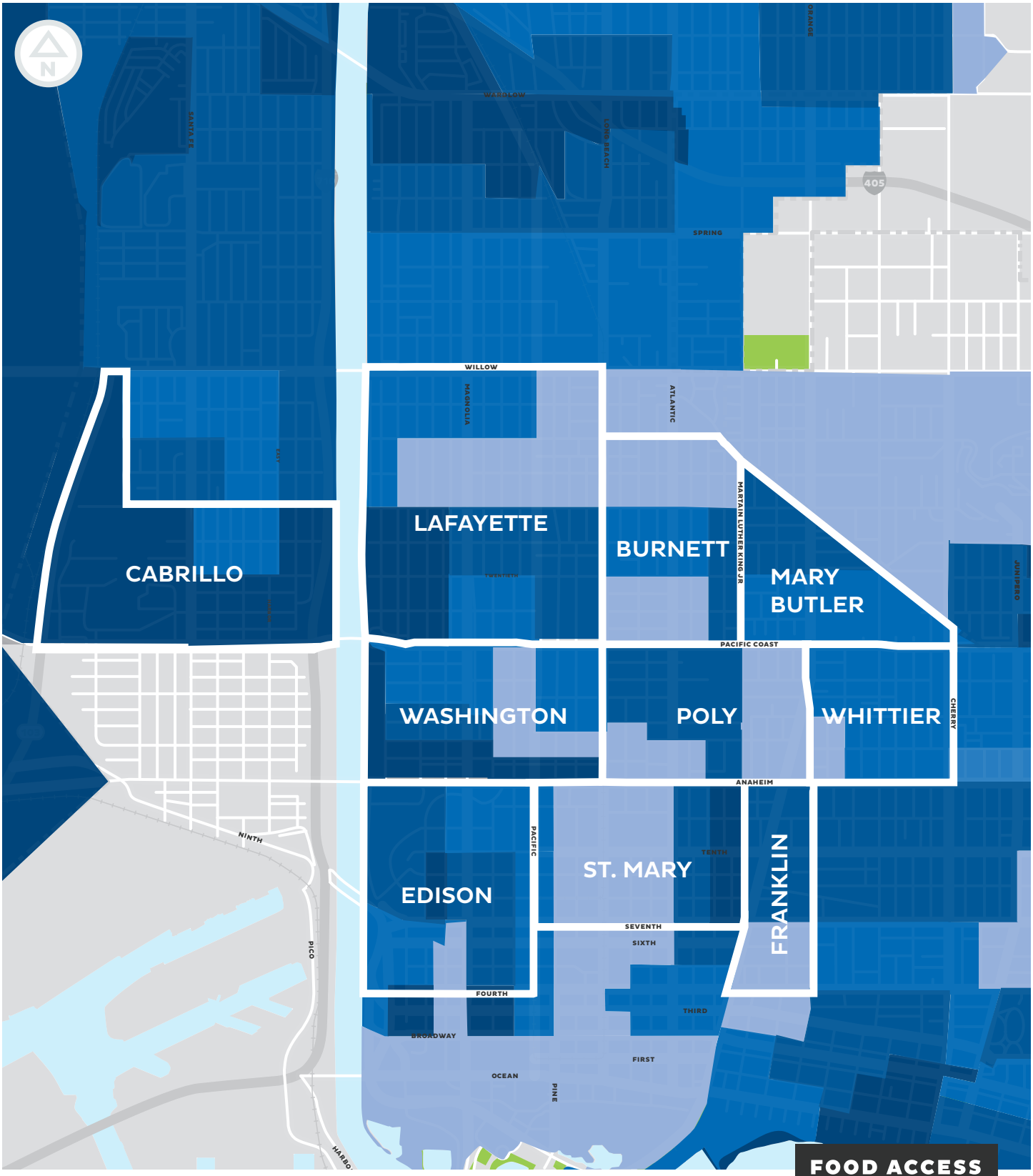
It is important in low income communities to provide healthy food choices within walking distance of residents, as many have limited access to private automobiles. The residents are within close proximity to grocery stores and markets or have the means to ride transit or drive relatively short distances to community retail centers where they are located. Many low income neighborhoods on the Westside and in Uptown, as well as some on the eastern portion of Central Long Beach are without healthy food options like grocery stores and markets. Specifically, the Cabrillo, Burnett and Mary Butler Neighborhoods of the study area are without a local option for purchasing healthy food.

ONLY 14% OF ADULTS IN LONG BEACH REPORT EATING 5 OR MORE SERVINGS OF FRUITS AND VEGETABLES A DAY, THE RECOMMENDED DAILY AMOUNT.

LOS ANGELES COUNTY HEALTH SURVEY, 2015

US Census tracks Low Income and Low Healthy Food Access as a public health indicator for disadvantaged communities. Due to the compact, dense nature of Long Beach most

While many of the neighborhoods within the study area have a grocery store or market that has healthy food options, the predominant majority of options are fast food outlets, liquor stores and convenience stores. The grocery stores carrying healthy food options tend be isolated behind parking lots, oriented towards customers arriving via automobile instead of those on foot. In contrast, the unhealthy food options have better pedestrian accessibility and greater distribution which makes the healthy choice more challenging.



FOOD ACCESS

Estimated Grocery Retail Leakage Rate [2014]

- Insufficient Data
- 1% or less
- 2%
- 3 - 48%
- 48 - 81%
- 82% or more

0 0.5 mi 1 mi

Grocery Retail Leakage is the percent of people that must leave their neighborhood to go grocery shopping.

CASE STUDY: 10TH STREET LONG BEACH

In Long Beach, the former Office of Councilmember Suja Lowenthal has proposed a series of vision plans for several streets within the council district—including 10th Street which has a strong residential land use profile. After engaging with the local community in a series of public outreach events, the 10th Street Vision Plan team proposed several improvements to enhance the pedestrian safety, comfort and accessibility of the neighborhood. Some of the proposals include working within private residential properties to foster a consistent design language that celebrates the unique neighborhood character. What makes 10th Street a successful candidate for a streetscape revisioning is its relatively high density and high number of nearby local destinations. The Plan proposes to prioritize these improvements and launch a pilot project that tests the feasibility of some of these improvements.

BEFORE
Currently, 84% of the 10th Street project segment, from Alamitos to Redondo, is residential. Elements that detract from the pedestrian experience include narrow sidewalks, difficult crossings, lack of illumination and inconsistent elements in the private realm.
PHOTO COURTESY OF HERE DESIGN

AFTER
The 10th Street Plan presents several opportunities to improve walkability of the neighborhood. Some of these improvements include curb extensions, pedestrian lighting and placemaking interventions.
PHOTO COURTESY OF HERE DESIGN

RESIDENTIAL POPULATIONS

Residential population often directly correlates to the number of people walking, though not necessarily the quality of the pedestrian environment.

Compact, dense residential neighborhoods can generate greater demand for commercial uses and public amenities than suburban communities based on their respective geographic area. Clusters of commercial and community amenities can thus be located within walking distance of the compact neighborhoods while similar uses for suburban areas must be located beyond walking distance to have similar levels of use.

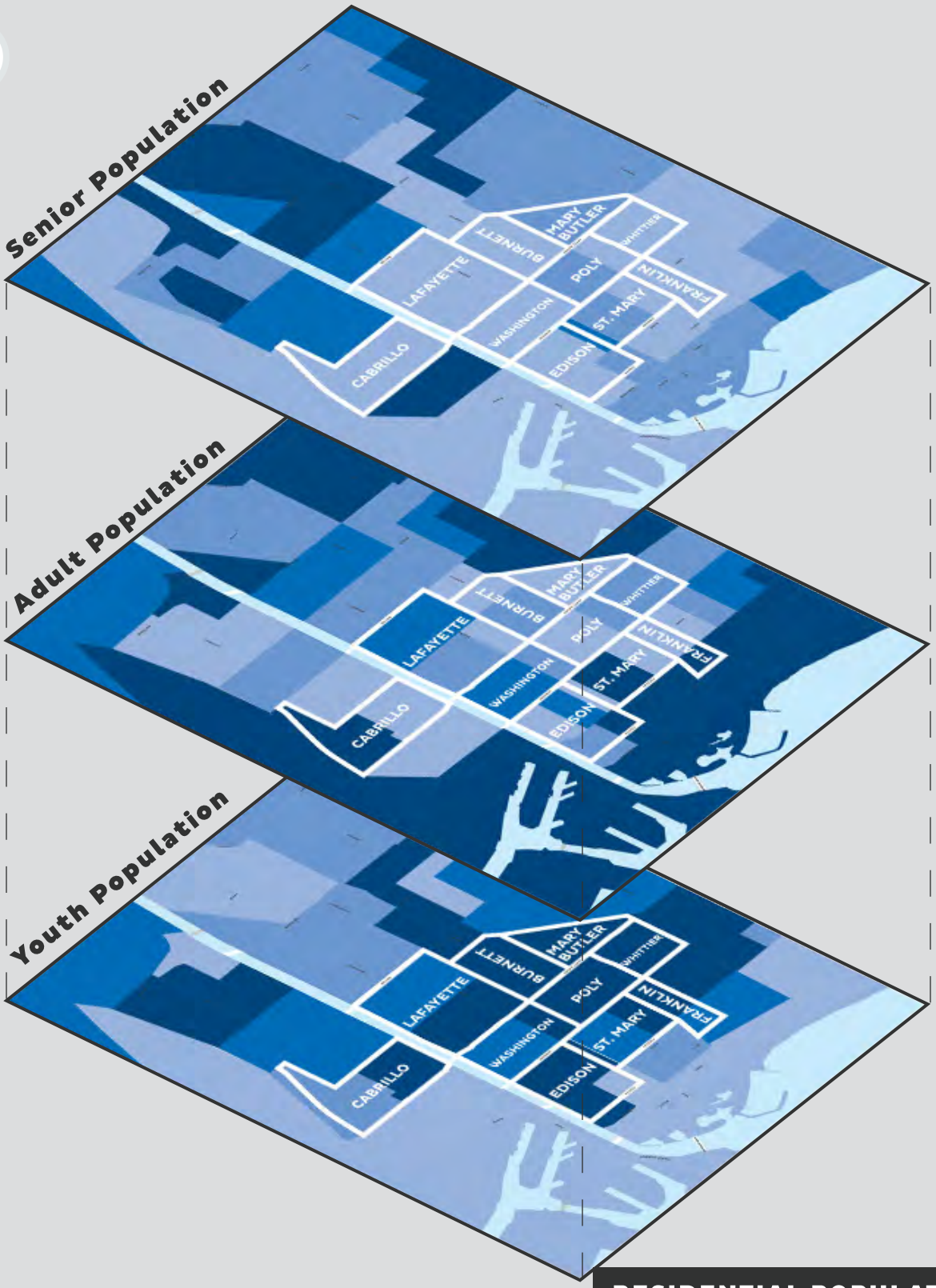
Long Beach's densest residential population is located between 4th Street, Cherry Avenue, Anaheim Street and Atlantic Avenue, though the entirety of Central Long Beach retains population concentrations approaching parts of Manhattan. This population intensity insures that sidewalks are typically active throughout most of the study area.

Young people, especially those below 16 years of age, do not drive thus limiting their options for transportation. In suburban communities, this can result in parents and adult relatives acting as chauffeurs due to the limited number of amenities within reasonable distance of walking or biking. Greater concentrations of young residents generally necessitates more community services like schools, parks and libraries, ideally within walking distance of their homes.

Similar to Long Beach's overall population density, the Central Area hosts a large portion of the city's population of youth population. Over a quarter of Central Long Beach residential population are under 18 years of age, with many of the study area neighborhoods having youths make up over a third of the residential population.

Similar to youth, elder residents find their transportation options more limited, without regular access to a private automobile due to health reasons or reduced resources for purchasing and operating a private automobile. At the same time, bicycling and walking long distances become less viable transportation options as well. To age in place, a predominant preference for many seniors, they have to remain connected to friends, family, community amenities and regular services, including healthcare.

Long Beach's senior population is fairly evenly distributed throughout the city. There are slightly larger concentrations of elder residents in the Poly and Edison neighborhoods where they make up over ten percent of the local population. There are clusters of senior services around Memorial Hospital and St. Mary Medical Center as well as along 4th Street near the Downtown Senior Center in the Franklin neighborhood.



RESIDENTIAL POPULATION

Percent of Youth

- 0 - 19.4%
- 19.4 - 24.2%
- 24.2 - 29.1%
- 29.1 - 64.4%

Youth are identified as ages 0 - 17

Percent of Adults

- 0 - 59.5%
- 59.5 - 63%
- 63 - 66.9%
- 66.9 - 100%

Adults are identified as ages 18-64

Percent of Seniors

- 0 - 7.4%
- 7.4 - 10.9%
- 10.9 - 15.1%
- 15.1 - 93.0%

Elderly are identified as ages 65 and older

BODY COMPOSITION OF STUDENTS IN CX3

From 2014-2015, the California Department of Education conducted a statewide Physical Fitness Test [PFT], which observed the fitness levels of students, including those within the CX3 area. Thousands of 5th, 7th and 9th grade students were tested based on several fitness standards, including 'body composition'. Body composition is used to describe percentages of fat, bone, water and muscle, which can determine if a person is or isn't obese. The table below presents the body composition of CX3 students and estimates what percentage of them need improvement or are at risk for heath issues.

CX3 SCHOOLS	NEEDS TO IMPROVE	HEALTH RISK
Washington	19.9%	26.2%
Franklin	20.3%	27.1%
Edison	22.8%	36.6%
International	23.9%	26.8%
Lincoln	14.0%	37.4%
Cabrillo	19.3%	19.9%
Roosevelt	18.8%	32.5%
Hudson	22.3%	39.4%
Lafayette	22.3%	19.4%
Whittier	19.4%	29.4%
Polytechnic	15.6%	12.4%
Renaissance	23.4%	8.4%
CITY AVERAGE	18.0%	16.8%
COUNTY AVERAGE	20.2%	18.8%

CALIFORNIA DEPARTMENT OF EDUCATION

"Childhood obesity is a major issue in Long Beach as nearly half of all 5th, 7th and 9th graders are considered overweight or obese, according to a study from an organization called ReThinking Greater Long Beach. In addition, the study found that obesity rates were significantly higher in low-income areas and neighborhoods with a high concentration of mini markets had higher rates of obesity. Dr, Peter Vash told the Long Beach Press Telegram that "even small changes, such as reducing portion size and cutting out soda, can make a big difference."

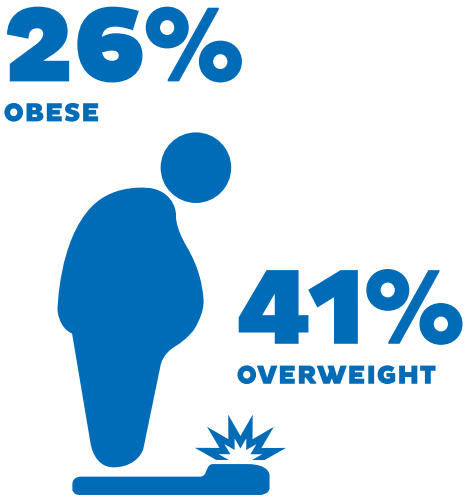
KELLY PUENTE , LONG BEACH PRESS TELEGRAM

OBESITY

Obesity is one of the nation's most significant public health epidemics.

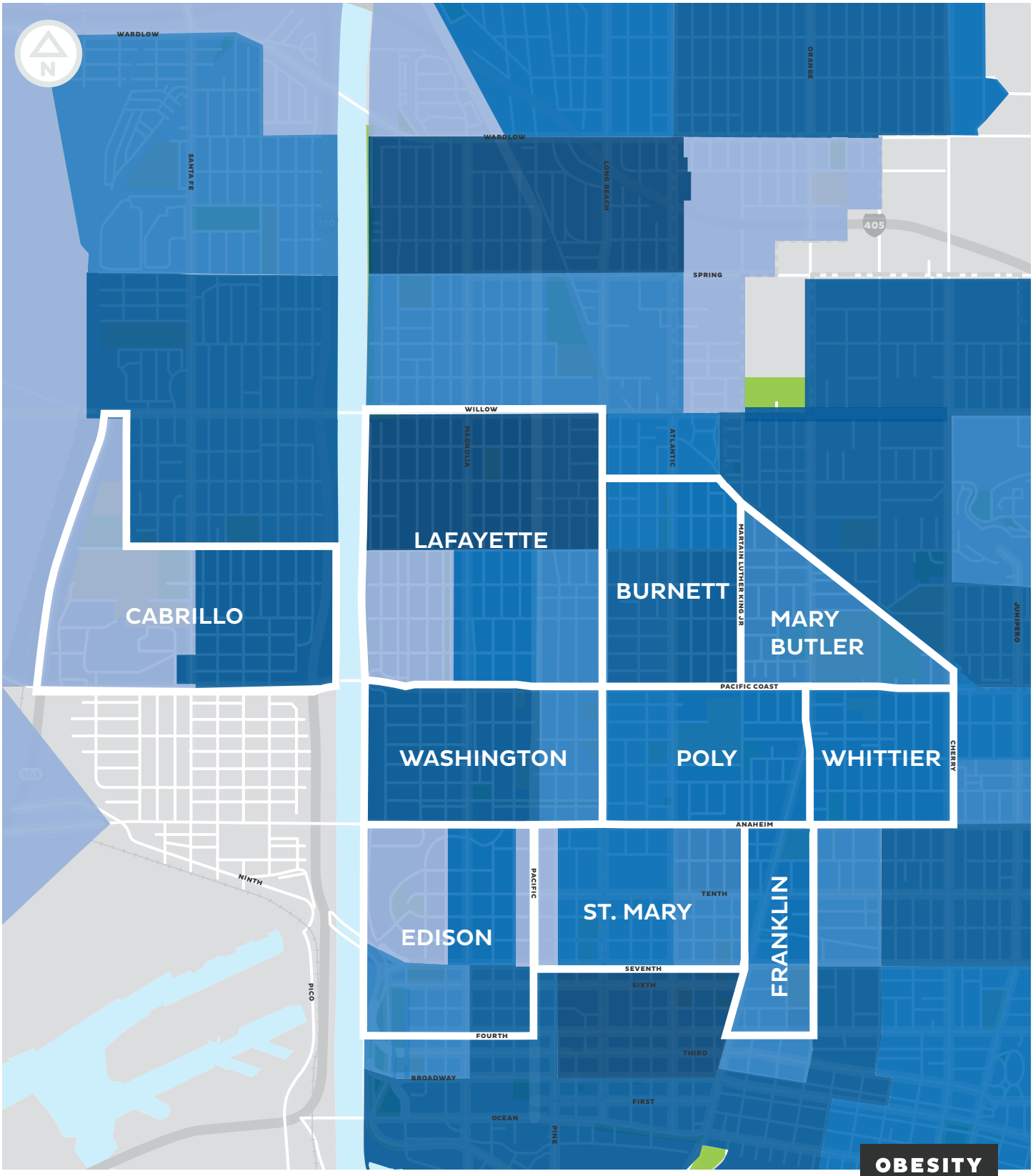
Many factors can lead to energy imbalance and weight gain, including the built environment, genes, food access, attitudes and emotions, personal habits and income. Obesity is a risk factor for a multitude of health issues including heart disease, type-2 diabetes, stroke, high blood pressure and some kinds of cancer. As there is no single cause of obesity, treatment could include a mix of behavioral treatment, diet, exercise and even drugs or surgery. Altering the the physical environment could substantially affect behavior, diet and exercise, thus treating obesity without substantial medical aid.

While California is below the national average of obesity [approximately one-quarter of Californians versus one-third of Americans] Long Beach is above the state and Los Angeles County [22.2%] average at 31.2%. Central, West and North Long Beach have higher proportions of obese residents with especially high concentrations in the Cabrillo, Lafayette and Edison neighborhoods. Variation within the study area vary while a third of the residents are considered obese in portions of those neighborhoods while Mary Butler neighborhood is closer to the County average.



IN LONG BEACH, 26% OF ADULTS REPORT BEING OBESE AND 41% OF ADULTS REPORT BEING OVERWEIGHT—BOTH FIGURES ARE HIGHER THAN THE COUNTY AVERAGE.

LOS ANGELES COUNTY HEALTH SURVEY, 2015

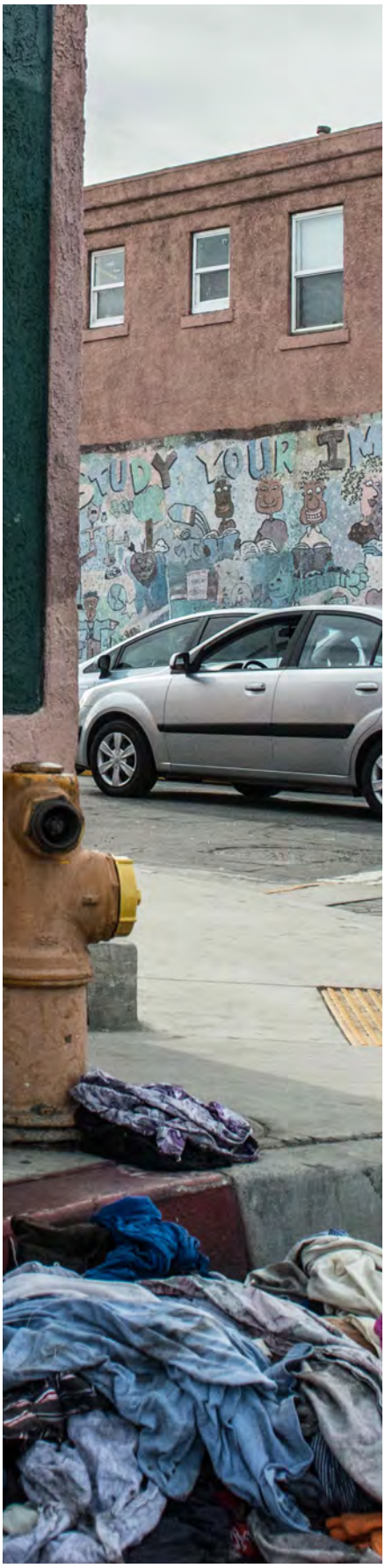


Estimated Percent of Obese Adults [2013]

- Insufficient Data
- 26.2% or less
- 26.2 - 28.7%
- 28.7 - 30.8%
- 30.8 - 33.6%
- 33.6% or more

0 0.5 mi 1 mi

Adult obesity is quantified by having a body mass index of 30 percent or greater.
Source: Healthy Food Access



ENVIRONMENTAL BURDEN

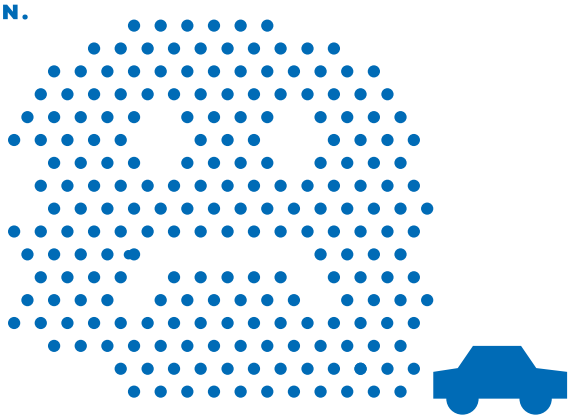
The air and water quality of a community carries a direct correlation to residents' health and quality of life.

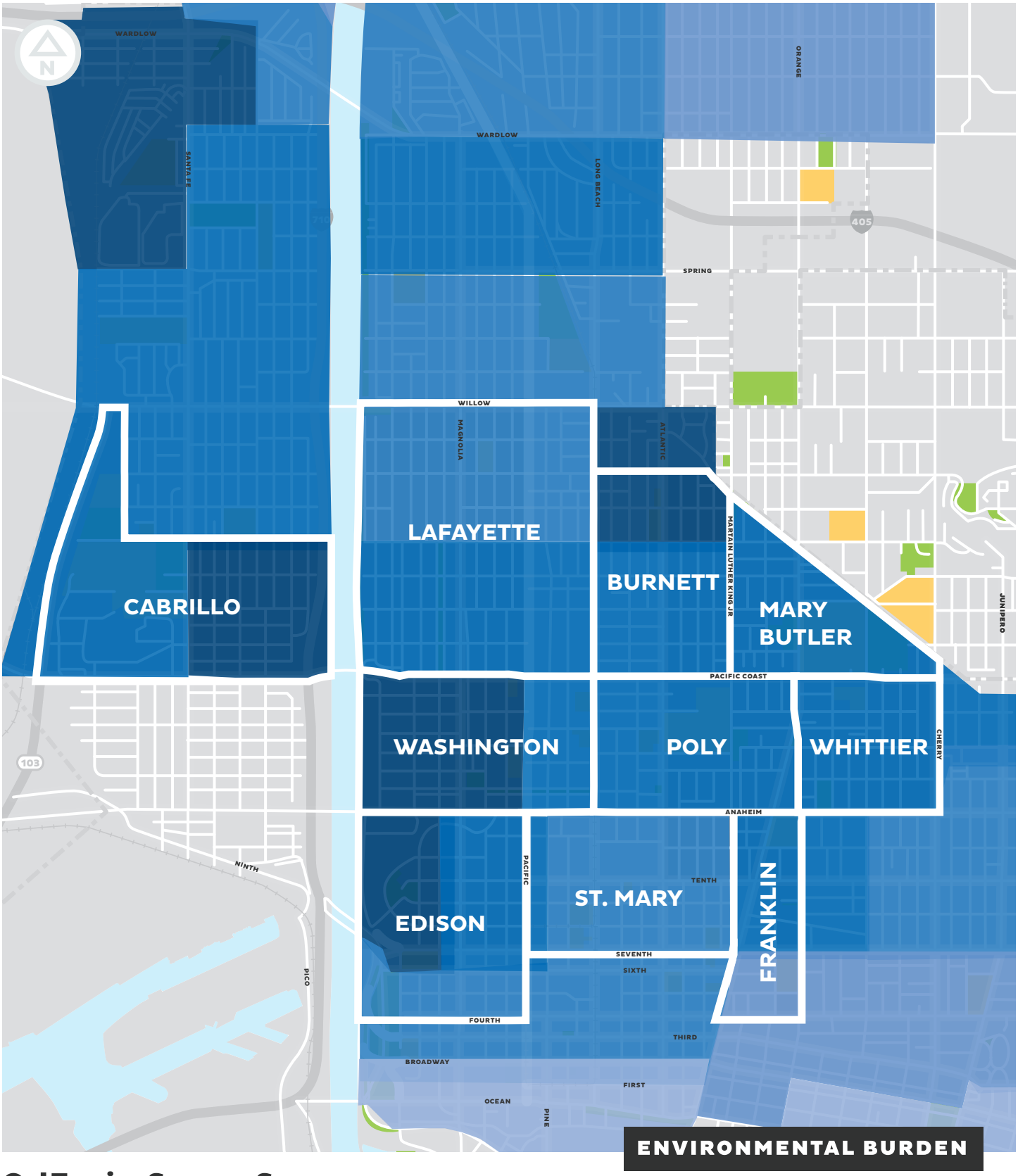
Besides the direct effect that regularly inhaling toxic chemicals has on public health, air pollution forces local inhabitants to be less physically active, encouraging obesity and other related health impacts. CalEnviroScreen is a screening methodology that can be used to help identify California's disadvantaged communities that are disproportionately burdened by multiple sources of pollution.

Cross referencing pollution burden with socioeconomic conditions, Long Beach's central, western and north areas share the greatest burden from environmental pollution. The west, southwest and northeast portions of the study area share the greatest pollution burden due in large part to concentrations of heavy industrial uses, port facilities and major transportation infrastructure. Based on the CalEnviroScreen metrics, the entire study area suffers from very high rates of asthma and low birth weights relative to the rest of the state. Systemic improvements to infrastructure and industry beyond increasing active mobility modal share would need to take place for improvements to air quality within the study area.

THE LOS ANGELES-LONG BEACH AREA IS THE WORST IN THE NATION IN TERMS OF OZONE POLLUTION.

AMERICAN LUNG ASSOCIATION, STATE OF THE AIR 2016





CalEnviroScreen Score

- 51 - 62
- 39 - 50
- 29 - 38
- 19 - 28
- 5 - 18

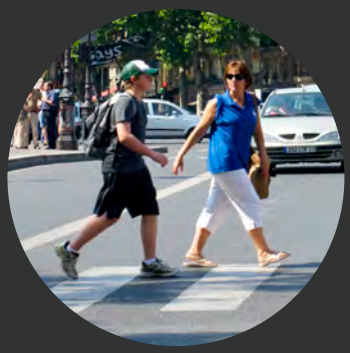
0 0.5 mi 1 mi

CalEnviroScreen Score measures the environmental burden of an area based on several public health indicators. The higher the score, the greater environmental burden that community faces.

CHAPTER 4

Pedestrian Toolkit

DEVELOP A STREET DESIGN STANDARDS MANUAL TO REFLECT THE NEW STREET TYPOLOGIES THAT INCORPORATE THE CONCEPT OF COMPLETE STREETS.



The purpose of this Design Treatment Toolkit is to provide options for reconfiguring streets or portions thereof, to enhance pedestrian accessibility. The toolkit provides the foundation for a street design manual while providing planners, designers and engineers the flexibility to apply different treatments in the appropriate context. The toolkit and the accompanying Local Pedestrian Infrastructure Tour empowers communities to create safe walking routes to parks, schools, food stores and local businesses in their neighborhoods. The toolkit presents potential solutions for different concerns, be the safety, expanding open space or otherwise. The toolkit

Street Design Components

SAFE

The treatment enhances pedestrian safety by slowing traffic speeds, reducing pedestrian exposure to traffic or enhancing visibility.

ACCESSIBLE

The treatment enhances accessibility for those with limited mobility by reducing obstructions and easing distances travelled.

LIVABLE

The treatment improves the conditions for living and walking along the street by providing shade, reducing visual, noise and light impacts from traffic.

ENVIRONMENT

The treatment reduces air pollution and urban heat island, manages stormwater or creates habitat for native wildlife.

ECONOMICS

The treatment supports the local economy by improving visibility and access to businesses, and creating stronger collective brand identity.

THE BUTTONS ON THE OVERVIEW PAGE IDENTIFY THE PRINCIPLES THAT EACH TREATMENT MOST DIRECTLY ADDRESS & SPECIFIC CONSIDERATIONS.

does not propose where the infrastructure enhancements shall go but instead provides a context for communities to work with the city officials to improve their pedestrian environment.

HOW TO USE IT

The Design Treatment Toolkit presents and explains potential options to community members, city officials and consultants seeking to calm traffic and make streets better for walking. The majority of the treatments within this chapter are based on the PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System, 2013 published by the Federal Highway Administration. For purposes of community usability, condensed descriptions for most of the treatments are provided by Active Streets LA, developed by the Los Angeles County Bike Coalition. The toolkit is meant to provide a common language for city officials, consultants and community members when trying to determine ways to improve streets for pedestrians. Not all of these treatments are suitable for every street, each design treatment description includes potential streets and intersections for installation. The criteria sets a baseline, each street design project needs to carefully consider the context to determine what treatments are most appropriate. If treatments are determined appropriate and effective for a particular location they still need to be crafted to fit properly within that context.

FORMAT

Each of the Design Treatments are presented in a similar format for ease of presentation and consideration. The spread is divided into an overview page and technical page, each oriented to different audiences though presented uniformly. Translated copies of the overview pages of each design treatment are available for distribution. There is also a deck of cards with scaled plans of each treatment for use by communities when planning street projects.

TREATMENT OVERVIEW

The overview page consists of an image of the treatment in a familiar context, in Long Beach or surrounding community which allows for firsthand experiences of the application. The dashboard identifies which of the principles each treatment specifically serve as well as specific budgetary considerations around maintenance and construction costs. There is a short description of the treatment and an image focusing on primary elements of the treatment.

TECHNICAL DESCRIPTION

The technical page provides a more detailed description of the purpose, function and application of each treatment. Specific considerations related to design and purpose are specifically emphasized. A schematic of the treatment's application is included in plan form, based on a real scenario in the city though specifically not identified in order to avoid confusion. Additional imagery is provided to show prototypical examples of the treatment's application.

FIRST RESPONDER CONSIDERATION

First responders provide essential public services to the City, and street improvements should be designed to accommodate the access of emergency vehicles. Some of the elements presented in this toolkit can easily be built to accommodate the typical needs of emergency services, while some may require a more involved collaboration to develop designs.

Toolkit Treatment Types

Street Design Components

RECREATION

The treatment encourages walking, jogging and running as physical activity by making continuous pedestrian spaces with few interruptions for traffic.

BEAUTY

The treatment enhances the aesthetic of the street with opportunities for decoration, new greenery and special fixtures.

SOCIAL

The treatment promotes social interaction by expanding public open space and place-making opportunities.

COST

Dollar bills generally indicate the cost of constructing the treatment.

MAINTENANCE

Wrenches generally indicate the amount of maintenance for the treatment after installation.

THE BUTTONS ON THE OVERVIEW PAGE IDENTIFY THE PRINCIPLES THAT EACH TREATMENT MOST DIRECTLY ADDRESS & SPECIFIC CONSIDERATIONS.

Interagency project level review will take place for specific streetscape proposals, particularly for new intersection and block elements.

UTILITIES CONSIDERATIONS

Implementing design treatments in the toolkit may require consideration of overhead or underground utilities. For example, overhead electrical wires may conflict with proposed street tree placement and sewer pipes may conflict with a proposed traffic island. Also changes to the streetscape, including curbs, can alter the streets capacity to carry stormwater. The location of local utilities should be considered early in the design process. Based on existing city policies, utility locations may limit design options or require relocation.

Conversely, placement of utilities should be considered for pedestrian accessibility, safety, visibility and comfort. On narrow sidewalks, above ground infrastructure like a traffic signal box, power pole or street light could make the path of travel unnavigable to pedestrians in wheelchairs, with strollers or pushcarts. Below ground utilities can limit opportunities for introducing landscaping, street trees and curb ramps.

TRANSIT CONSIDERATION

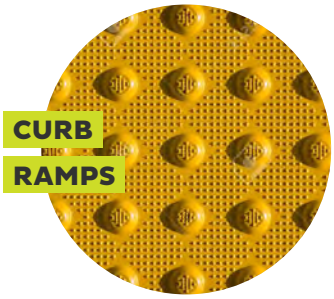
Streets that serve public transportation – including light rail and buses – have specific requirements beyond those on the typical streets. These requirements affect the application of design treatments and the details of how they are designed. This section provides a summary of some of the primary design considerations for pedestrian improvements that overlap with transit routes.

Pedestrian improvement project designs on Long Beach Transit routes generally should not include proposals that reduce transit lanes to below standard lane widths. Exceptions may be made on community routes which have lower frequency and are in primarily residential areas or on transit routes that currently have substandard travel lanes widths.

Adding curb extensions at transit stops can fulfill pedestrian enhancement goals while improving transit operations. However, transit curb extensions have specific requirements for clear space in order to provide access to vehicle doors. Enhancement that include transit extensions should be coordinated with Long Beach Transit to ensure appropriate design and placement. The general planting palette for green space on transit routes should be developed with transit vehicles in mind. Where possible, pedestrian improvement projects that overlap with transit routes should include coordination with Long Beach Transit engineers or service planners to ensure that the designs support the needs of both.

Termino

SIDEWALKS



Sidewalks are the portion of the public right-of-way that provide a separated area for people traveling on foot. Sidewalks that are safe, accessible and aesthetically pleasing attract pedestrians. People walk for many reasons: to go to a neighbor's house, to run errands, for school, or to get to a business meeting. People also walk for recreation and health benefits or for the enjoyment of being outside. Some pedestrians must walk to transit or other destinations if they wish to travel independently. It is a public responsibility to provide a safe, secure and comfortable system for all people who walk.

Safe & Accessible Sidewalks

ALL STREETS

Sidewalks should be a minimum of 5' wide, with a smooth, flat surface and free of obstructions. Providing an additional 4-6' buffer area between the sidewalk and street accommodates landscape, trees, furniture and infrastructure.

-CONSIDERATIONS-

Provide adequate sidewalk widths and clear path of travel as determined by street type classification, adjoining land uses and expected pedestrian usage.

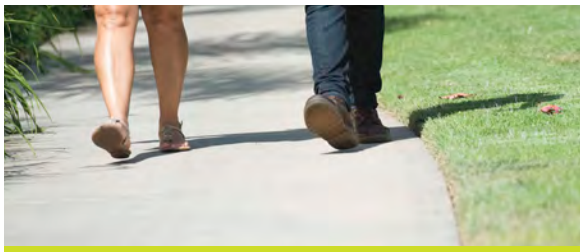
MOP P 2-18

STREET FURNITURE ZONES

In downtown or commercial districts

FLAT SIDEWALKS

Where driveways slope to the roadway



DESCRIPTION

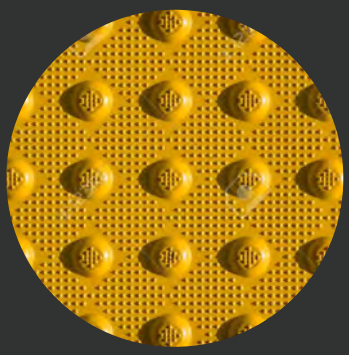
Sidewalks provide people with space to travel within the public right-of-way that is separated from roadway vehicles. They provide places for children to walk, run, skate, ride bikes and play. Such facilities also improve mobility for pedestrians and provide access for all types of pedestrian travel: to and from home, work, parks, schools, shopping areas and transit stops. Walkways should be part of every new and renovated road facility and every effort should be made to retrofit streets that currently do not have sidewalks.

Both the FHWA and the Institute of Transportation Engineers [ITE] recommend a minimum width of 5 feet for a sidewalk or walkway, which allows two people to pass comfortably or to walk side-by-side. Wider sidewalks should be installed near schools, at transit stops, in downtown areas, or anywhere high concentrations of pedestrians exist. Sidewalks should be continuous along both sides of a street and sidewalks should be fully accessible to all pedestrians, including those in wheelchairs.

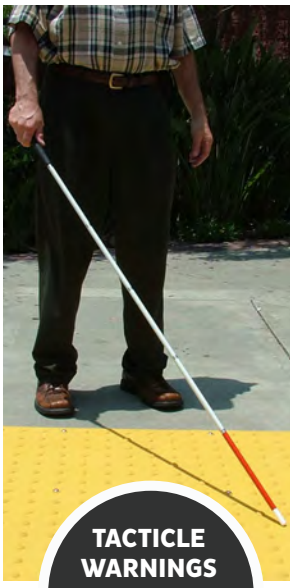
A buffer zone of 4 to 6 feet is desirable to separate pedestrians from the street. The buffer zone will vary according to the street type. In downtown or commercial districts, a street furniture zone is usually appropriate. There should be a flat sidewalk provided in areas where driveways slope to the roadway. Additionally, it is necessary to maintain a sidewalk level across the driveway with no more than 2 percent cross slope in order to safely accommodate pedestrians in wheelchairs and other mobility devices and to comply with ADA standards.

Curb Ramps

ALL INTERSECTIONS



Curb ramps let wheelchairs, strollers and carts cross the street from the raised curb more easily.



TACTICLE WARNINGS

Alert pedestrians to the sidewalk & street edge

CURB RAMPS

DESCRIPTION

Curb ramps provide access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, bicycles and also for pedestrians with mobility impairments who have trouble stepping up and down high curbs. Curb ramps must be installed at all intersections and midblock locations where pedestrian crossings exist, as mandated by federal legislation [1973 Rehabilitation Act and Americans with Disabilities Act 1990]. Curb ramps must have a slope of no more than 1:12 [must not exceed 25.4 mm/0.3 m [1 in/ft] or a maximum grade of 8.33 percent] and a maximum slope on any side flares of 1:10.

Where feasible, separate curb ramps for each crosswalk at an intersection should be provided rather than having a single ramp at a corner for both crosswalks. This provides improved orientation for visually impaired pedestrians. Similarly, tactile warnings will alert pedestrians to the sidewalk/street edge. All newly constructed and altered roadway projects must include curb ramps. In addition, audits of their pedestrian facilities should be made to make sure transit services, schools, public buildings and parks, etc. are accessible to pedestrians who use wheelchairs.

Tactile warnings alert pedestrians to the sidewalk and street edge. Rumble strips, stripes formed in the crosswalk signal the transition between ramp and sidewalk while a mat consisting of truncated domes indicate the ramp and street transition.

Pedestrian Lighting

ALL STREETS

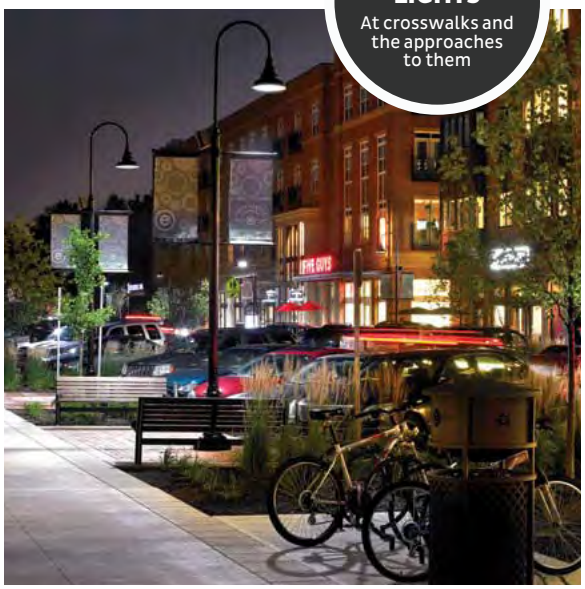
Increased lighting on the sidewalk area and crosswalks for enhancing pedestrian safety and security. This can include closer placement of street lights, pedestrian scale light fixtures as well as special festive lighting.

-CONSIDERATIONS-

In commercial areas with nighttime pedestrian activity, streetlights & building lights can enhance the ambiance & vibrancy of the area as well as the visibility of pedestrians for motorists.

SHINE BRIGHTER LIGHTS

At crosswalks and the approaches to them



String lights or festoon lighting can also dramatically improve the nighttime aesthetic of the area.

PEDESTRIAN LIGHTING

DESCRIPTION

Good quality and placement of lighting can enhance an environment as well as increase comfort and safety. Pedestrians often assume that motorists can see them at night; they are deceived by their own ability to see the oncoming headlights. Without sufficient overhead lighting, motorists may not be able to see pedestrians in time to stop.

In commercial areas with nighttime pedestrian activity, streetlights and building lights can enhance the ambiance of the area and the visibility of pedestrians by motorists. It is best to place streetlights along both sides of arterial streets and to provide a consistent level of lighting along a roadway. In Pedestrian Priority Areas, around Urban Trails and along primary Safe Routes, specialty pedestrian-level lighting should be placed over the sidewalks to improve pedestrian comfort, security and safety. Additional pedestrian lighting should be considered around intersections that have had safety issues whether through vehicle conflicts or criminal action.

Nighttime pedestrian crossing areas may be supplemented with brighter or additional lighting. This includes lighting pedestrian crosswalks and approaches to the crosswalks. In commercial areas or in downtown areas, specialty pedestrian-level lighting may be placed over the sidewalks to improve pedestrian comfort, security and safety. Mercury vapor, incandescent, or less expensive high pressure sodium lighting is often preferred as pedestrian level lighting. Low-pressure sodium lights are low energy, but have a high level of color distortion.

Driveway Improvements

ALL STREETS

Reconfigure existing vehicle driveways to improve pedestrian accessibility and safety by narrowing, altering or consolidating them. Eliminate unused vehicle driveways wherever possible.

-CONSIDERATIONS-

To accommodate the walkway's maximum two percent cross-slope on narrow sidewalks it might be necessary to ramp the sidewalk down to street level.

KEEP A LEVEL WALKWAY
No more than 2% cross-slope at sidewalks

DRIVEWAY IMPROVEMENTS

DESCRIPTION

Several driveway design characteristics may cause safety and access problems for pedestrians, including excessively wide and/or sloped driveways, driveways with large turning radii, multiple adjacent driveways, driveways that are not well defined, and driveways where motorist attention is focused on finding a gap in congested traffic. Driveway improvements should include narrowing driveways, tightening turning radii, and improving driveway definition.

Closing and consolidating driveways or converting driveways to right-in-right-out are design strategies that may be part of a larger access management strategy. Driveways should be narrowed to current maximum design standards when possible. When driveways cross sidewalks, the sidewalk should be clearly delineated across the driveway to make it clear to motorists that they must watch for pedestrians. If a driveway must function as part of an intersection, it should be designed with pedestrian safety features such as crosswalks, small corner radii, tactile surface treatments and pedestrian signal heads if signalized.

When driveways cross sidewalks, it is necessary to maintain a level walkway across the driveway of no more than 2 percent cross-slope. This is more usable for all pedestrians, especially those in wheelchairs, and makes it clear to motorists that they must watch for pedestrians. It is important to minimize large signs and bushes at driveways to improve the visibility between motorists and pedestrians. The sidewalk material [usually concrete] should be maintained across the driveway as well.

Street Landscaping

ALL STREETS

Street trees add a canopy cover over the street. This makes the streets more beautiful, cools the neighborhood, lowers energy costs in homes, gives pedestrians shade while they walk and makes the air cleaner.

-CONSIDERATIONS-

Treat streets as an important part of the public open space system, and an integral part of the City's urban forest.

MOP P 2-7

KEEP IT LOCAL

Plants should be adapted to the local climate

Growth patterns should not obscure signs or pedestrians' and motorists' views of each other.

STREET LANDSCAPING

DESCRIPTION

The careful use of landscaping along a street can provide separation between motorists and pedestrians, reduce the visual width of the roadway [which can help to reduce vehicle speeds], and provide a more pleasant street environment for all. This can include a variety of trees, shrubs and/or flowerpots, which can be planted in the buffer area between the sidewalk or walkway and the street. The City of Long Beach has adopted the first phase of the Urban Forestry Master Plan, which drafts goals and policies for the long-term management and maintenance of City trees and expansion of the city's urban forest.

The most significant issue with any landscaping scheme is ongoing maintenance. Some communities have managed effectively by creating associations to pay for landscape maintenance or through the volunteer efforts of neighbors. Others have found them to be unreliable and budget for public maintenance instead. Consider adding irrigation systems in areas with extensive planting.

Choosing appropriate plants, providing adequate space for maturation and preparing the ground can help ensure that they survive with minimal maintenance, and don't buckle the sidewalks as they mature. Plants should be adapted to the local climate and fit the character of the surrounding area—they should survive without protection or intensive irrigation and plant's growth patterns should not obscure signs or pedestrians' and motorists' views of each other.

Tree Allée

STREETS WITH A WIDE SIDEWALK OR ADJACENT OPEN SPACE

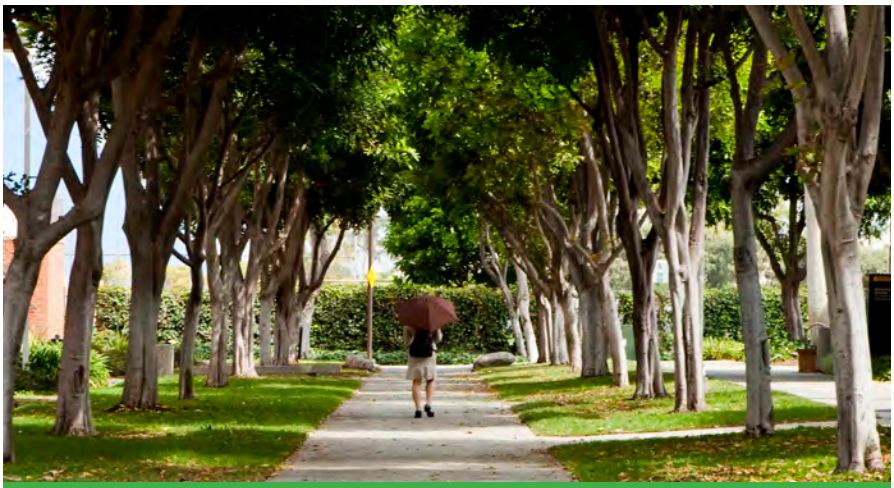
A tree allée is a walkway flanked by consistently spaced trees or tall shrubs on either side, providing constant shade for pedestrians no matter the time of day or year.

-CONSIDERATIONS-

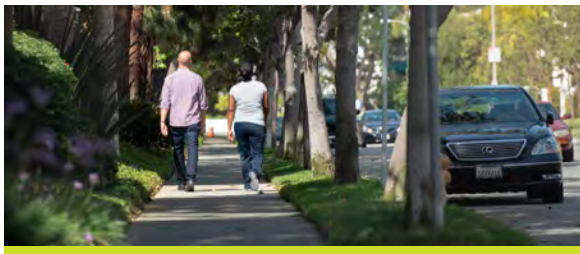
Though many of the most famous tree allées are located in commercial districts the dense tree canopy can obscure businesses' signage so consider using taller trees or species with lacier canopies.

GIVE THEM SPACE

Tree Allées usually need 20-40 ft of sidewalk area



TREATMENT TYPE



DESCRIPTION

When space is available along particularly desirable walking routes, tree allées can be particularly cost effective treatments for enhancing the pedestrian realm. Planting a pair of rows of consistent tree types can create an urban forestry canopy that provides constant shade for pedestrians utilizing the walking path between. It also delivers a picturesque experience for pedestrians as their walk is enveloped in nature within an otherwise urban environment.

Consistent street trees and landscape are shown to have a traffic calming effect, especially on the occasions when the tree canopy reaches over the roadway. The tree allée expands upon the typical street tree program, further enhancing the traffic calming as well as environmental benefits for natural habitat, stormwater management, carbon sinking and reducing the urban heat island. Additional maintenance is required as there are more trees to water until establishment then followed by tree trimming when mature.

Tree allées typically require a sidewalk area of between twenty and forty feet between the trees depending the selected tree species. For narrower areas, the trees can be offset in order to more closely space the trees. School campuses, parks and public facilities typically provide additional area when the sidewalk is not sufficiently wide to comfortably plant the two rows of trees. When working with community groups, it is possible to plant trees in front yard areas to augment street trees within the public right-of-way.

Street Furniture

ALL STREETS

Pedestrian environments can be enhanced with street furniture like benches, bus shelters, public art and special landscaping on the sidewalk. Installation should consider accessibility, visibility and maintenance.

-CONSIDERATIONS-

To insure street furniture remains safe & clean, the local business association or adjacent property owner typically enters into an operating agreement with the city to be responsible for its maintenance.

KEEP SIDEWALKS CLEAR

Of tripping hazards and debris.

Good-quality street furniture will show that the community values its public spaces and is more cost-effective in the long run.

STREET FURNITURE

DESCRIPTION

Sidewalks should be continuous and should be part of a system that provides access to goods, services, transit and homes. Well-designed walking environments are enhanced by urban design elements and street furniture, such as benches, bus shelters, trash receptacles, public art and water fountains. The improvements can be used to support economic development along commercial corridors and business districts.

Sidewalks and walk areas should be kept clear of poles, signposts, newspaper racks and other obstacles that could block the path, obscure a driver's view or pedestrian visibility, or become a tripping hazard. Benches, water fountains, bicycle parking racks and other street furniture should be carefully placed to create an unobstructed path for pedestrians. Good-quality street furniture will show that the community values its public spaces and is more cost-effective in the long run.

Such areas must also be properly maintained and kept clear of debris, overgrown landscaping, tripping hazards, or areas where water accumulates. Walking areas should also be interesting for pedestrians and provide a secure environment. Storefronts should exist at street level and walking areas have good sight lines for adequacy of overhead clearances and detectability of protruding objects should be assured for pedestrians who are blind or visually impaired.

STREETS

Design and operational elements of the roadway affect the ability of pedestrians to safely and easily cross streets. A geometric element such as street width affects the time needed to cross the street, whereas an operational parameter like traffic direction affects the number of potential conflicts between motorists and crossing pedestrians. Traffic calming is a way to design streets, using physical measures, to encourage people to drive more slowly. It creates physical and visual cues that induce drivers to travel at slower speeds. Traffic calming is self-enforcing. The design of the roadway results in the desired effect, without relying on compliance with traffic control devices such as signals, signs, and without enforcement. While elements such as landscaping and lighting do not force a change in driver behavior, they can provide the visual cues that encourage people to drive more slowly.

On-street Parking

STREETS WITH AVAILABLE ROADWAY WIDTH

On-street parking is provided by a curbside lane that vehicles can pull in parallel or diagonally. The parked vehicles insulate pedestrians from moving vehicles while calming traffic speeds while vehicles park.

-CONSIDERATIONS-

Approaches to crosswalks & intersections should be clear of on-street parking pedestrian safety. Curb extensions can reduce these distances and increase on-street parking.

ON-STREET PARKING

DESCRIPTION

On-street parking can be both a benefit and a detriment to pedestrians. On-street parking increases positive "friction" along a street and can narrow the effective crossing width, both of which encourage slower speeds. Parking provides a buffer between moving motor vehicle traffic and pedestrians along a sidewalk. In addition, businesses that rely on on-street parking as opposed to parking lots are better oriented toward pedestrian access; they are more likely to orient their building to the sidewalk. This attention can foster a more vibrant pedestrian commercial environment.

On the other hand, parking creates a visual barrier between motor vehicle traffic and crossing pedestrians, especially for children with low visual profiles and people using wheelchairs. Parking should be restricted on approaches to a marked or unmarked crosswalk. Diagonal parking may require more attention to improve visibility at crossings and intersections, and it should not be used on high speed or busy streets. Back-in diagonal parking is preferred and has a number of advantages over pull-in parking, including: giving drivers access to their trunk from the curb rather than the street, protection of children as an open door directs them to the sidewalk, and giving the driver clear sight lines when pulling out of the parking space.

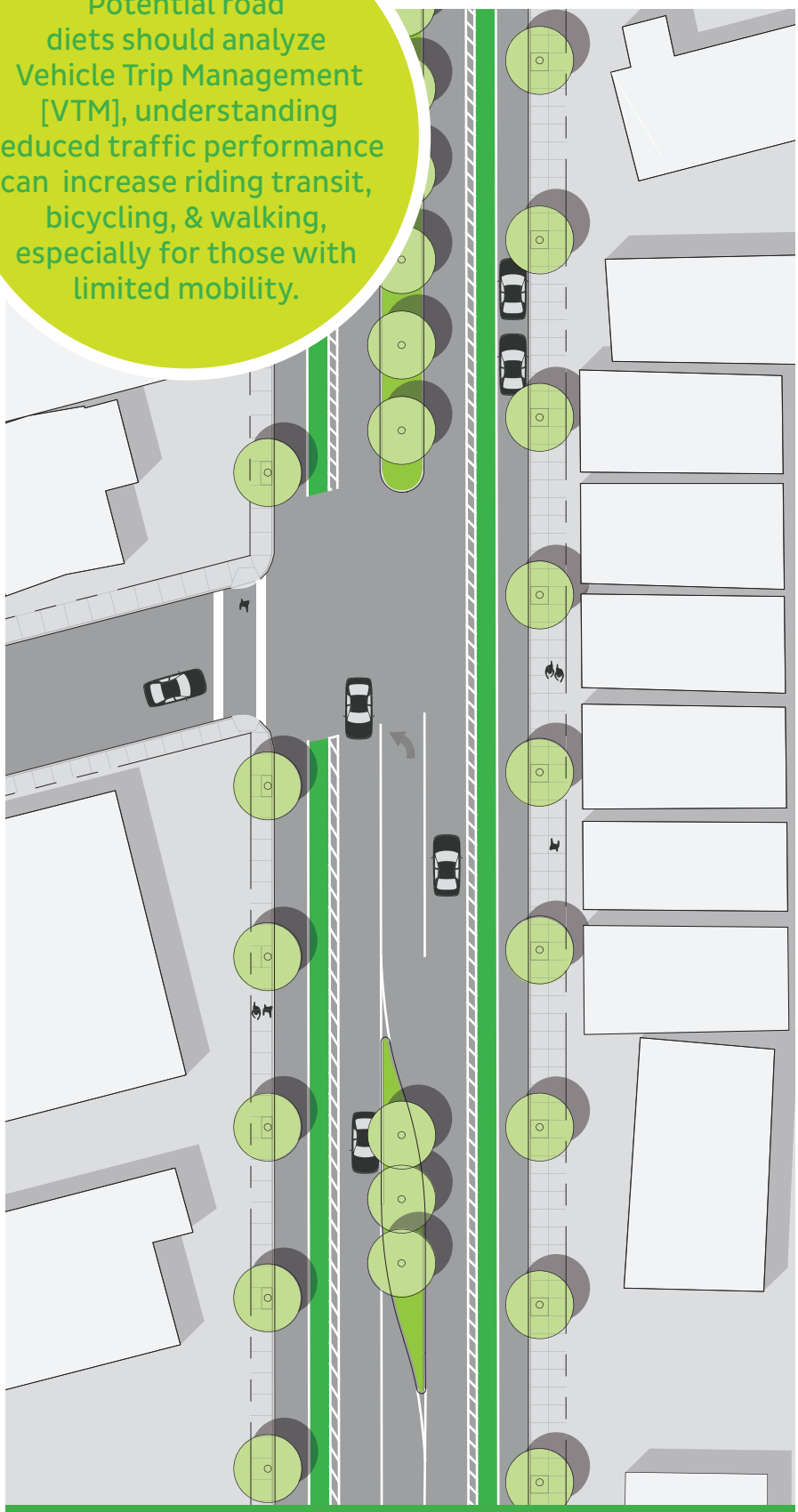
Road Diet

ANY STREET WITH SURPLUS CAPACITY

A road diet reconfigures surplus roadway for additional on-street parking, turn lanes, bike lanes and/or pedestrian area. Road diets typically calm traffic speeds while reducing common conflicts.

-CONSIDERATIONS-

Potential road diets should analyze Vehicle Trip Management [VTM], understanding reduced traffic performance can increase riding transit, bicycling, & walking, especially for those with limited mobility.



ROAD DIET

DESCRIPTION

The most common road diet configuration involves converting a four lane road to three lanes, with one travel lane in each direction and a center lane for left-turn movement, often supplemented with painted, textured, or raised center islands. Four to three lane conversions should be considered for roadways with documented safety concerns, moderate volumes [less than 15,000 ADT, up to 25,000 ADT in special cases], and along priority bicycle and pedestrian priority areas.

A traffic analysis should be conducted to determine whether a lane reduction is feasible. There are many opportunities to perform road diets, particularly on roadways with wider cross sections, one-way streets and although not as common, where volumes are low on a three lane road [one lane in each direction with center lane] can be converted to two.

Extra roadway space can be reallocated for other roadway users to improve safety, comfort and convenience pedestrians. Reconstruction projects may allow for curb lines to be moved to narrow the roadway. With the additional space created from restriping or reconstruction, space can be redistributed for the following uses in the roadway [bicycle lanes, parking lanes or transit lanes] or for wider sidewalks or landscaped buffers.

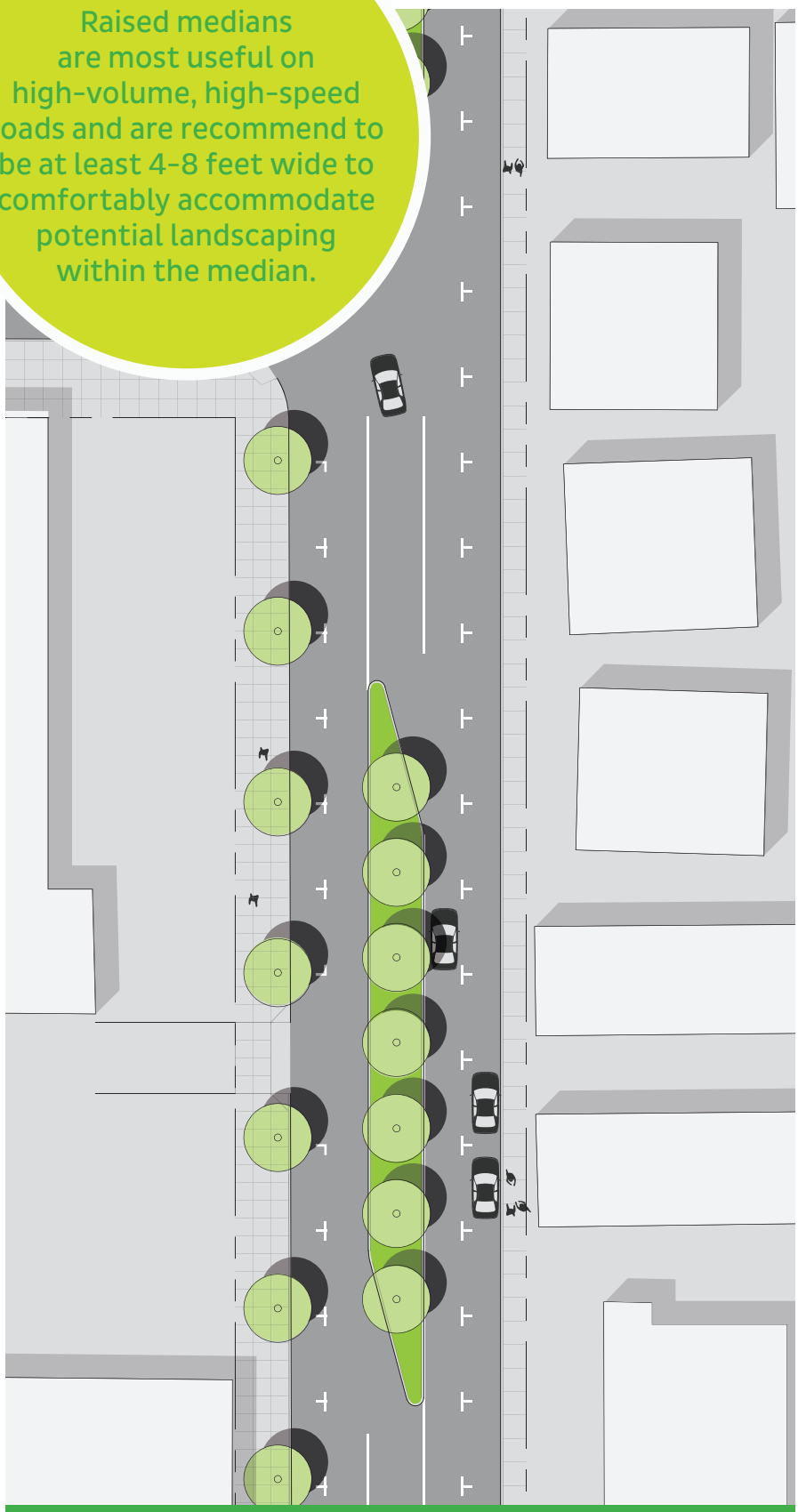
Landscaped Median

ANY STREET

A landscaped median is a continuous curb island within the middle of the street that provides opportunity for landscaping and street trees. The median reduces conflict between opposing traffic and helps calm traffic speeds.

-CONSIDERATIONS-

Raised medians are most useful on high-volume, high-speed roads and are recommend to be at least 4-8 feet wide to comfortably accommodate potential landscaping within the median.



RAISED MEDIANS

DESCRIPTION

Raised medians are curbed sections that typically occupy the center of a roadway. They can facilitate pedestrian crossings by providing a crossing area that is physically separated from the automobile path of travel, reducing pedestrian crossing distances and enabling pedestrians to focus on one direction of traffic at a time when crossing the street. Raised medians can be especially helpful for pedestrians who are unable to judge distances accurately or who have difficulty completing wide roadway crossings.

Trees and other landscaping elements can be added to raised medians as long as they do not restrict visibility. These elements can help change the character of a street and reduce speeds. Raised medians can also improve motorist safety when they replace two-way center turn lanes; however, desired turning movements need to be carefully studied and provided where necessary so that motorists are not forced to travel on inappropriate routes, such as residential streets, or make unsafe U-turns. In some environments, raised medians can be constructed in sections, creating an intermittent rather than continuous raised median. Another good alternative device for two-, three- or four-lane roads is the crossing island, which provides a crossing landing for pedestrians and, in some designs, aids in decreasing vehicle speeds.

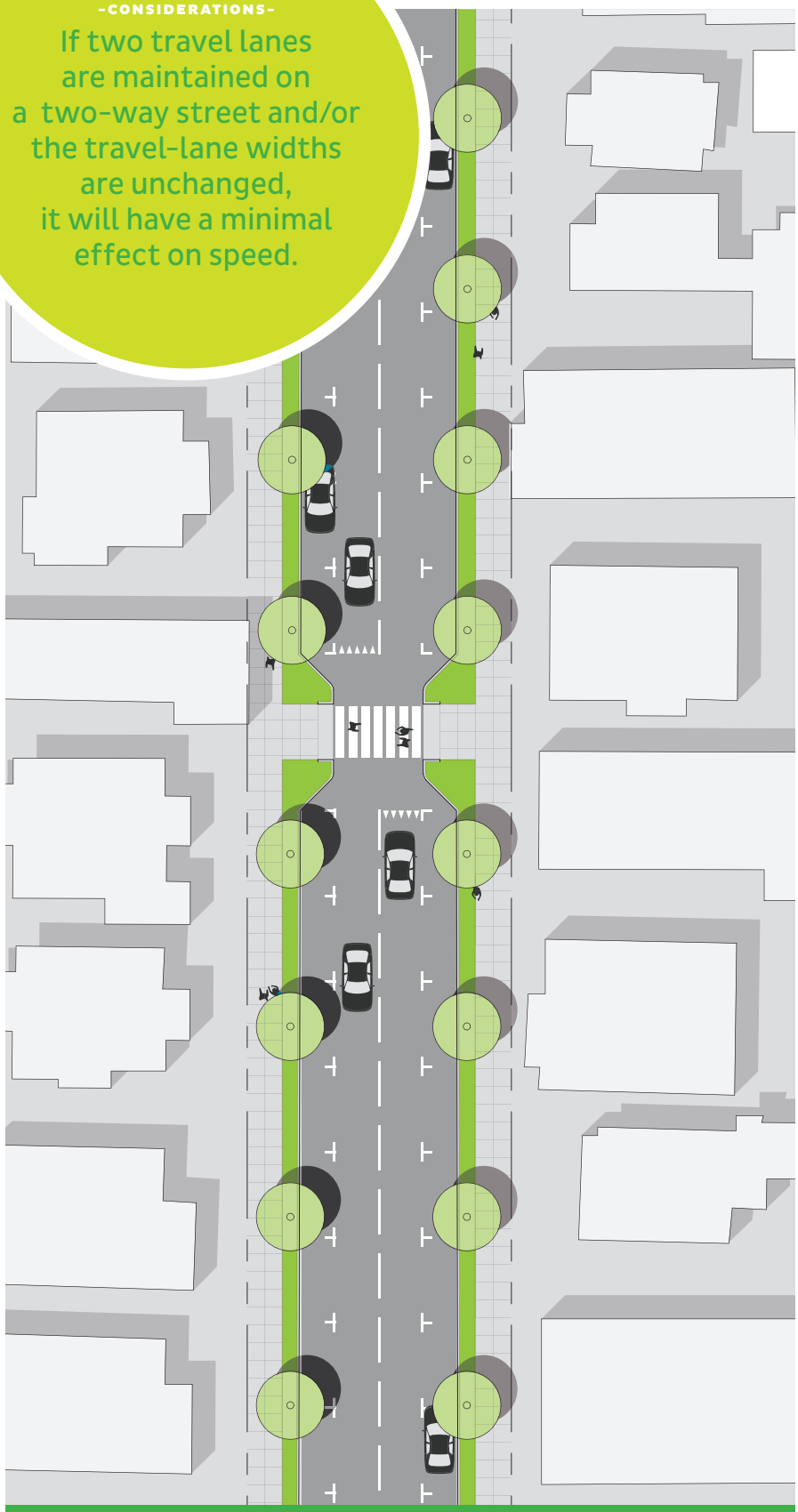
Choker/ Neck-down

ANY STREET

Chokers are two curb extensions on opposite sides of the street that encourage drivers to slow down by making the street narrower. They can also be used as part of mid-block pedestrian crossings.

-CONSIDERATIONS-

If two travel lanes are maintained on a two-way street and/or the travel-lane widths are unchanged, it will have a minimal effect on speed.



CHOKER/ NECK-DOWN

DESCRIPTION

Chokers are curb extensions that narrow a street by widening the sidewalks or planting strips, effectively creating a pinch point along the street. Chokers can be created by bringing both curbs in, or they can be done by more dramatically widening one side at a midblock location. They can also be used at intersections, creating a gateway effect when entering a street.

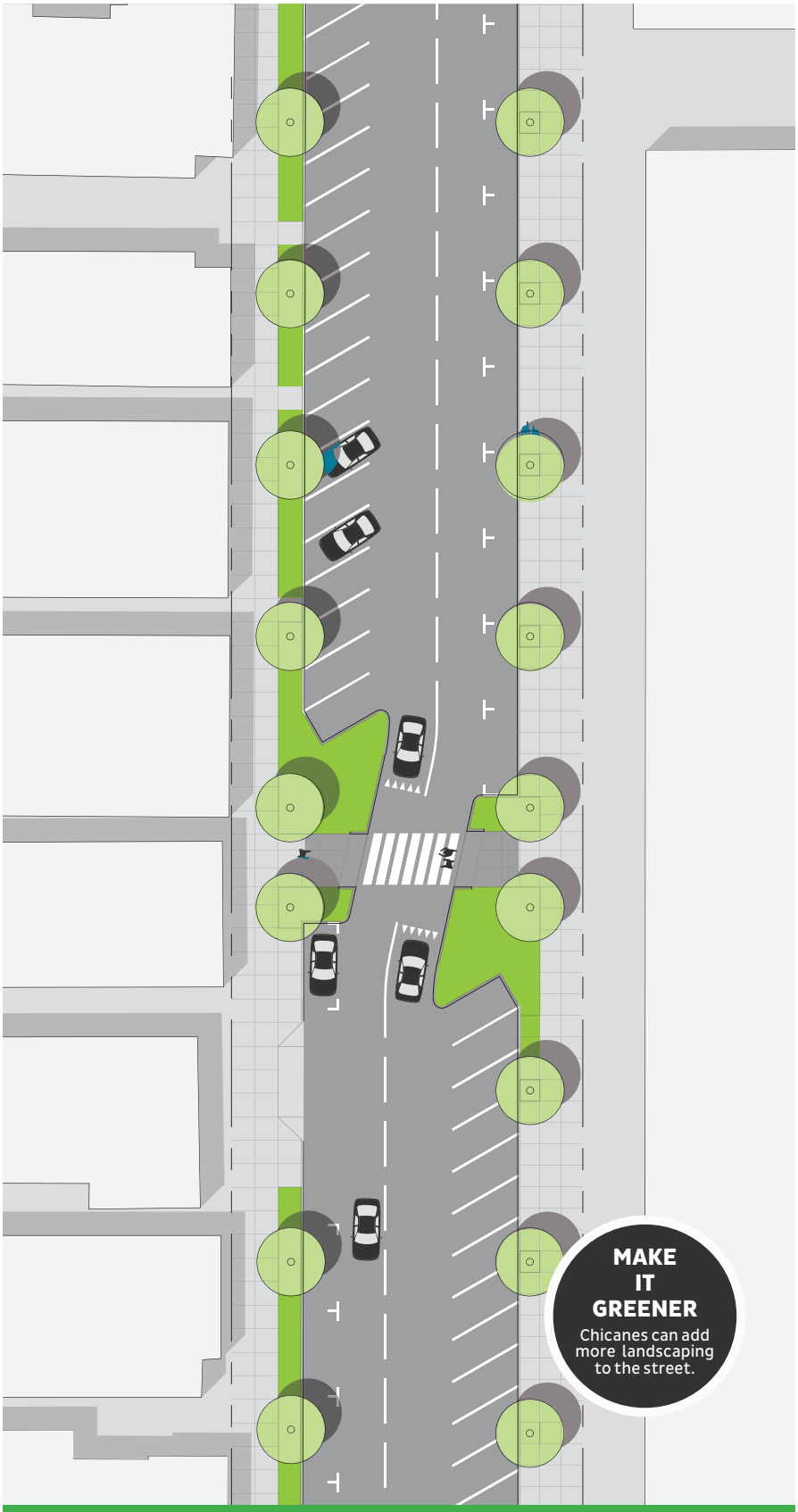
Chokers can have a dramatic effect by reducing a two-lane street to one lane at the choker point [or two narrow lanes], requiring motorists to yield to each other or slow down. In order for this to function effectively, the width of the travelway cannot be wide enough for two cars to pass: 16 feet is generally effective [and will allow emergency vehicles to pass unimpeded]. This kind of design is usually only appropriate for low-volume, low-speed streets.

They can be used to create a clear transition between a commercial and a residential area or narrow overly-wide intersections and midblock areas of streets. Chokers also can be designed to add room along the sidewalk or planting strip for landscaping or street furniture. Chokers can provide an opportunity to enhance midblock pedestrian crossings by reducing the crossing distance. In this case, care should be taken to ensure that street furniture and landscaping do not block motorists' views of pedestrians.

Chicane/ Lateral Shift

LOCAL STREETS

A chicane is a series of alternating curb extensions [or on-street parking spaces] that forces drivers to slow down by creating an S-shaped roadway.



CHICANE / LATERAL SHIFT

DESCRIPTION

Chicanes create a horizontal diversion of traffic and can be gentler or more restrictive depending on the design. A secondary benefit of chicanes installation is the ability to add more landscaping to a street but be sure to maintain good visibility by planting only low shrubs or trees with high canopies.

DIVERTING THE PATH OF TRAVEL

Shifting a travel lane has an effect on speeds as long as the taper is not so gradual that motorists can maintain speeds. For traffic calming, the taper lengths may be as much as half of what is suggested in traditional highway engineering. The taper lengths should reflect the desired speed which should be posted prior to the chicane. Shifts in travel ways can be created by shifting parking from one side to the other [if there is only space for one side of parking or by building landscaped islands; islands can also effectively supplement the parking shift].

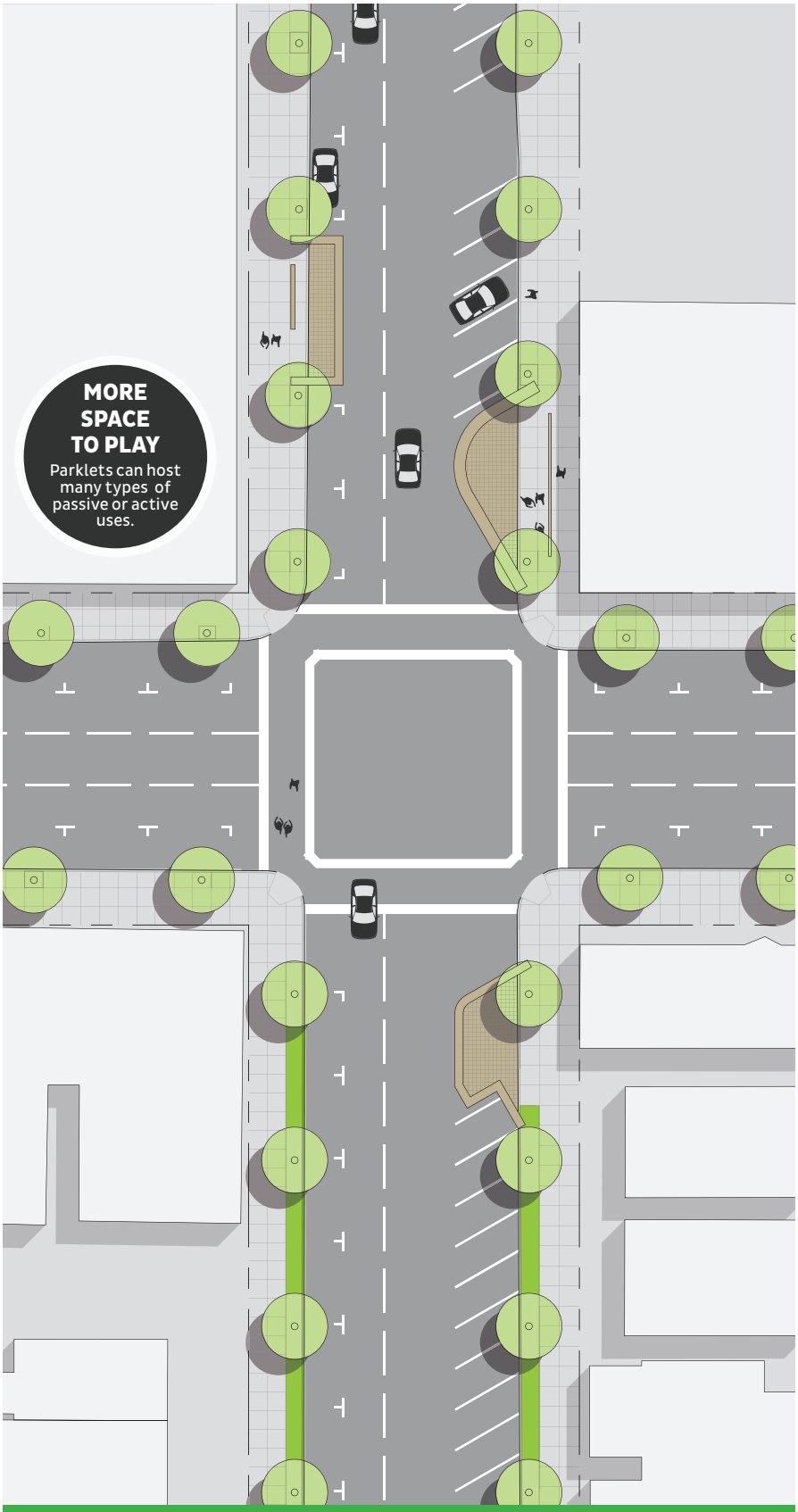
DIVERSION PLUS LANE RESTRICTION

Diverting the path of travel plus restricting the lanes [as described under "chokers"] usually consists of a series of curb extensions, narrowing the street to two narrow lanes or one lane at selected points and forcing motorists to slow down to maneuver between them. Such treatments are intended for use only on residential streets with low traffic volumes. If there is no restriction [i.e., the number of lanes is maintained], chicanes can be created on streets with higher volumes, such as collectors or minor arterials.

Parklet

LOCAL STREET, NEIGHBORHOOD CONNECTORS & MINOR AVENUES

A parklet is a temporary extension of the sidewalk that takes the place of one or more on-street parking spaces. Parklets create space for seating, planting and other elements.



STREET PARKLET

DESCRIPTION

Parklets are typically installed in the parking lane adjacent to the sidewalk area, expanding the pedestrian realm much like a curb extension does. While most parklets developed across the country are public spaces those in Long Beach have primarily been installed by businesses as extensions of their sidewalk dining areas. In these cases, the business owner pays for the additional area afforded through the parklet just like the public walkway occupancy permit.

Parklets are typically built using prefabricated decking systems that allow for easy installation and removal or relocation, as they are intended to be temporary in nature. The parklet's surface meets to the level of the sidewalk to provide ADA access from the public walkway. The edges of the parklet are defined with a mix of planters, railing and other furniture that insulates parklet occupants from the vehicle traffic in the adjacent travel lane.

Raised decking systems on parklets allow unencumbered storm water to flow through the street and along the gutter. A metal edge is affixed along the parklet deck edges facing the street to protect the decking from street-sweepers.

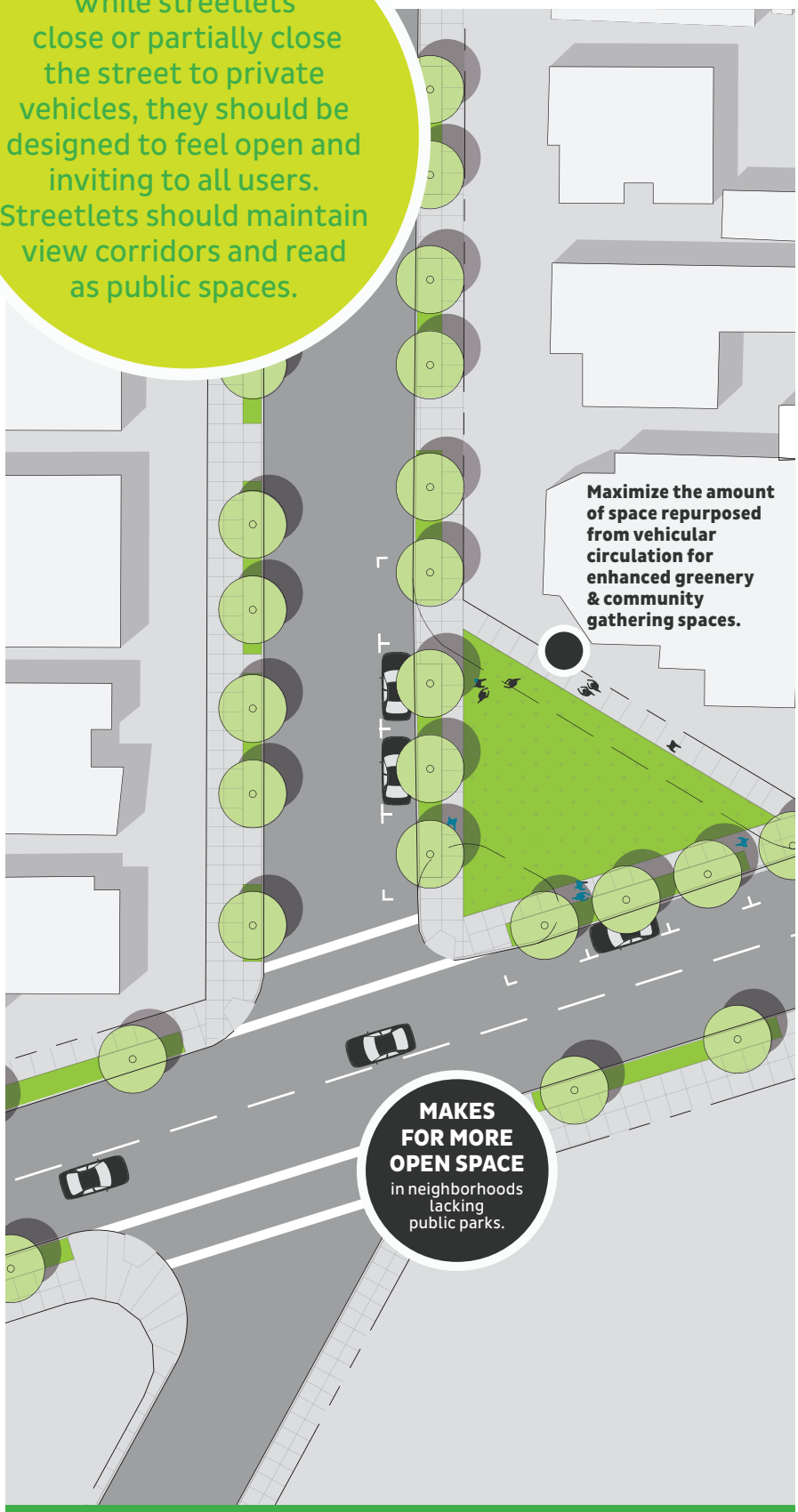
Streetlet/ Block Closure

NEIGHBORHOOD COLLECTORS, LOCAL STREETS & ALLEYS WITH PARALLEL ALTERNATIVE ROUTES.

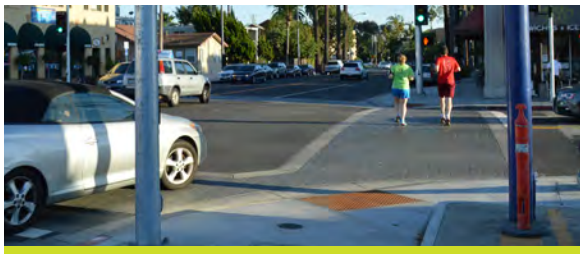
A streetlet or block closure permanently closes all or part of the roadway to create area for public open space.

-CONSIDERATIONS-

While streetlets close or partially close the street to private vehicles, they should be designed to feel open and inviting to all users. Streetlets should maintain view corridors and read as public spaces.



STREETLET/BLOCK CLOSURE



DESCRIPTION

Streetlets expand upon the partial or complete street closure to create public open space for pedestrians in the former roadway. This is accomplished by installing multiple physical barriers that blocks a street to motor vehicle traffic and provides some means for vehicles to turn around. The streetlet can be employed to expand open space in neighborhoods currently underserved by public parks or for place-making for commercial districts.

Streetlets may be designed with low-cost materials like paint or more expensive treatments that involve modifying curb lines, adding speed tables etc. Streetlets should be designed to maximize opportunities for greening, stormwater management and habitat creation. Streetlets should incorporate programming elements like seating, public art and informational or educational environmental graphics. The design of streetlets should maximize the amount of space repurposed from vehicular circulation for enhanced greenery and community gathering spaces.

If a street closure is done for the streetlet, it should always allow free through movement of all pedestrians, including wheelchair users and bicyclists. Emergency vehicles should also be able to access the street; this can be done with a type of barrier or gate that is electronically operated, permitting only large vehicles to traverse it. Streetlet projects may necessitate the installation of new catch basins to ensure potential changes to stormwater flow caused.

Shared Street

LOCAL STREETS WITH PARALLEL ALTERNATIVE ROUTES

A shared street minimizes the difference between vehicle traffic and pedestrians, often by removing features such as curbs, road markings and traffic signs. They can also easily be closed to vehicle traffic for alternative uses and programs.

-CONSIDERATIONS-

The street design must still meet current Americans with Disability Act [ADA] standards, and consideration must be given to provide access by fire trucks and other service vehicle where applicable.

SHARED STREET

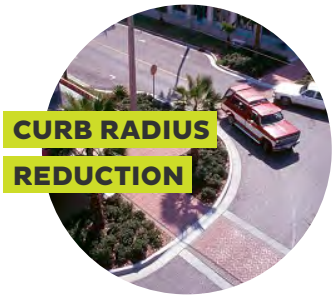
DESCRIPTION

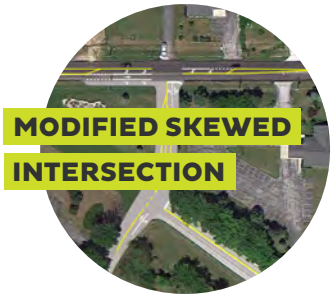
"Shared street" is the term that is commonly used in English; its origins are based in the concept of a "woonerf," which is a Dutch term loosely meaning "street for living." It is an integrated space used to better balance the needs of pedestrians, bicyclists and low-speed motor vehicles. They are usually local-access, narrow streets without curbs and sidewalks and vehicles are slowed by placing trees, planters, parking areas and other obstacles in the street.

A clear signal is given to designate entrance into the space, either through signage, narrowing of the roadway and/or different paving materials. Motorists in these areas are encouraged to travel at much slower speeds. Rather than relying on traffic controls, street users negotiate right of way in a cooperative manner. The shared streets often lack signs and markings necessary for the operation of conventional streets, with users instead guided by the physical design of the street. The intended result is that the street and any adjacent commercial businesses are more amenable to bicycle and pedestrian use.

While not technically shared streets, there are also ways streets can be utilized and/or engineered to accommodate a greater variety of street space uses. This can be done with retractable bollards, operable gates or moveable planers. During the times it is open to vehicles, the street operates as a shared street with very slow vehicle traffic.

INTERSECTIONS



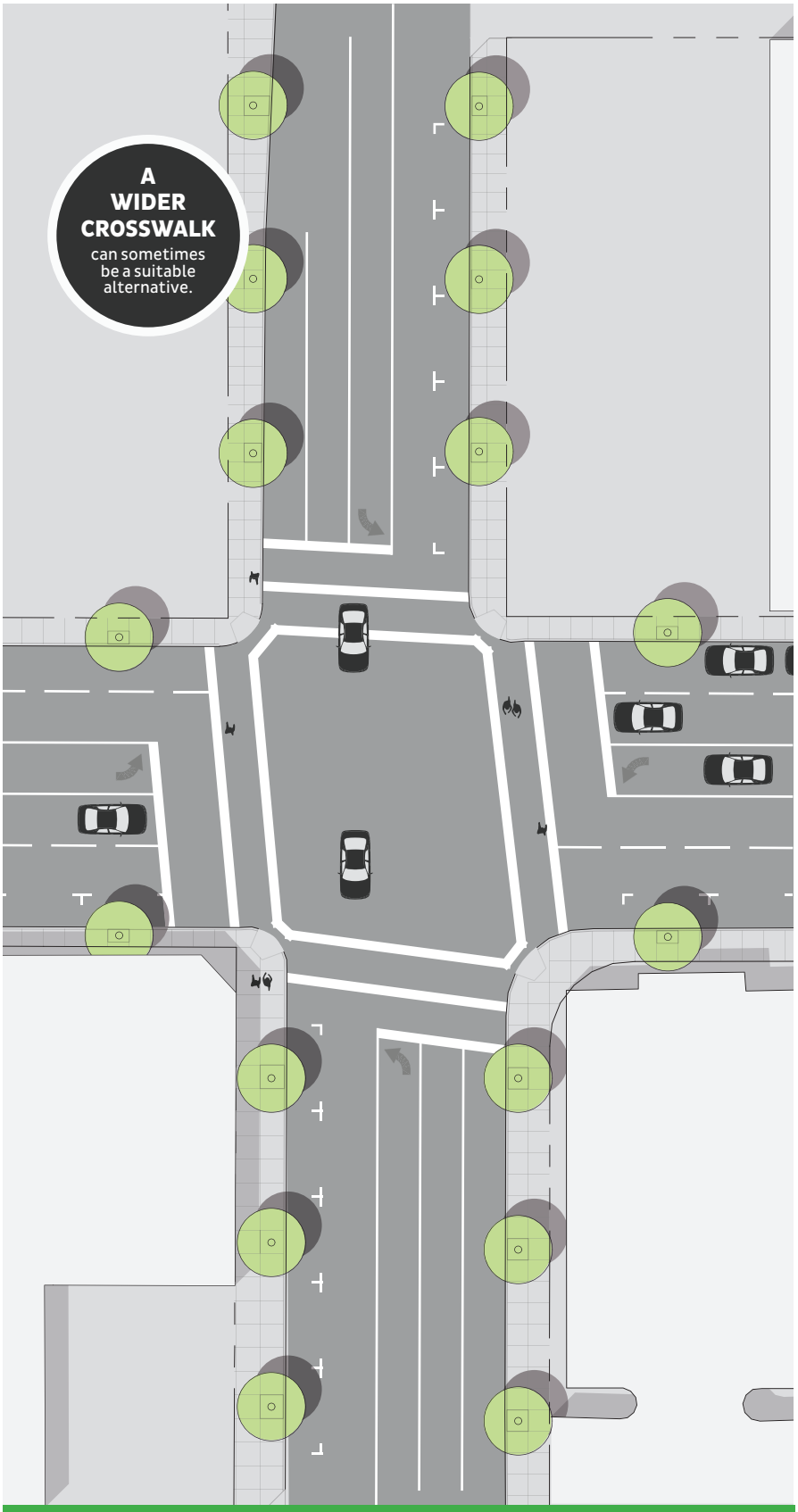


A successfully designed intersection eliminates any possibility of conflict between transportation modes, including walking and driving. There are several countermeasures that are specifically aimed at improving intersection safety and mobility, including many of those described in the sections on roadway design and traffic calming. There are several advantages to using these traffic control devices, but it is important to consider the surrounding transportation and land use contexts, as some of these improvements may be less appropriate than others.

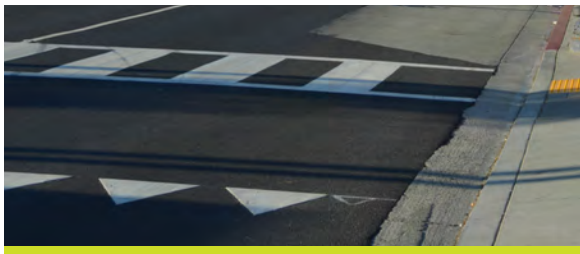
Advanced Stop Line

NEIGHBORHOOD CONNECTORS, AVENUES, BOULEVARDS & REGIONAL CORRIDORS

Advanced stop lines before crosswalks improve pedestrian visibility and gives p destrians a head start to cross before vehicles can make a turn.



ADVANCED STOP LINE



DESCRIPTION

At signalized intersections and midblock crossings, the vehicle stop line can be moved farther back from the pedestrian crosswalk for an improved factor of safety and for improved visibility of pedestrians. One study found that use of a "Stop Here For Pedestrians" sign alone reduced conflicts between drivers and pedestrians by 67 percent. With the addition of an advanced stop line, this type of conflict was reduced by 90 percent compared to baseline levels. Advanced stop lines are also applicable for non-signalized crosswalks on multi-lane roads to ensure that drivers in all lanes have a clear view of a crossing pedestrian.

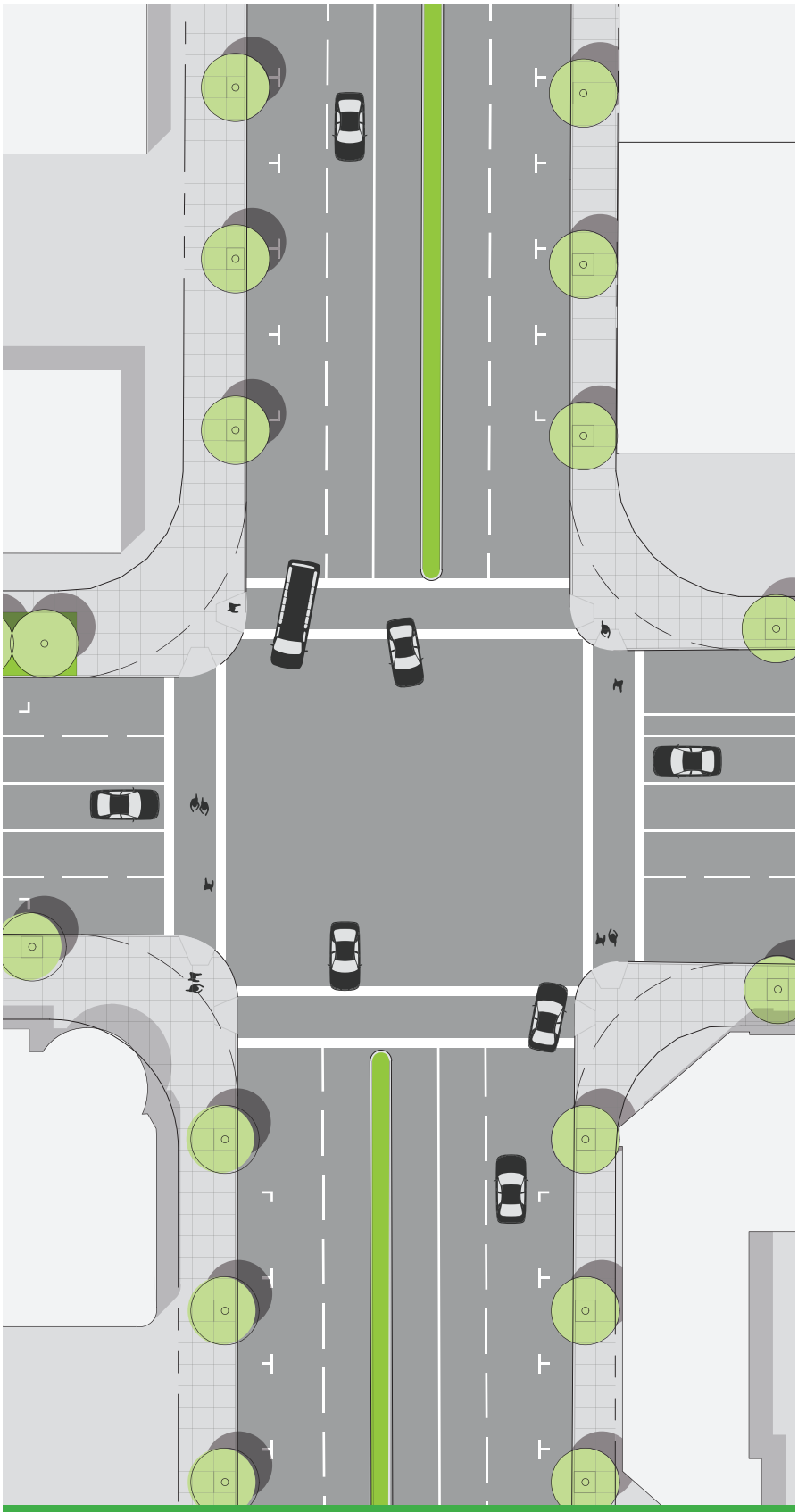
The effectiveness of this tool depends upon whether motorists are likely to obey the stop line, which varies from place to place. At signalized intersections, place an advance stop line 8-12 feet from the crosswalk to allow pedestrians and drivers to have a clearer view of each other and more time in which to assess each other's intentions. For marked crosswalks at uncontrolled intersections, installing the stop line 15-30' relative to the marked crosswalk will provide considerable safety benefits for pedestrians. If it is placed too far in advance of the crosswalk, motorists may ignore the line. In some locations, a wider crosswalk may be a more effective alternative to the advance stop line.

When advanced stop lines are installed along streets with class II bike facilities, the area created between the advanced stop line can be used to create a bike box, which enhance bicyclist safety when attempting left turns.

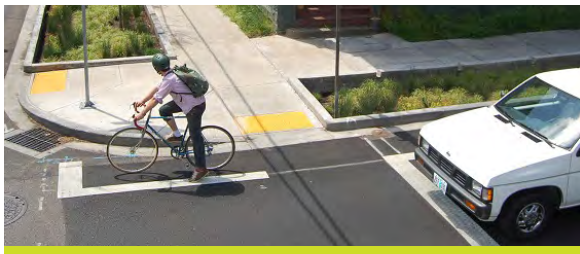
Curb Radius Reduction

STREET WITH EXCESSIVE CURB RADIUS

Curb radius reductions make the corner tighter, more compact, slow turning cars and reduce the distance to cross the street.



CURB RADIUS REDUCTION



DESCRIPTION

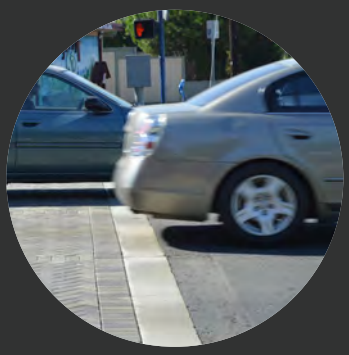
Curb radii designs are determined based on the design vehicle of the roadway [i.e. the types of vehicles using the roadway, such as buses, tractor trailer trucks, fire trucks, etc.]. The most important factor for design is using the "effective radius" rather than the "actual radius" to accommodate the chosen design vehicle. Actual curb radius refers to the curvature along the curb line; effective radius refers to the curvature vehicles follow when turning. Larger effective curb radii can be achieved by adding on-street parking, bicycle lanes, or striping advance stop lines on the destination street of multilane roadways.

In areas of intense pedestrian activity [shopping districts, schools, parks] additional consideration should be provided to slowing turning vehicles as well as reducing pedestrian crossing distances. The smallest practical actual curb radii should be chosen based on how the effective curb radius accommodates the design vehicle. An actual curb radius of 5 to 10 feet should be used wherever possible. An appropriate effective radius for urban streets with high volumes of pedestrians is 15 to 20 ft. For arterial streets with a substantial volume of turning buses and/or trucks, an appropriate effective curb radius is about 25 to 30 ft.

Curb radius designs should balance the turning needs of the design vehicle with consideration for nearby land uses and the diversity and prevalence of roadway users.

Enhanced Crosswalks

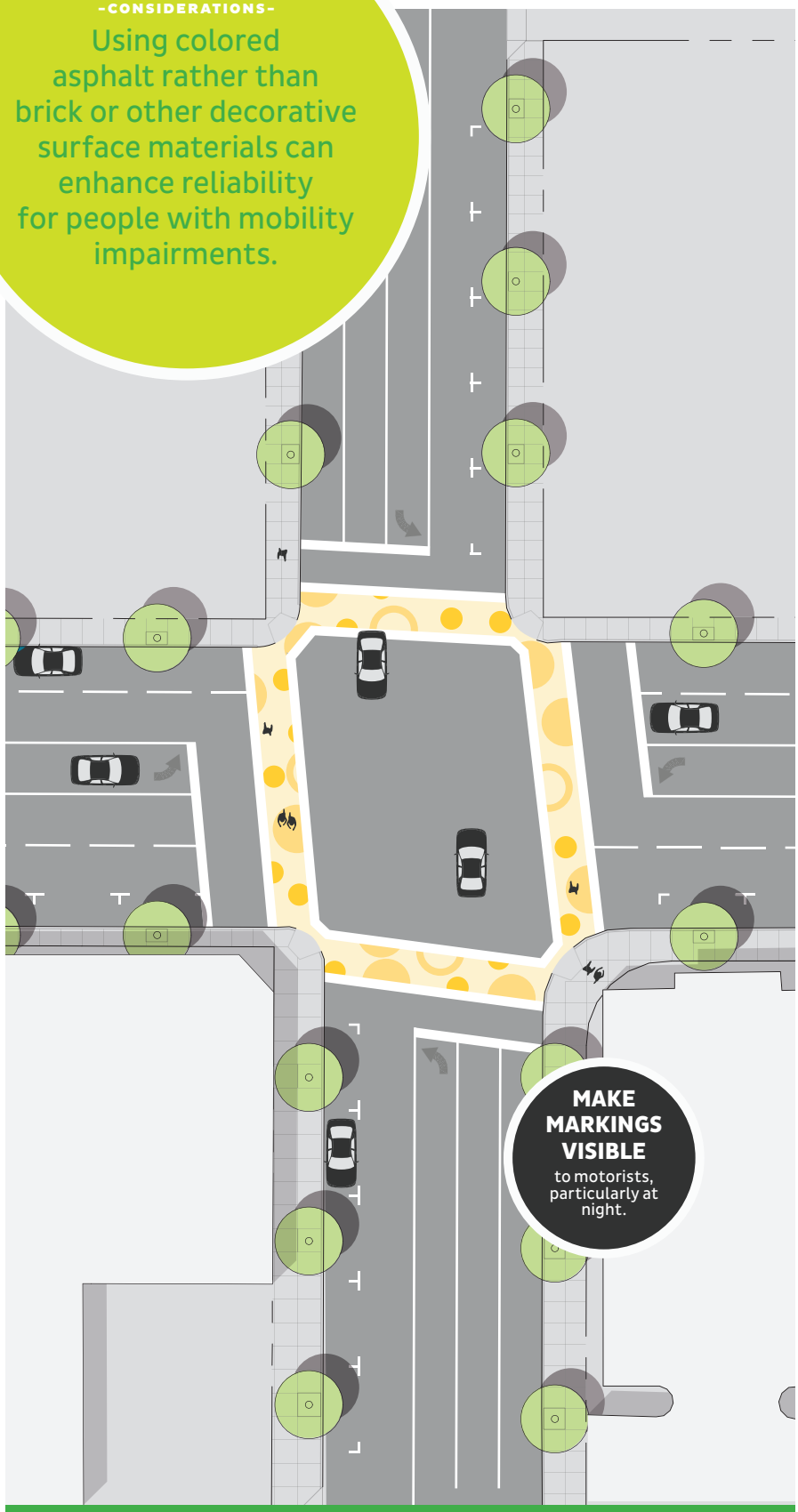
ANY STREET



Enhanced crosswalks use color, material, texture or grade change within the crosswalk area to define pedestrian-priority space.

-CONSIDERATIONS-

Using colored asphalt rather than brick or other decorative surface materials can enhance reliability for people with mobility impairments.



ENHANCED CROSSWALK

DESCRIPTION

Crosswalks can be enhanced using textured pavement as a surface material on the roadway, such as brick, concrete pavers and stamped asphalt, which is installed to produce small, constant changes in vertical alignment. Though textured pavements do reduce travel speeds; however, they can be difficult for bicyclists and some pedestrians to negotiate.

It is important to ensure that crosswalk markings are visible to motorists, particularly at night. Crosswalks should not be slippery, create tripping hazards, or be difficult to traverse by those with diminished mobility or visual capabilities. Granite and cobblestones are examples of materials that are aesthetically pleasing, but may become slippery when wet or be difficult to cross by pedestrians who are blind or using wheelchairs.

A material often used for marking crosswalks is thermoplastic, which is installed on new or repaved streets. It is highly reflective, long-lasting and slip-resistant, and does not require a high level of maintenance. Although initially more costly than paint, both inlay tape and thermoplastic are more cost-effective in the long run. Inlay tape is recommended for new and resurfaced pavement, while thermoplastic may be a better option on rougher pavement surfaces. Both inlay tape and thermoplastic are more visible and are less slippery than paint when wet.

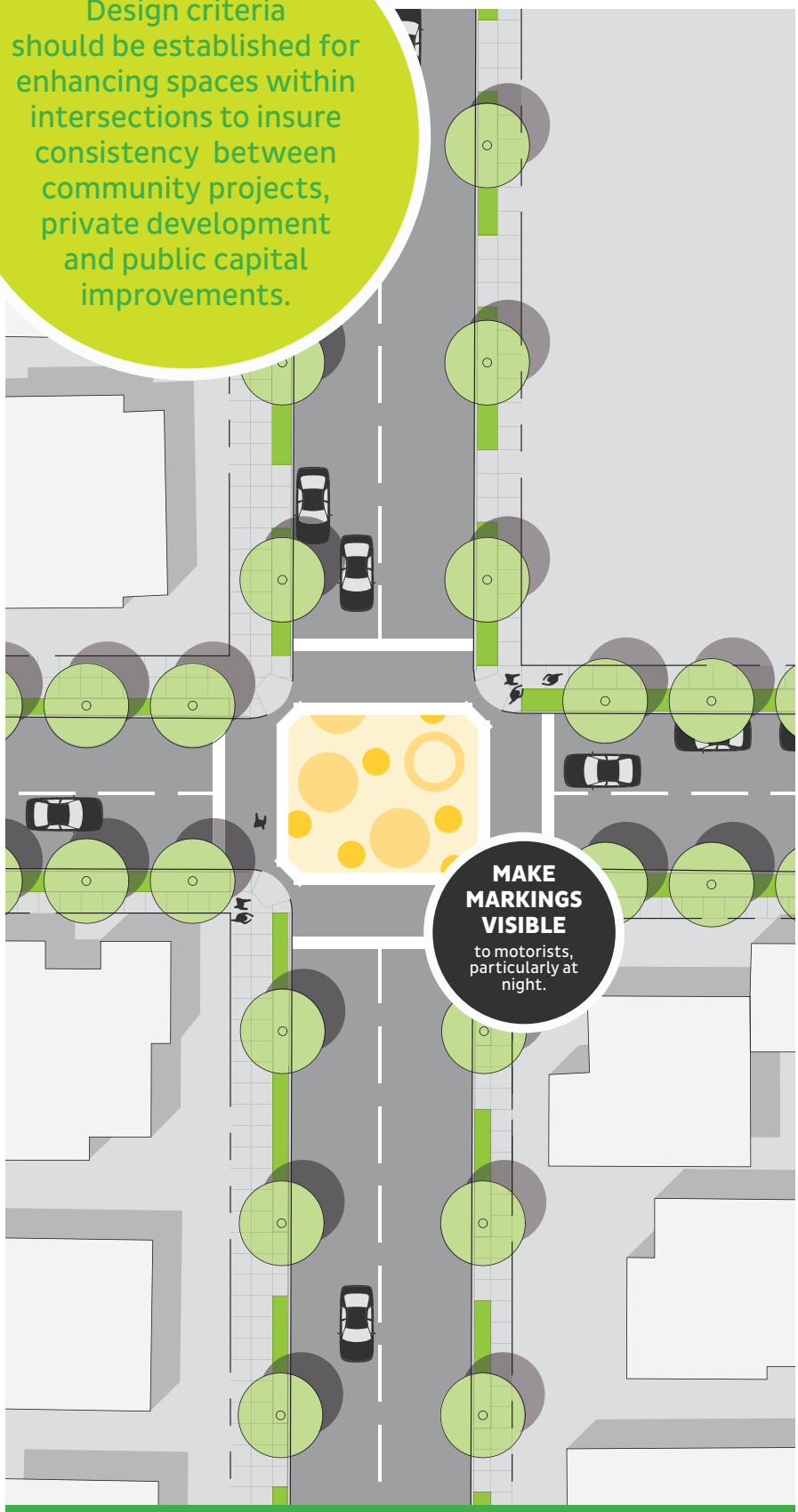
Enhanced Intersection

INTERSECTION OF LOCAL STREETS

Enhanced intersections use color, material, texture or grade change within the intersection to define pedestrian-priority space.

-CONSIDERATIONS-

Design criteria should be established for enhancing spaces within intersections to insure consistency between community projects, private development and public capital improvements.



ENHANCED CROSSWALK

DESCRIPTION

Intersections can be enhanced using textured pavement as a surface material on the roadway, such as brick, concrete pavers, and stamped asphalt. Which textured pavements may result in a reducted travel speeds; they can also be difficult for bicyclists and some pedestrians to negotiate.

It is important to ensure that intersection markings are visible to motorists, particularly at night. Surfaces should not be slippery or create tripping hazards. Some transportation agencies allow community groups to paint murals within low volume intersections as beautification projects. Criteria for design, material and implementation are developed to insure that the painted intersection remains safe for pedestrians, bicyclists and vehicles.

A material often used for enhanced intersection is thermoplastic, which is installed on new or repaved streets. It is highly reflective, long-lasting, slip-resistant and does not require a high level of maintenance. Although initially more costly than paint, both inlay tape and thermoplastic are more cost-effective in the long run. Inlay tape is recommended for new and resurfaced pavement, while thermoplastic may be a better option on rougher pavement surfaces. Both inlay tape and thermoplastic are more visible and are less slippery than paint when wet.

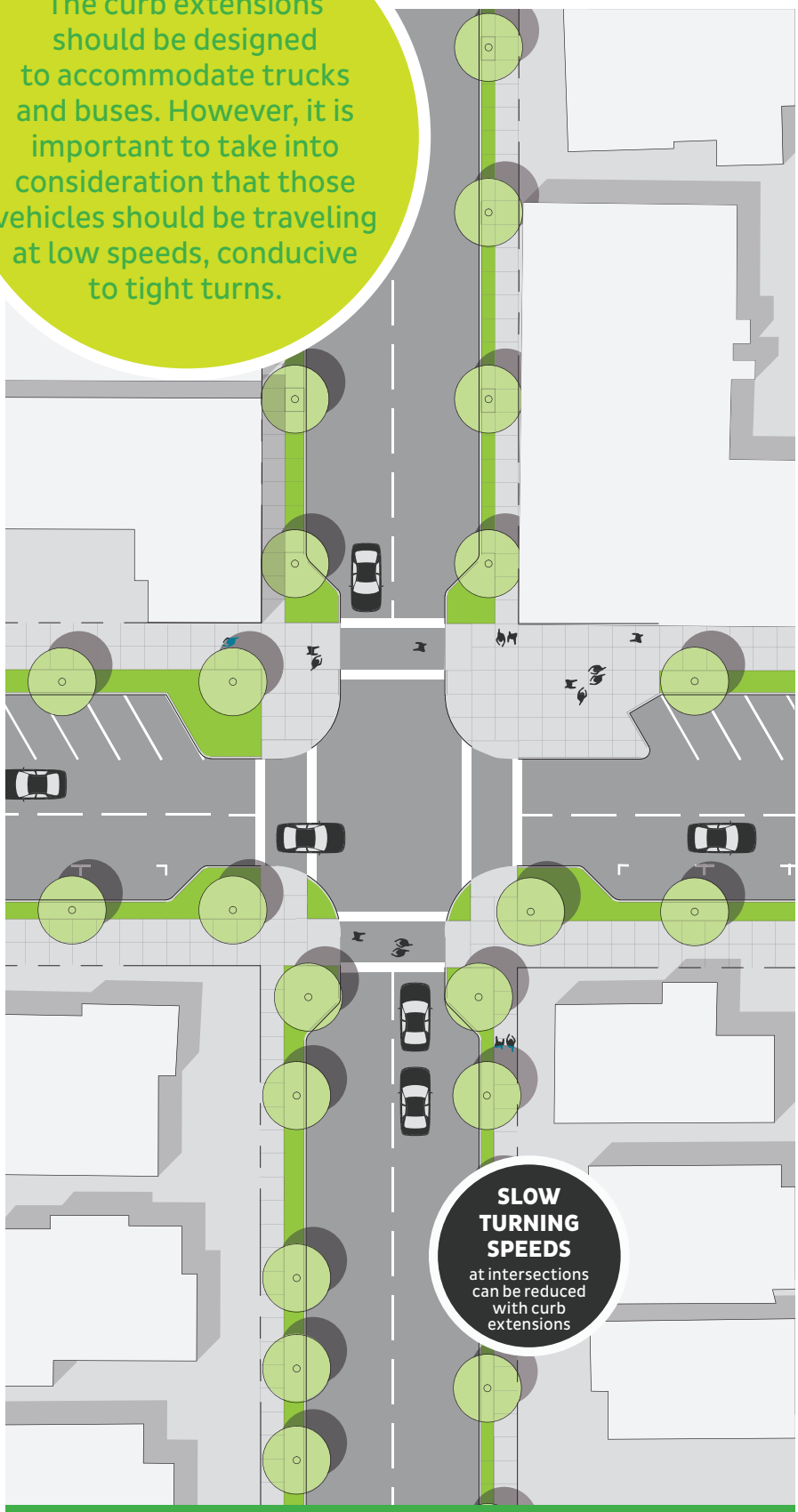
Corner Curb Extension

ANY STREET

By expanding the sidewalk area into the on-street parking lane, curb extensions shorten the distance to walk across the street, make it easier for drivers to see pedestrians and make drivers slow down when turning.

-CONSIDERATIONS-

The curb extensions should be designed to accommodate trucks and buses. However, it is important to take into consideration that those vehicles should be traveling at low speeds, conducive to tight turns.



CORNER CURB EXTENSION

DESCRIPTION

Curb extensions—also known as bulb-outs—extend the sidewalk or curb line out into the parking lane, which reduces the effective street width. Curb extensions significantly improve pedestrian crossings by reducing the pedestrian crossing distance, visually and physically narrowing the roadway, improving the ability of pedestrians and motorists to see each other, reducing the time that pedestrians are in the street. Curb extensions placed at an intersection essentially prevent motorists from parking in or too close to a crosswalk and from blocking a curb ramp or crosswalk, while improving sightlines for pedestrians and other vehicles, making turning particularly difficult for emergency vehicles and trucks.

Motorists are encouraged to travel more slowly at intersections as the restricted street width sends a visual cue to motorists. Turning speeds at intersections can be reduced with curb extensions. Curb extensions also provide additional space for curb ramps and for level sidewalks where existing space is limited. Curb extensions are only appropriate where there is an on-street parking lane. Curb extensions must not extend into travel lanes, bicycle lanes, or shoulders. The turning needs of larger vehicles, such as school buses, need to be considered in curb extension design.

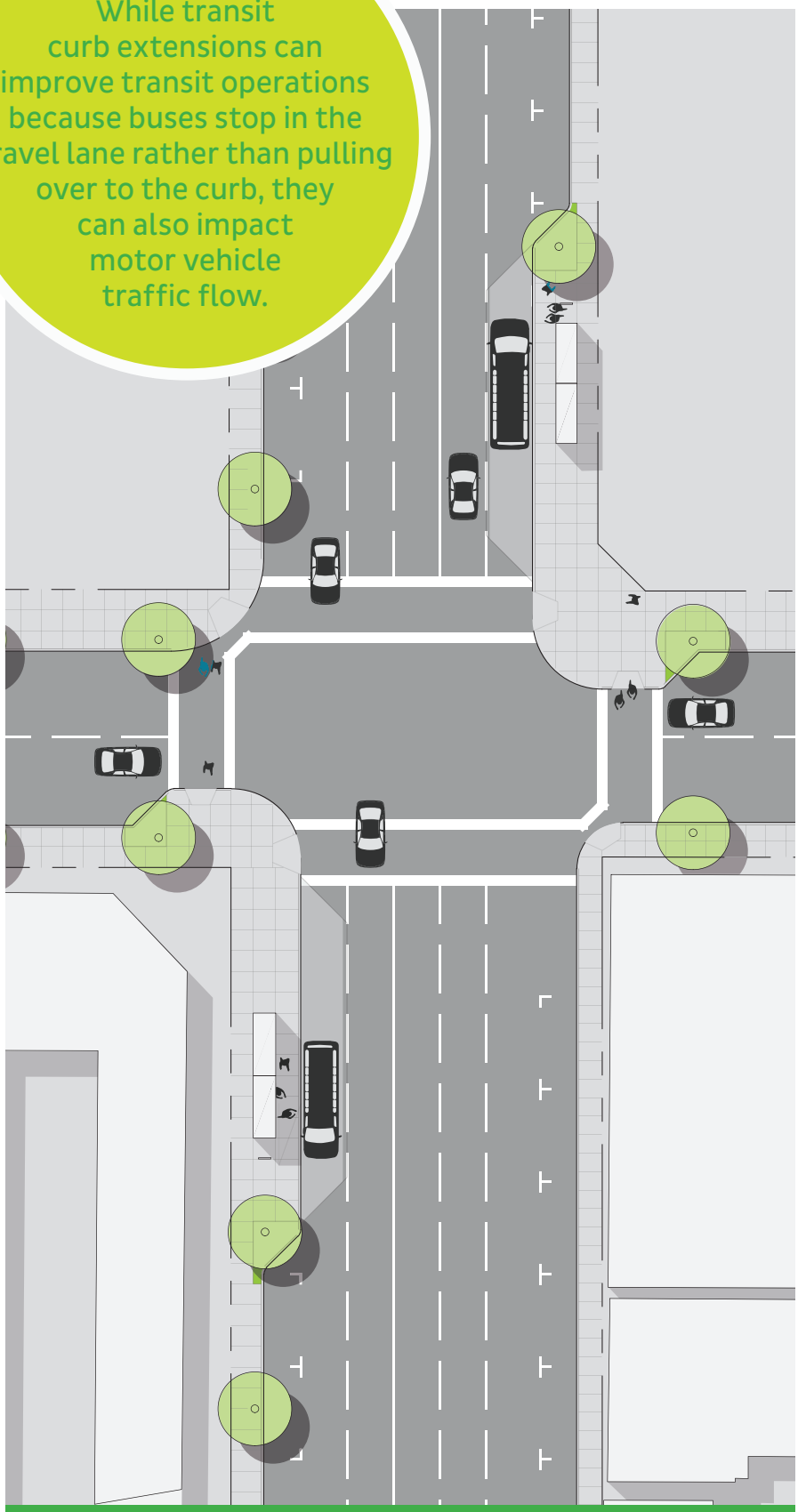
Transit Curb Extension

MAJOR AVENUES, BOULEVARD AND REGIONAL CORRIDORS WITH TRANSIT ROUTES

A transit curb extension expands the sidewalk area into the on-street parking lane to expand the bus rider waiting area. It also improves bus operations by allowing the bus to remain in the travel lane to avoiding exiting and merging.

-CONSIDERATIONS-

While transit curb extensions can improve transit operations because buses stop in the travel lane rather than pulling over to the curb, they can also impact motor vehicle traffic flow.



TRANSIT CURB EXTENSION

DESCRIPTION

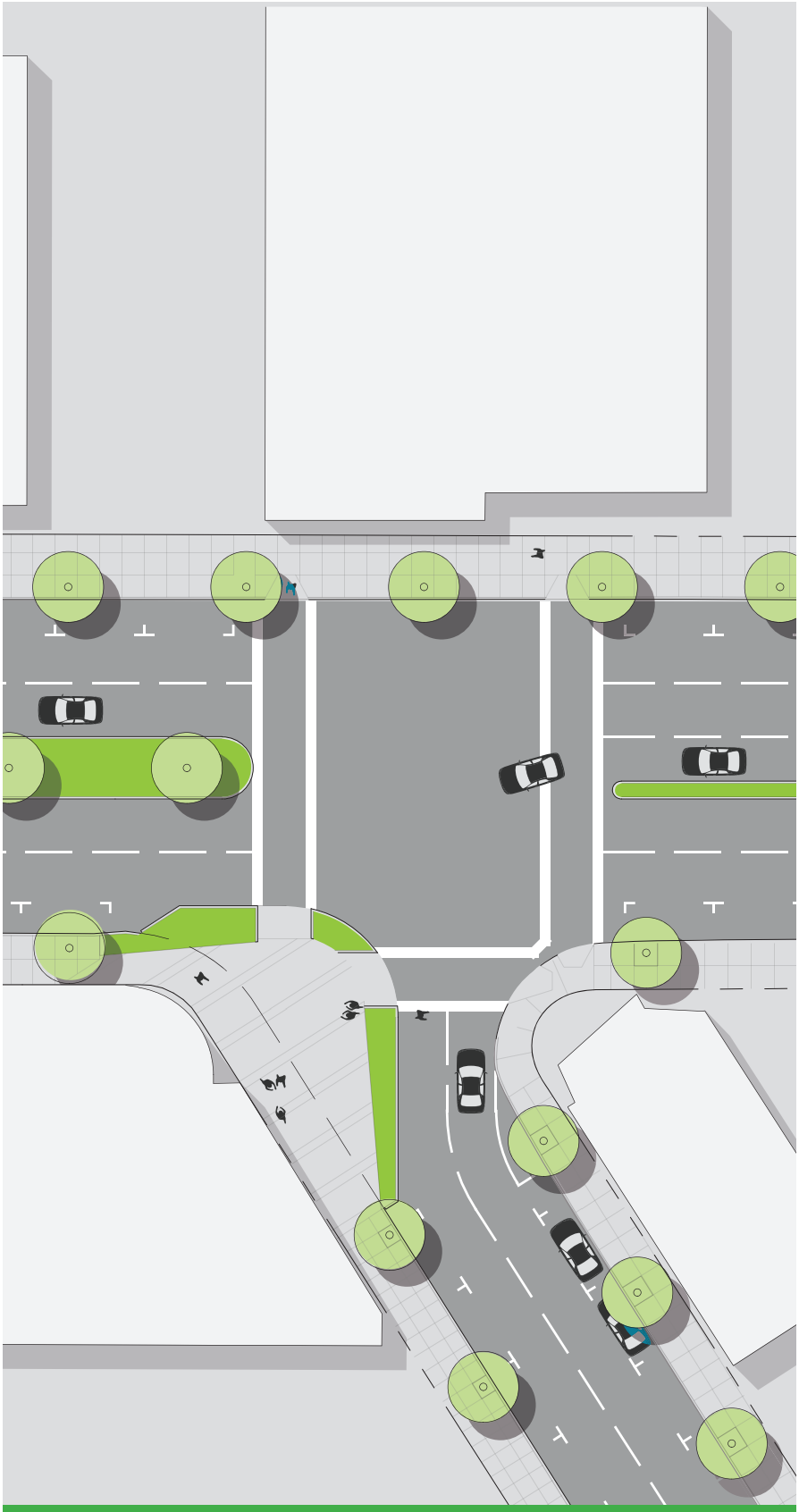
Transit Curb Extensions allow buses to stop in-lane thereby eliminating the need to re-enter the traffic flow. This increases bus reliability since the bus driver no longer needs to wait for a gap in traffic; and it increases safety by reducing the potential for conflict when entering the traffic flow. Additionally, where it is not possible to provide a pad or sidewalk of sufficient width for accommodating waiting passengers and passing pedestrians, bus bulb outs [i.e. elongated curb extensions] can provide additional space for passengers to board and alight transit vehicles without interfering with sidewalk flow.

The bulb out should be long enough to allow passengers to board and X at all doors of the bus. Bus bulb outs can also have positive traffic calming effects by narrowing the roadway, and when placed at intersections, can be designed with smaller curb radii that force right-turning vehicles to reduce speed. When coupled with a pedestrian crossing, bus bulb outs, like curb extensions, also reduce pedestrian exposure by shortening the crossing distance. Bulb outs also make pedestrians who are about to enter the crosswalk more visible to approaching traffic by putting them out beyond objects like parked cars or street trees, which may obstruct driver visibility.

Modified Skewed Intersection

OBLIQUE ANGLED INTERSECTIONS

Modifying skewed intersections improves pedestrian safety and accessibility by reconfiguring the intersecting street closer to 90 degrees. Other treatments include adding medians or channelization islands.



MODIFIED SKEWED INTERSECTION

DESCRIPTION

Strategies for improving pedestrian safety at existing skewed intersection crossings include reconfiguring the intersection by straightening the skewed approach thereby reducing the speed of turning vehicles by creating a tighter turning radius, and reducing the crossing distance for pedestrians. In some cases, it may be just providing high visibility marked crosswalks and adding medians or channelization islands to reduce crossing distance. Intersection guide strips for pedestrians with restricted vision may also be considered in some situations. Moving crosswalks back from the intersection to shorten crossing distances is generally not a preferred strategy because it is counter to pedestrian or motorist expectations, and it can create problems for visually impaired pedestrians.

When skewed intersections are unavoidable, the intersection should be designed so that the angle between intersecting streets is as close to 90 degrees as possible. In addition, if major alterations are being done to an existing skewed intersection, engineers should consider whether it is possible to reconfigure the intersection so that the crossings are more perpendicular.

Modified skewed intersections occur when streets intersect at angles other than 90 degrees and can create complicated scenarios for pedestrians, bicyclists and motorists.

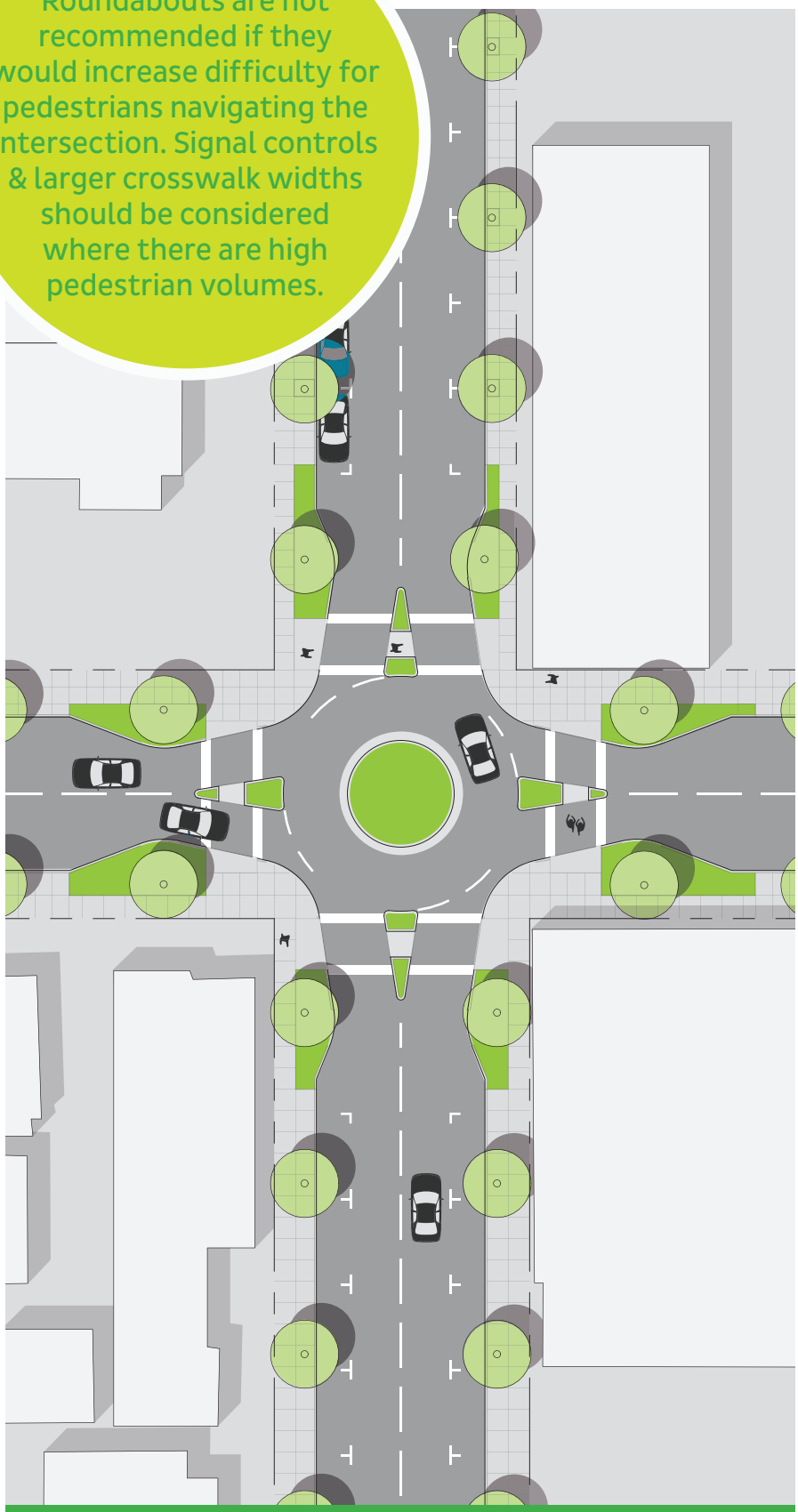
Roundabout

INTERSECTIONS ALONG NEIGHBORHOOD CONNECTORS

A roundabout is a circular intersection on a major street with one-way [counter-clockwise] traffic that revolves around a central island. Entering traffic must yield to traffic already in the roundabout.

-CONSIDERATIONS-

Roundabouts are not recommended if they would increase difficulty for pedestrians navigating the intersection. Signal controls & larger crosswalk widths should be considered where there are high pedestrian volumes.



ROUNDABOUT / MINI CIRCLE

DESCRIPTION

Roundabouts are circular intersections designed to eliminate left turns by requiring traffic to exit to the right of the circle. Roundabouts are installed to reduce vehicular speeds, improve safety at intersections through eliminating angle collisions, help traffic flow more efficiently and reduce operation costs when converting from signalized intersections, and help create gateway treatments to signify the entrance of a special district or area.

A roundabout is built with a large circular, raised island located at the intersection of two or more streets and may take the place of a signalized intersection. Traffic maneuvers around the circle in a counterclockwise direction, and then turns right onto the desired street. Entering traffic yields to traffic in the roundabout, and left-turn movements are eliminated. Unlike a signalized intersection, vehicles generally flow and merge through the roundabout from each approaching street without having to stop.

ADA compliant pedestrian crosswalks and curb ramps should be provided at least 20 feet from the entry of the roundabout to give room for a vehicle to stop prior to the crosswalk but outside of the circulatory roadway. Channelization islands at the approaches can help slow vehicles and allow pedestrians to cross one direction of travel at a time. At-grade pedestrian cut-throughs should be provided at channelization islands with ADA compliant detectable warning strips.

Mini Traffic Circle

INTERSECTIONS ALONG LOCAL STREETS

A mini-traffic circle is a raised island in the middle of an intersection that has one-way [counter-clockwise] traffic revolves around. Entering traffic must yield to traffic already in the roundabout.

-CONSIDERATIONS-

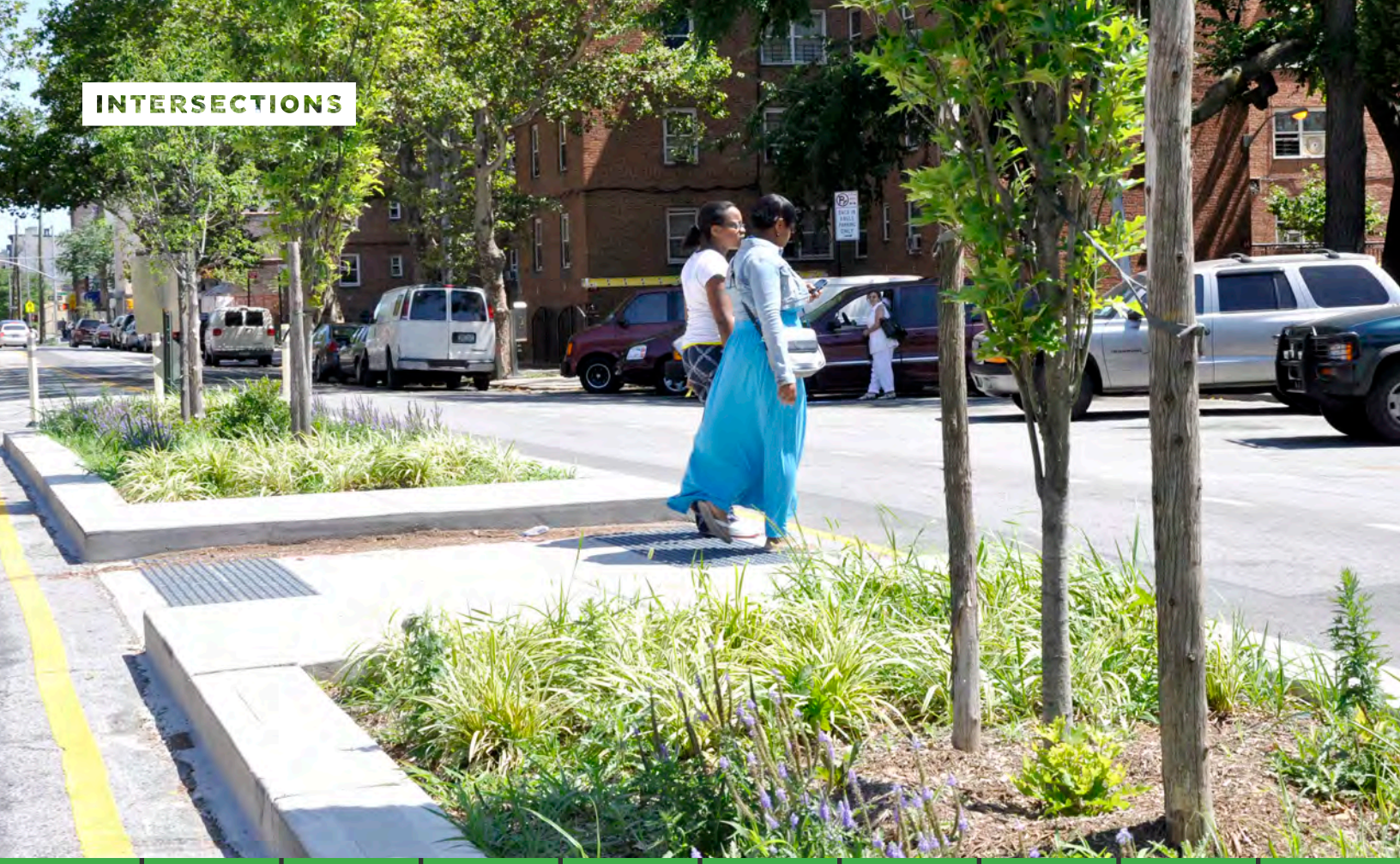
Mini-circles are an intersection improvement as well as a traffic-calming device and can take the place of a four-way stop sign. Many unwarranted four-way stop signs are installed because of community demand.

MINI TRAFFIC CIRCLE

DESCRIPTION

Mini-circles are raised circular islands constructed in the center of local streets intersections while roundabouts are larger traffic circles that can be used at intersections with arterial streets. They reduce vehicle speeds by forcing motorists to maneuver around them. Drivers making left turns are directed to go on the far side of the circle [see diagram on the left] prior to making the turn. Channelization islands for roundabouts at the approaches can help slow vehicles and allow pedestrians to cross one direction of travel at a time. Signs should be installed directing motorists to proceed around the right side of the circle before passing through or making a left turn.

Mini-circles are commonly landscaped, most often at locations where the neighborhood has agreed to maintain the plants. In locations where landscaping is not feasible, traffic circles can be enhanced through specific pavement materials. Mini-circles and roundabouts must be properly designed to slow vehicles and benefit pedestrians and bicyclists. The occasional larger vehicle going through an intersection with a traffic circle [e.g., a fire truck or moving van] can be accommodated by creating a mountable curb in the outer portion of the circle.



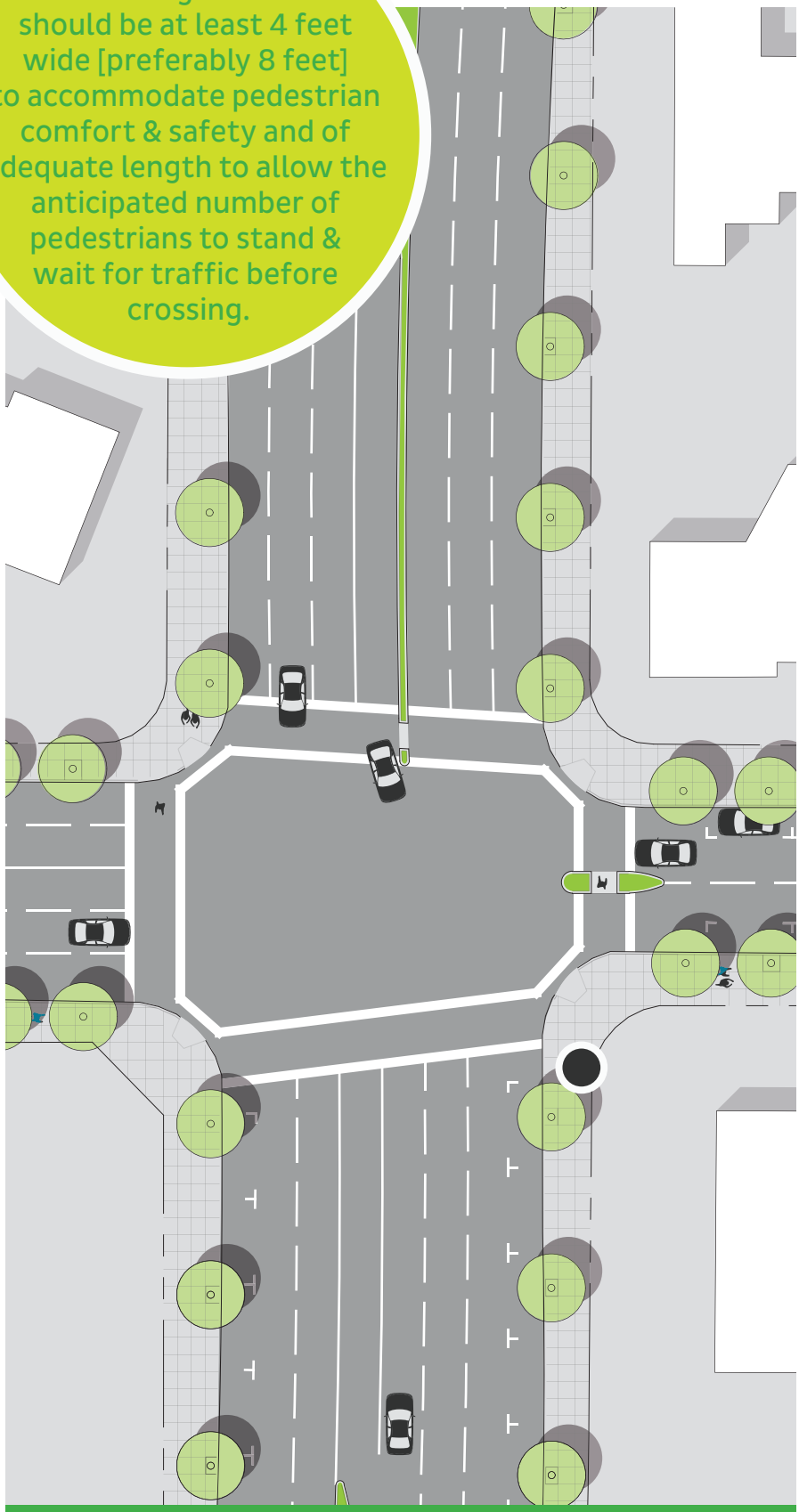
Crossing Island

STREETS WITH AVAILABLE ROADWAY WIDTH

A crossing island is a raised curb island in the middle of the street that gives people a place to wait while crossing the street and allows people to cross one half at a time.

-CONSIDERATIONS-

Crossing islands should be at least 4 feet wide [preferably 8 feet] to accommodate pedestrian comfort & safety and of adequate length to allow the anticipated number of pedestrians to stand & wait for traffic before crossing.

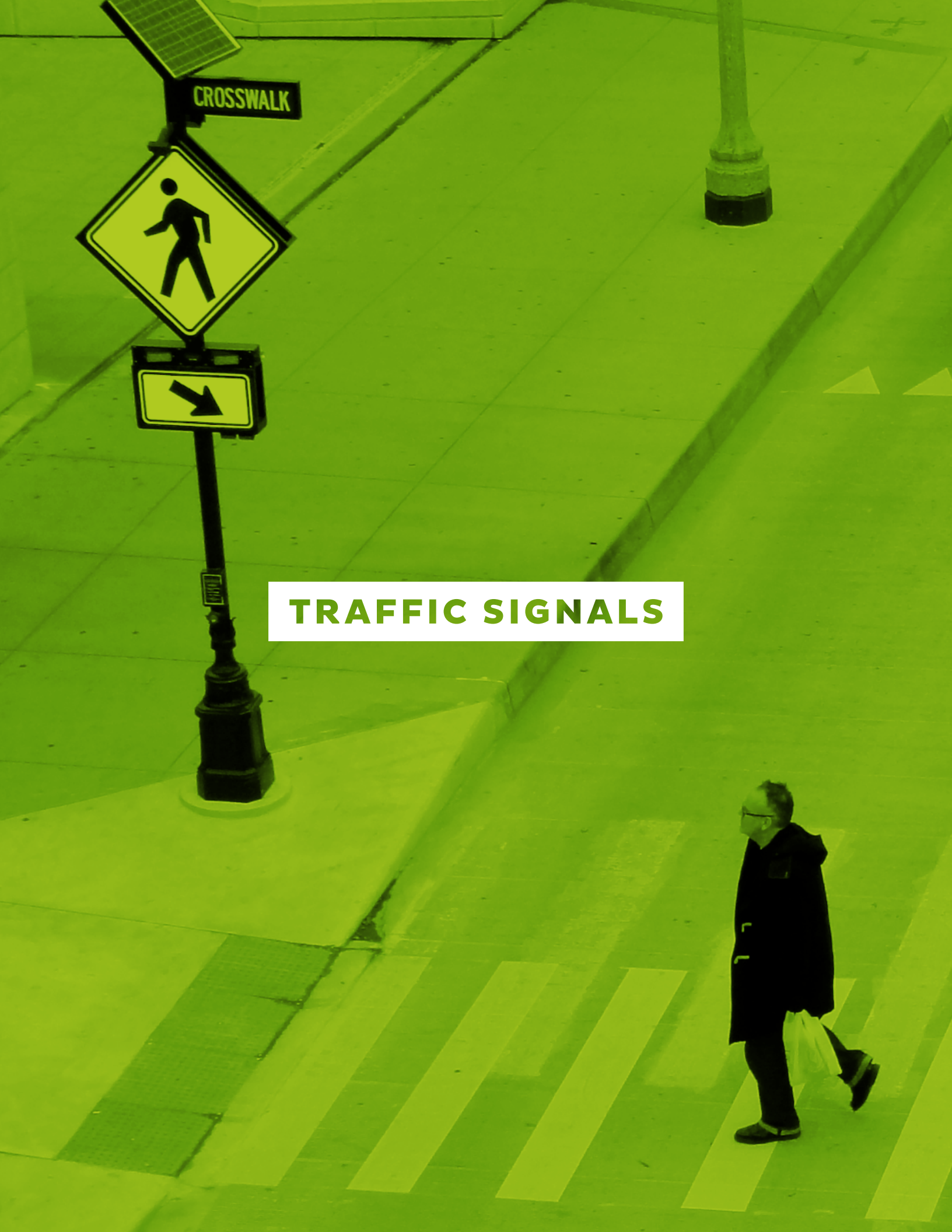


CROSSING ISLAND

DESCRIPTION

Crossing islands—also known as center islands, areas of refuge or pedestrian islands—are raised islands placed in the center of the street at intersections or midblock crossings to help protect crossing pedestrians from motor vehicles. Center crossing islands allow pedestrians to deal with only one direction of traffic at a time, and they enable pedestrians to stop partway across the street and wait for an adequate gap in traffic before crossing the second half of the street. Crossing islands can be constructed so that crossing pedestrians are forced to the right to view oncoming traffic as they are halfway through the crossing.

If there is enough width, center crossing islands and curb extensions can be used together to create a highly improved pedestrian crossing. Detectable warnings are needed at cut-throughs to identify the pedestrian refuge area. Crossing islands have been demonstrated to decrease pedestrian-vehicle incidents by 46 percent at marked crossings, and by 39 percent at unmarked crossings. The factors contributing to pedestrian safety include reduced conflicts, reduced vehicle speeds approaching the island, greater attention called to the existence of a pedestrian crossing and reduced exposure time for pedestrians.



TRAFFIC SIGNALS

Traffic control devices are often used by traffic engineers to improve safety and access for pedestrians. In addition to marked crosswalks, several other devices are available, including the ones listed above. Advanced traffic signals may include auditory or sensory cues to alert people when it is safe or not safe to cross the street. Similar to intersection enhancements, certain traffic signal devices may not be appropriate at certain locations, and should consider existing pedestrian circulation patterns.

Pedestrian Countdown

SIGNALIZED INTERSECTIONS

Countdown signals show people how much time they have left to cross the street.

-CONSIDERATIONS-

Federal American Disabilities Act guidelines encourage the use of accessible pedestrian signals where there is a need to accommodate pedestrians with visual impairments.

Accessible signals come in a variety of designs but include an audible signal and tactile guidance for pedestrians.

PEDESTRIAN COUNTDOWN

DESCRIPTION

Countdown signals tell pedestrians the amount of time remaining before the flashing upraised hand changes to a solid upraised hand or "don't walk" indication. Research shows that both drivers and pedestrians tend to comply with these signals more often than with non-countdown signals.

The number of seconds displayed in the countdown is determined by the pedestrian change interval [the time before the "walk" indication changes to "don't walk"]. Signal heads may be installed in place of existing non-countdown signal heads, because they use internal logic that enables them to calculate the amount of time based upon the signal inputs received over the course of several signal cycles.

In some locations, the countdown sequence operates through the entire pedestrian phase [walk and the change interval]. Many pedestrians like knowing the actual amount of time in the full pedestrian phase, so that they can elect whether to begin crossing or adjust their speed to cross more safely. For example, an older person can cross a wide intersection with greater confidence if he or she knows from the outset how much time remains for the crossing.

Phase-Out Pedestrian Actuators

ALL SIGNALIZED INTERSECTIONS

Remove existing pedestrian signal pushbuttons and provide dedicated signal phases for all pedestrian movement at signalized intersections.

-CONSIDERATIONS-

Pedestrian signal actuators or push button devices are not activated by about one-half of pedestrians, even fewer activate them where there are sufficient motor vehicle gaps.

PHASE-OUT PEDESTRIAN ACTUATORS

DESCRIPTION

Current pedestrian signal actuators or pushbuttons are used to trigger the pedestrian movement cycle of a traffic signal phase. Many times, pedestrians will cross streets illegally after realization that they had missed their signal phase due to not pushing the button. Removing the pedestrian actuators can be done in conjunction with installation of pedestrian countdowns, regular resignalization and traffic signal synchronization projects.

Pedestrian signals may be supplemented with audible or other messages to make crossing information accessible for all pedestrians, including those with vision impairments. The decision to install audible pedestrian signals should consider the noise impact on the surrounding area. The pushbutton can be retained to activate audible warnings for pedestrian movement, to activate Rectangular Rapid Flashing Beacons [RRFB] or to prioritize a pedestrian signal phase at an intersection, though all pedestrian movement should be accommodated through the regular traffic signal cycle.

If necessary for optimizing the Multimodal Level of Service [MMLOS], new “intelligent” pedestrian detectors can be considered. These automatically activate the red traffic and WALK signals when pedestrians are detected. Detectors can also be used to extend the crossing time for slower moving pedestrians in the crosswalk. Automatic pedestrian detectors have been found to improve pedestrian signal compliance and also reduce pedestrian conflicts with motor vehicles.

Signalized Intersections

NEIGHBORHOOD CONNECTORS, AVENUES, BOULEVARDS & REGIONAL CORRIDORS

Reduce the distance between safe crossing opportunities on major thoroughfares by adding new traffic signals and marked crosswalks at intermediate intersections.

-CONSIDERATIONS-

Implement additional midblock crossings & traffic calming as needed in the more suburban locations of the City where larger blocks and wider streets inhibit pedestrians.

MOP M-9

DESCRIPTION

Pedestrians are sensitive to out-of-the-way travel, and reasonable accommodation should be made to make street crossings both convenient and safe at locations with adequate visibility. Marked crosswalks indicate optimal or preferred locations for pedestrians to cross and help designate right-of way for motorists to yield to pedestrians. Crosswalks are often installed at signalized intersections and other selected locations.

Marked crosswalks along major thoroughfares should be installed at intersections in conjunction with traffic controls and/or treatments that reduce pedestrians' exposure to traffic. Typically in pedestrian priority areas, every intersection should accommodate safe and convenient opportunities for pedestrians to cross the street. Consideration for safe crossings should also be provided in relation to safe routes to schools and parks as well as transit stops.

SIGNALIZED INTERSECTIONS

Leading Pedestrian Interval

SIGNALIZED INTERSECTIONS

A leading pedestrian interval gives pedestrians a head start walk signal before the motorists get a green light, giving the pedestrian several seconds to start in the crosswalk.

To be useful to pedestrians with vision impairments, an LPI needs to be accompanied by an audible signal to indicate the WALK interval.

LEADING PEDESTRIAN INTERVAL

-CONSIDERATIONS-

Right turn on red rules can limit the effectiveness of a leading pedestrian interval, restricting right turn on red use. Consider adding protected turn movements to the traffic signal cycle as an alternative.

DESCRIPTION

A simple, useful signal timing change is the leading Pedestrian Interval [LPI]. A LPI gives pedestrians an advance walk signal before the motorists get a green light, giving the pedestrian several seconds to start in the crosswalk where there is a concurrent signal. This makes pedestrians more visible to motorists and motorists more likely to yield to them.

LPIs increase the percentage of motorists who yield the right of way to pedestrians because pedestrians are in the crosswalk by the time the traffic signal turns green for parallel vehicle movements. This advance crossing phase approach has been used successfully in several places for two decades and studies have demonstrated reduced conflicts for pedestrians. The advance pedestrian phase is particularly effective where there is a two-lane turning movement.

To be useful to pedestrians with vision impairments, a LPI needs to be accompanied by an audible signal to indicate the WALK interval. There are some situations where an exclusive pedestrian phase may be preferable to a LPI. Exclusive phases are desirable where there are high-volume turning movements that conflict with the pedestrians crossing. Consideration should be made to potential traffic impacts due to reduced signal phase for vehicle movement.

Pedestrian Hybrid Beacon

MAJOR & MINOR AVENUES

Pedestrian hybrid beacon warn drivers when they are trying to cross so they know to yield. These are used at marked crosswalks without a stop sign or traffic signal.

-CONSIDERATIONS-

Pedestrian hybrid beacons are a traffic control device that may require outreach to the public before implementation to reducate them as to how they operate.

NEAR SCHOOLS & TRANSIT are good places to consider the pedestrian beacon

PEDESTRIAN HYBRID BEACON

DESCRIPTION

The pedestrian hybrid beacon, also known as the High intensity Activated Crosswalk [or HAWK] is a pedestrian-activated warning device located on the roadside. The beacon head consists of two red lenses above a single yellow lens. The beacon head is "dark" until the pedestrian desires to cross the street. At this point, the pedestrian will push an easy to reach button that activates the beacon. After displaying brief flashing and steady yellow intervals, the device displays a steady red or yellow indication to drivers and a "WALK" indication to pedestrians, allowing them to cross a major roadway while traffic is stopped. After the pedestrian phase ends, the "WALK" indication changes to a flashing orange hand to notify pedestrians that their clearance time is ending.

Pedestrian hybrid beacons should only be used in conjunction with a marked crosswalk. In general, they should be used if gaps in traffic are not adequate to permit pedestrians to cross, if vehicle speeds on the major street are too high to permit pedestrians to cross, or if pedestrian delay is excessive. Transit and school locations may be good places to consider using the pedestrian hybrid beacon. Chapter 4F of the Manual on Traffic Control Devices [MUTCD] contains a chapter on the pedestrian hybrid beacon and when and where it should be installed.

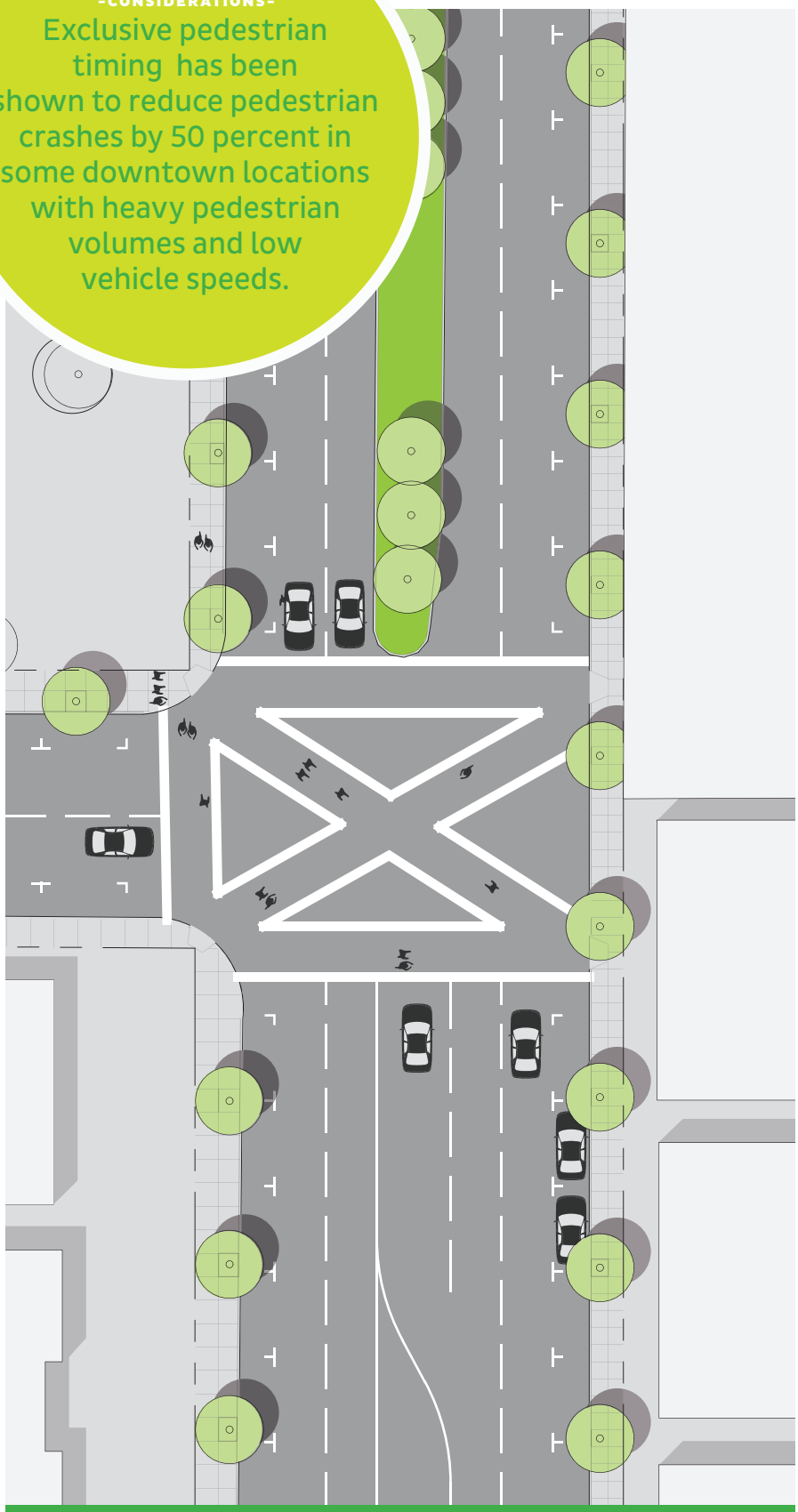
Pedestrian Scramble

SIGNALIZED INTERSECTIONS

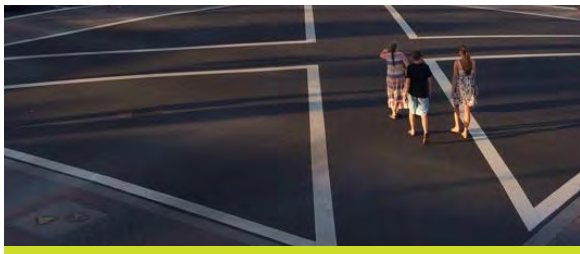
The pedestrian scramble stops cars in all directions and allows pedestrians to cross the street in any direction, including diagonally.

-CONSIDERATIONS-

Exclusive pedestrian timing has been shown to reduce pedestrian crashes by 50 percent in some downtown locations with heavy pedestrian volumes and low vehicle speeds.



PEDESTRIAN SCRAMBLE



DESCRIPTION

Also known as an Exclusive Pedestrian Phase, a pedestrian scramble is active only when all conflicting vehicle movements are stopped across an approach to an intersection. When vehicles are stopped on all approaches to an intersection while pedestrians are given a WALK indication, the phasing is referred to as "exclusive" or as a "pedestrian scramble". Intersections with pedestrian scramble phases often feature pedestrian crossing markings indicating pedestrians may walk diagonally across the intersection.

Pedestrian Scrambles have a traffic signal phasing cycle which gives pedestrians their own signal phase to cross in any direction, including diagonally through the intersection. The Pedestrian Scramble reduces or eliminates conflicts between vehicles and pedestrians and allows intersections to operate more efficiently when large pedestrian traffic volumes prevent vehicles from being able to make turns. At traditionally signalized intersections with high pedestrian volumes, crossing pedestrians may severely limit turns and cause intersection back-ups. Adequate signage and pavement markings must be provided to ensure pedestrians understand operations of the pedestrian scramble including where they are required to wait; otherwise pedestrians may continue to disrupt certain vehicle movements and the efficiency benefits will be lost.

TRAFFIC MANAGEMENT

FORCED TURN DIVERTER

DIAGONAL & STAR DIVERTER

MEDIAN DIVERTER

PARTIAL CLOSURE DIVERTER

FULL CLOSURE DIVERTER

Although they are sometimes lumped together, traffic management and traffic calming are different tools and address different problems. Traffic management includes the use of traditional traffic control devices to manage volumes and routes of traffic. Traffic calming deals with what happens to traffic once it is on a street. For example, limiting access to a street may reduce the amount of traffic on that street, but will do nothing to affect the speed of the traffic that travels on that street or others. Traffic management should be assessed from an area wide perspective. The problem should not just be shifted from one street to another. Although implementation usually occurs in stages, an overall plan can be developed up-front, involving a larger neighborhood or area of the city. Traffic management and traffic calming should involve the community.

Forced Turn Diverter

INTERSECTIONS WITH LOCAL STREETS THAT HAVE PARALLEL ALTERNATIVE ROUTES.

A forced turn diverter is a barrier that forces those entering or exiting an intersection from the secondary street to turn while typically allowing bicyclists and pedestrians to continue through.

FORCED TURN DIVERTER

DESCRIPTION

Forced turn diverters also called forced turn channelizations, pork chops, or right turn islands, preclude movements from one street through an intersection. Typically employed at intersections along thoroughfare traveling through neighborhoods, forced turn diverters limit certain movements from entering the local street when approaching an intersection. Installing diverters should be part of a concerted neighborhood traffic plan to avoid transferring negative traffic patterns to another location. Although forced turn islands have some benefits for people with mobility impairments, they are not as desirable as median barriers for diverting traffic because they complicate the intersection for people with vision impairment.

When designing forced turn diverters, minimize lane widths and tighten the angle of deflection used for the raised island to slow vehicle speeds. While attempting to calm traffic speeds, the lane width and angle of deflection must still accommodate maneuvering for emergency vehicles. The forced turn island creates a pedestrian refuge benefiting pedestrians by dividing and decreasing crossing. Pedestrians with slower walking speeds are able to cross one leg of traffic and then wait on a pedestrian refuge before crossing a second leg of traffic. To improve pedestrian safety, design islands to include accessible features, such as cut-throughs with detectable warnings and a minimum clear width of 48" and provide space for bicyclists to share the road with motorists.

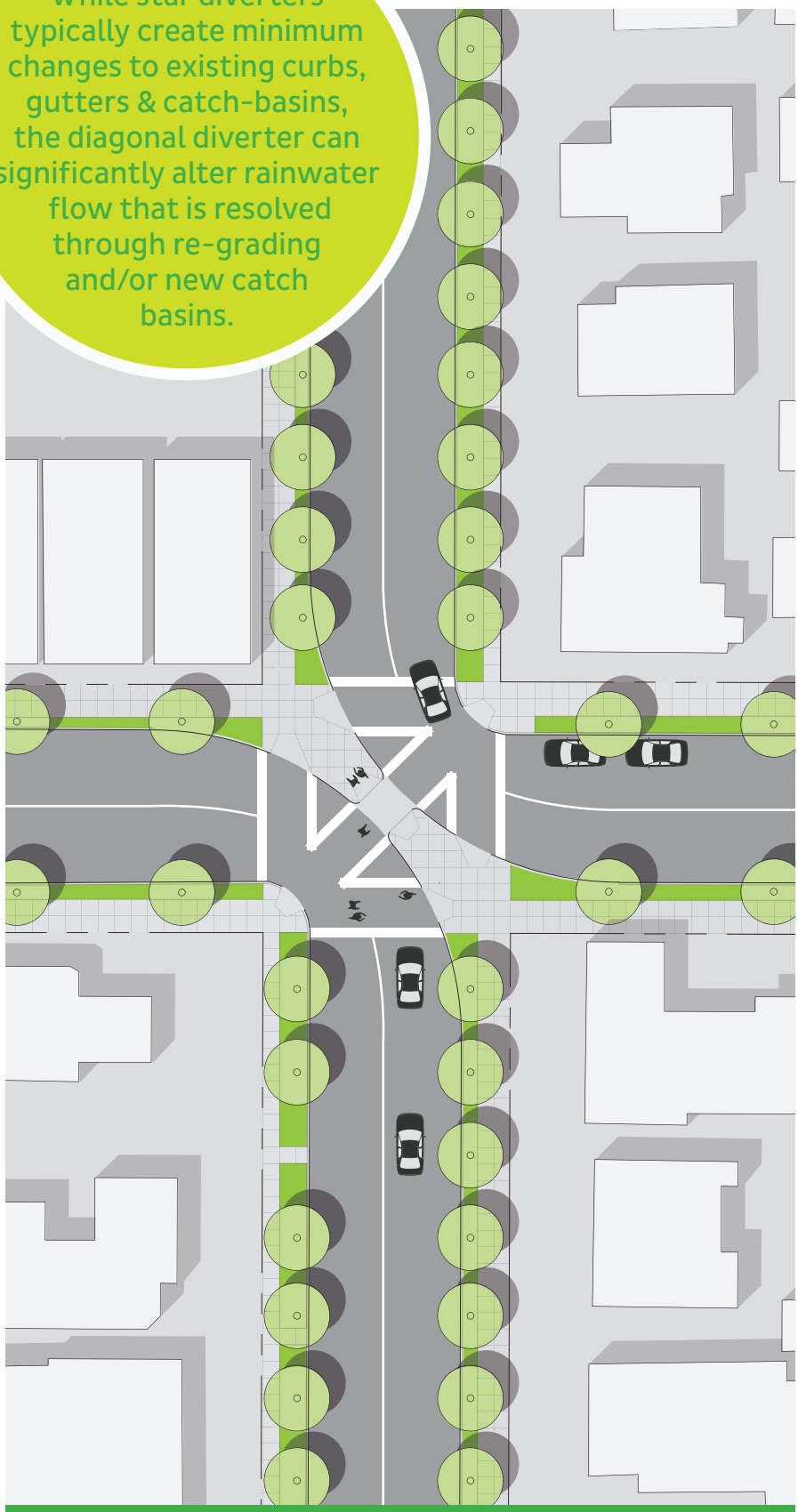
Diagonal & Star Diverter

INTERSECTIONS OF LOCAL STREETS THAT HAVE PARALLEL ALTERNATIVE ROUTES

Diagonal and star diverters are barriers that require drivers in all four directions to turn while typically allowing bicyclists and pedestrians to continue through.

-CONSIDERATIONS-

While star diverters typically create minimum changes to existing curbs, gutters & catch-basins, the diagonal diverter can significantly alter rainwater flow that is resolved through re-grading and/or new catch basins.



DIAGONAL & STAR DIVERTER

DESCRIPTION

Diagonal and star diverters are barriers designed to preclude through movement of both streets of an intersection. They are good for inner-neighborhood locations with non-local traffic volume problems. As with other traffic management tools, diverters must be used in conjunction with other traffic management tools within the neighborhood street network.

Diagonal diverters are barriers placed diagonally across an intersection, blocking through movements and creating two separate, L-shaped streets. Like half closures, diagonal diverters are often staggered to create circuitous routes through the neighborhood as a whole, discouraging non-local traffic while maintaining access for local residents. A truncated diagonal diverter is a diverter with one end open to allow additional turning movements.

A star diverter is a star-shaped raised island in the middle of the intersection that forces right turns from each approach. Both star and diagonal diverters are able to maintain full pedestrian and bicycle access through the intersection. Consider emergency vehicle access in the overall planning of the diverter locations as well as their design and construction.

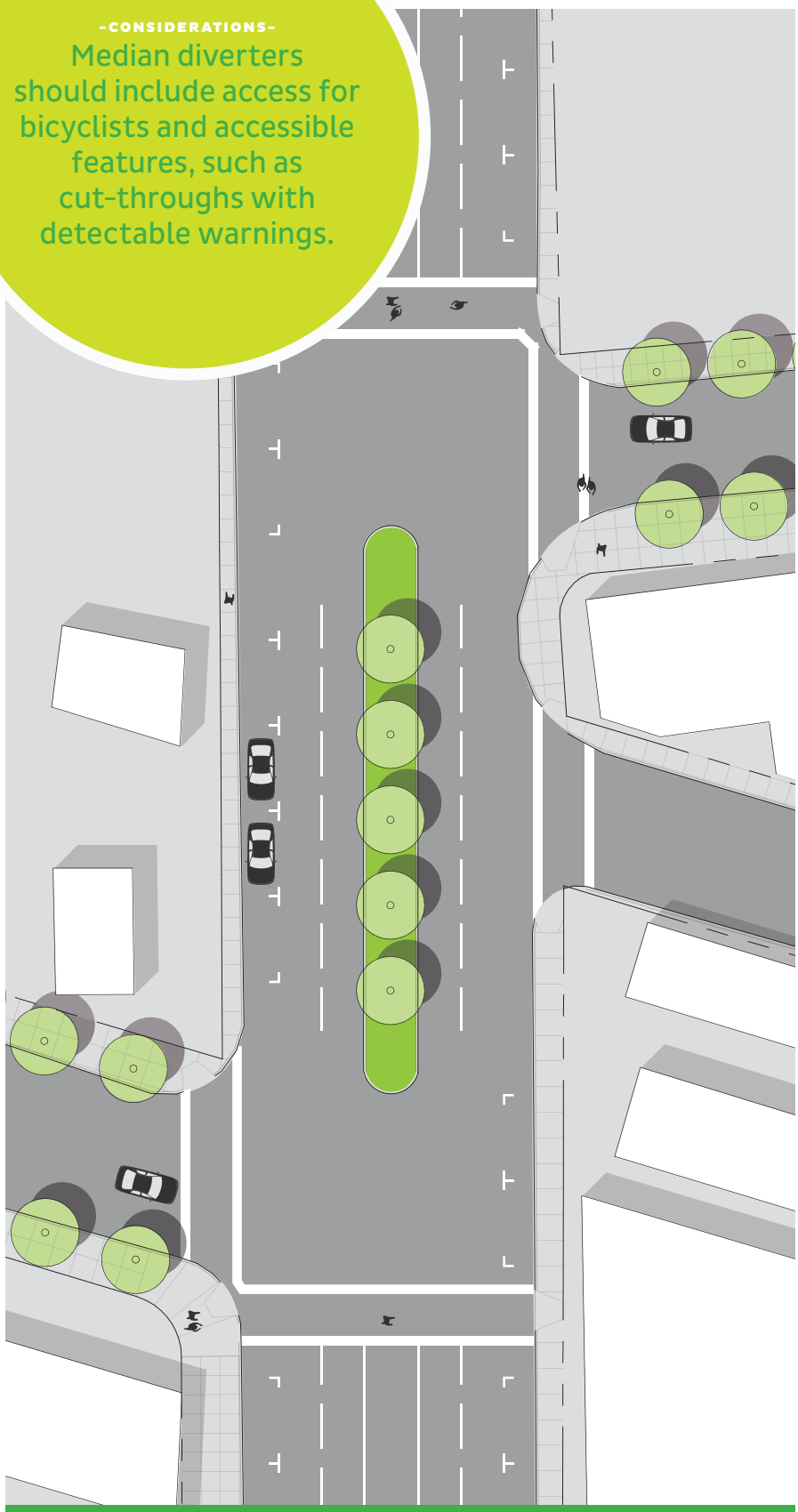
Median Diverter

INTERSECTIONS WITH LOCAL STREETS THAT HAVE PARALLEL ALTERNATIVE ROUTES

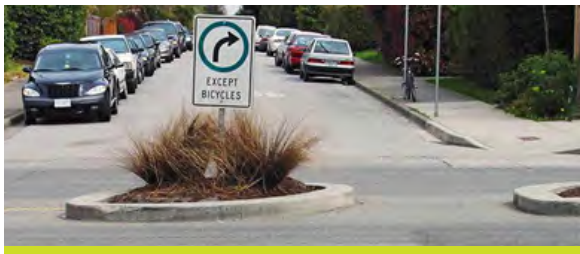
A median barrier diverter prevents drivers from crossing a street or turning left but typically allows bicyclists and pedestrians to continue the movement.

-CONSIDERATIONS-

Median diverters should include access for bicyclists and accessible features, such as cut-throughs with detectable warnings.



MEDIAN DIVERTER



DESCRIPTION

Median diverters are raised islands located in the middle of a street and continuing through an intersection. Median diverters are implemented to block cut-through movement of motor vehicle traffic at a cross street. Median diverters can block left turning motorists, which can benefit pedestrians. They are also called median diverters or island diverters.

Median diverters also provide additional area for landscaping and street trees which along beautification and environmental benefits, including additional habitat, stormwater management and reducing the urban heat island. The median diverter provides visual cues for drivers to slow their speeds along the corridor as well as intersecting streets as the street's vista can be obstructed.

Median diverters generally benefit pedestrian access by providing people with mobility impairments benefit from divided and decreased crossing distances due to the presence of a pedestrian refuge in the center of the street. Pedestrians with slower walking speeds are able to cross one leg of traffic and then wait on a pedestrian refuge before crossing a second leg of traffic. Raised medians increase pedestrian visibility, separating pedestrians and motorists, and improving detectability for people with vision impairments.

Partial Closure Diverter

INTERSECTIONS WITH LOCAL STREETS THAT HAVE PARALLEL ALTERNATIVE ROUTES.

A partial closure diverter is a barrier that prevents drivers from turning onto a street, but typically allows bicyclists and pedestrians to use the turn.

PARTIAL CLOSURE DIVERTER

DESCRIPTION

A partial street closure uses a semi-diverter to physically close or block one direction of motor vehicle travel into or out of an intersection; it could also involve blocking one direction of a two-way street. Typically, the closures are designed to preclude traffic from entering neighborhoods from major thoroughfares. Partial street closures at the entrance to a neighborhood or area should consider the traffic flow pattern of the surrounding streets as well. The design of this measure should allow for easy access by bicyclists and all pedestrians.

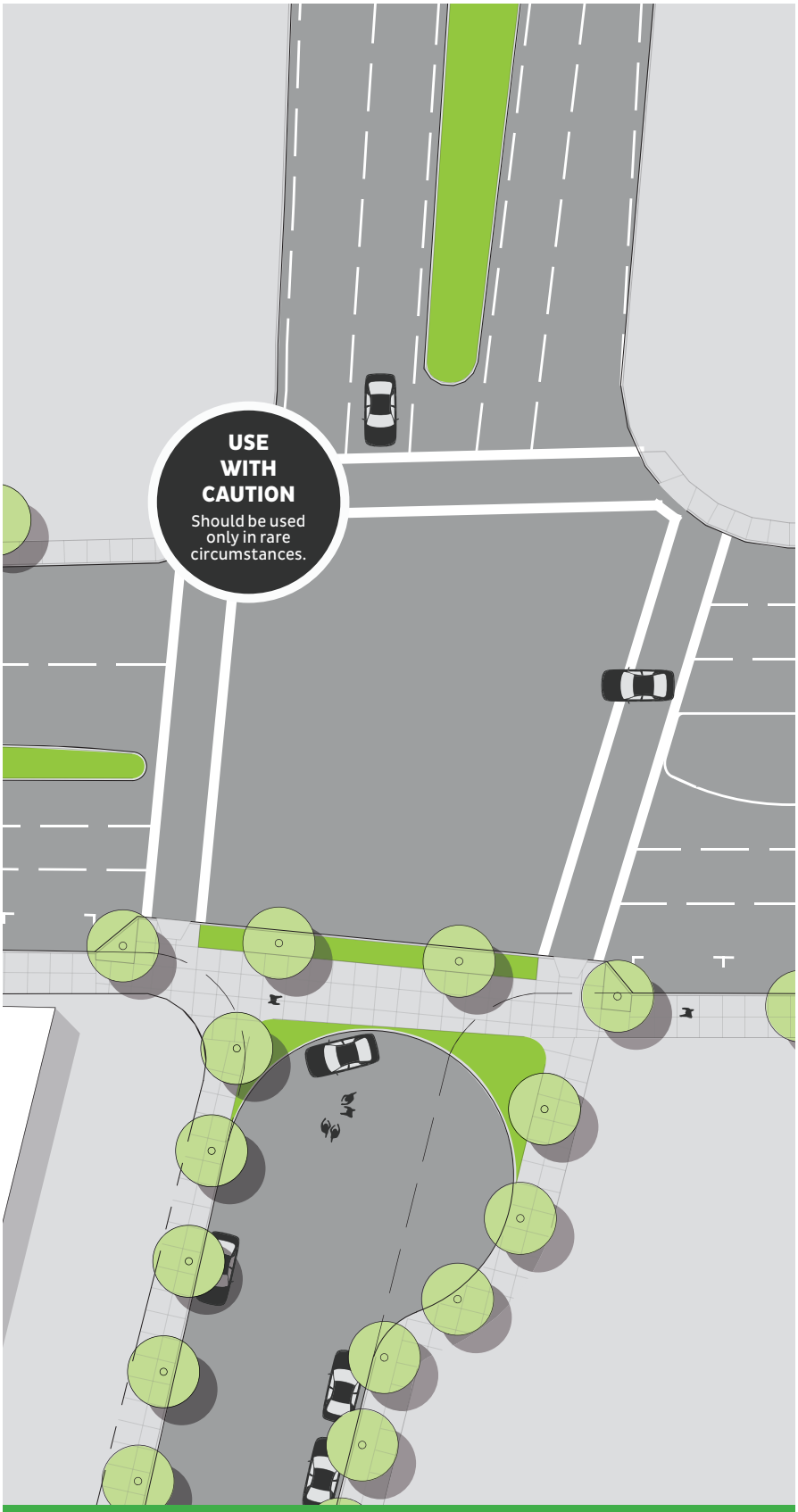
A partial closure provides better emergency access than a full closure. Since this design also allows motorists to relatively easily violate the prohibitions, police enforcement may be required. If the partial closure only eliminates an entrance to a street, a turnaround is not needed; closing an exit will generally require a turnaround.

Analyze whether local streets will be adversely affected and/or access into or out of the neighborhood would not be adequate. This treatment will likely put additional traffic on other streets.

Full Closure Diverter

INTERSECTIONS WITH LOCAL STREETS THAT HAVE PARALLEL ALTERNATIVE ROUTES

A full closure diverter is a barrier that creates a dead-end street so that drivers cannot go through, but typically still allow bicyclists and pedestrians to do so.



FULL CLOSURE DIVERTER

DESCRIPTION

A full street closure is accomplished by installing a physical barrier that blocks a street to motor vehicle traffic and provides some means for vehicles to turn around. Full street closures should be used only in the rarest of circumstances. Neighborhoods with cul-de-sac streets require extensive indirect travel, which has potentially significant impacts on other streets. All traffic is forced to travel on feeder streets, which has negative consequences for the people who live on those streets and forces higher levels of control at critical intersections.

If a street closure is done, it should always allow for the free through movement of all pedestrians, including wheelchair users and bicyclists. Emergency vehicles should also be able to access the street; this can be done with a type of barrier or gate that is electronically operated, permitting only large vehicles to traverse it. Examples are mountable curbs or an access way with a raised element in the center that a low vehicle would hit, though those treatments may not be able to stop pickups or sport utility vehicles.

Full street closures are the ultimate limitation measures used to discourage or prevent through traffic from using certain streets. They are not an appropriate measure for addressing crime or other social problems.

GOLDEN
BURGERS

CHAPTER 5

Streets For People

CREATING DESTINATIONS THAT PEOPLE CAN WALK & BIKE TO, MEET FRIENDS OR MAKE NEW FRIENDS, OR JUST WATCH THE PARADE OF LIFE.

As there are design treatments emphasize different facets of walkability as do policies, projects and programs. Within the following section are a series of initiatives that each focus on a different characteristic of connecting pedestrians throughout the study area, following the principles for making communities walkable. These programs, policies and projects are based on existing conditions analysis, and was augmented by on-the-ground reconnaissance through community engagement.

Categorizing these initiatives through these principles provides greater clarity behind the purpose

Environmental Factors

ENVIRONMENT BEAUTY HEALTH ACCESSIBLE
SAFE SOCIAL ECONOMICS RECREATION

VISION ZERO/ MAYOR'S CHALLENGE

Develops collaborations to eliminate all traffic deaths [pedestrian, driver, passenger and bicyclists] by 2025.

SAFE ROUTES

Creates safe routes to connect pedestrians to schools, parks and other public amenities.

UNIVERSAL CITY

Provides universal accessibility for all pedestrians including consistent baseline improvements and increased access through major infrastructure.

FIRST BLOCK/ LAST BLOCK

Expands the effectiveness of public transit by improving accessibility to and user experience at transit stops.

NEIGHBORHOOD CONNECTORS

Connects pedestrians to schools, parks, public amenities and commercial areas using neighborhood streets.

PEDESTRIAN PRIORITY AREAS

Enhances the pedestrian experience within both commercial districts and dense residential neighborhoods.

WALK LONG BEACH

Promotes walking as a healthy activity through safe, comfortable and pleasurable pedestrian environments.

STREET CHARACTER CHANGE

Transforms streets uses surplus roadway capacity and right-of-way to better support pedestrians.

PAVEMENT TO PLACES

Creates places for people by safely sharing the roadway or by completely transforming it into public open space.

of each of their respective polices, programs and projects. Doing so allows residents, staff and policy makers to more clearly prioritize what walkable means to different parts of the city. This also supports the process for pursing funding sources that require specific focuses, whether safety, environmental sustainability or accessibility, among others.
Like the design treatments, while each of these initiatives have a specific emphasis they often meet multiple principles while serving the ultimate goal of making neighborhoods more walkable.

While the projects are geographically located within the focus area many of the policies and programs could be citywide initiatives and can form the foundation of a citywide pedestrian plan. Alternatively, some of the policies and programs can be introduced initially to the focus area as pilots, to study and refine for eventual citywide implementation.

IMPLEMENTATION

The initiatives are intended to be part of comprehensive approaches to implementing each principle for walkable communities. As these programs, policies and projects are broad reaching, collaboration between multiple departments and agencies will be necessary, as will communication and engagement with effected community stakeholders. Identifying lead agencies as well as commissions and agencies to be champions will insure successful execution and continuation of these various initiatives.

Like the design treatments, while each of these initiatives have a specific emphasis they often meet multiple principles while serving the ultimate goal of making neighborhoods more walkable.

Vision Zero

City streets are typically designed for the greatest capacity and mobility options available, for decades they were designed primarily for the movement of privately operated and occupied automobiles. While safety of people is always a consideration in our transportation network, the efficiency of moving people, goods and resources is evidenced in typical street designs, traffic controls and allowed travel speeds. Because of this, safety within the public realm is placed on the vehicle operators and pedestrians sharing the street.Vision Zero instead places the main burden for safety on the transportation system design in recognition that human weaknesses and low tolerance to the forces of vehicles using this system. Vision Zero is a comprehensive strategy of policies, programs, partnerships and design standards with the intention to reduce the number and severity of conflicts between vehicles and people. The goal of Vision Zero is to eliminate death and serious injuries from the public transportation network.

Originating in Sweden, Vision Zero was developed to reduce traffic related fatalities and serious injuries in country that is already considered one of the safest. Five years after implementation, deaths from traffic accidents have been cut in half, with further reductions intended through driver education programs. Based on this success, many other countries are considering Vision Zero, as are a number of major American cities, including New York, Seattle and Los Angeles.

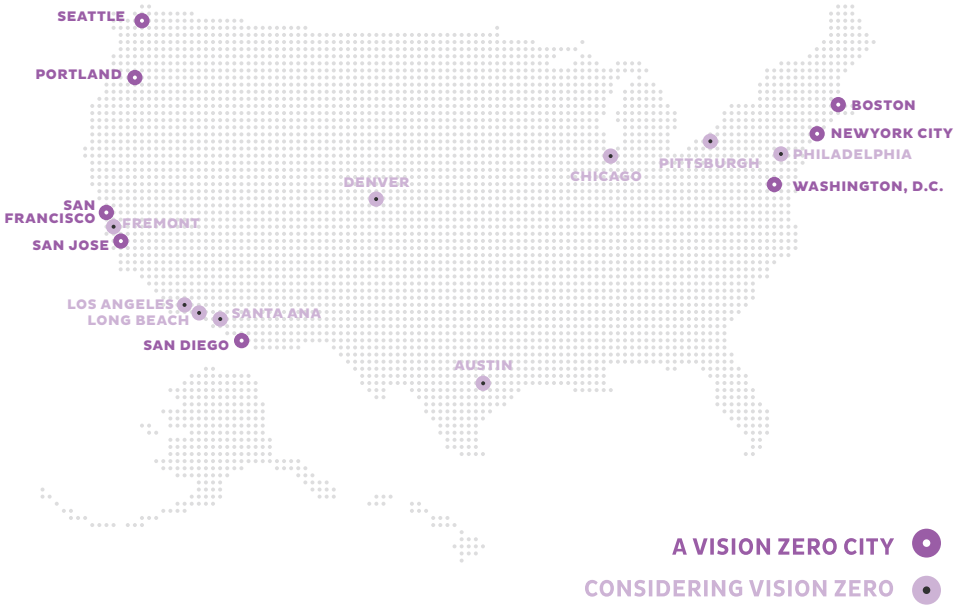
Similarly the US Department of Transportation is challenging mayors and local elected officials to take significant action to improve safety for bicyclists

and pedestrians of all ages and abilities over the next year. Mayors' Challenge participants are invited to attend the Mayors' Summit for Safer People, Safer Streets and their cities will spend a year helping their communities undertake seven activities to improve safety. The challenge is based on the 2010 USDOT Policy Statement on Bicycle and Pedestrian Accommodation.

Vision Zero and the Mayor's Challenge both include a collection of education programs, enforcement strategies and infrastructure design standards adapted to each transportation system. As one of the densest large cities in the nation, Long Beach can be navigated effectively on foot, bike and bus as well as by car. Vision Zero and the Mayor's Challenge in Long Beach would focus on ensuring safety for all people using the local transportation network while accommodating the movement of people, goods and resources.

Seventeen cities across the US have adopted or are considering adopting a Vision Zero Policy.

VISION ZERO NETWORK



POLICES & PROGRAMS

ADOPT VISION ZERO

Declare that the City will "eliminate traffic fatalities in Long Beach by 2025." By embracing Vision Zero as its first and most prominent goal, safety will now be the first priority in transportation decisions going forward. Develop a comprehensive plan with all relevant public agencies and community partners to meet this goal.

TRAFFIC SAFETY BY SWEDEN

The Vision Zero Initiative is a multi-national road traffic safety project that aims to eliminate all fatalities or serious injuries in road traffic. Started in Sweden in 1997, The Vision Zero Initiative is based on four principles:

ETHICS
Human life and health are paramount and take priority over mobility and other objectives of the road traffic system.

RESPONSIBILITY
Providers and regulators of the road traffic system share responsibility with users.

SAFETY
Road traffic systems should take account of human fallibility and minimize both the opportunities for errors & the harm done when they occur.

MECHANISMS FOR CHANGE
Providers and regulators must do their utmost to guarantee the safety of all citizens; they must cooperate with road users; and all three must be ready to change to achieve safety.

ABOVE
Pedestrians and bicyclists are the focus of San Francisco's recently adopted Vision Zero policy.
PHOTO COURTESY OF VISION ZERO SF

OPPOSITE, TOP
A successful Vision Zero intersection incorporates the needs and safety all users of the road.
PHOTO COURTESY OF NYCDOT

THE MAYOR'S CHALLENGE

The U.S. Deptartment of Transportation challenged city leaders to raise the bar for bicyclist & pedestrian safety by joining The "Mayors' Challenge" for Safer People & Safer Streets, with these goals.

COMPLETE STREETS 1

Walking and bicycling should be considered equally important as other transportation modes: The primary goal of a transportation system is to safely & efficiently move people and goods.

FIX BARRIERS 2

Communities should ensure that there are transportation choices for people of all ages and abilities. Transportation facilities should be accessible and provide safe, convenient and interconnected transportation networks.

GATHER DATA 3

Pedestrian & bicycle data programs should be initiated or expanded to better understand walking and bicycling activity levels [i.e. volume], crash location & circumstances, & existing & proposed infrastructure.

DESIGN RIGHT 4

Go beyond minimum design standards to make streets safe & convenient for all road users. Plan projects for the long-term to anticipate likely future demand for bicycling & walking facilities & not preclude the provision of future improvements.

CREATE NETWORKS 5

Find ways to make facility improvements for pedestrians and bicyclists during resurfacing and other maintenance projects.

IMPROVE LAWS 6

Take steps to protect all road users such as improving the rules on safe passing, turning, or yielding, bicyclists who ride unlawfully, or pedestrians who unlawfully cross or walk in the roadways.

EDUCATE + ENFORCE 7

Cities should publicize traffic safety laws & behaviors; educate communities about the consequences of violating traffic laws; & conduct enforcement where they will be most effective based on local crash data.

ACCEPT MAYOR'S CHALLENGE FOR SAFER PEOPLE, SAFER STREETS

Issue a public statement about the importance of bicycle and pedestrian safety and form a local action team of city staff and local stakeholders to advance safety and accessibility goals.

REGULAR COLLISION EVALUATION

MOP IM 57 Develop a program to regularly evaluate traffic collision data. Identify top collision locations for automobiles, bicycles and pedestrians, and develop appropriate countermeasures.

REGIONAL CORRIDOR PEDESTRIAN SAFETY

MOP P 1-3 Improve auto-oriented streets [such as Pacific Coast Highway and Lakewood Boulevard] so pedestrians using the stores or services can walk comfortably and feel safer navigating the busy thoroughfare, regardless of their point of origin — from the surrounding neighborhoods or via transit.

MINIMIZE CONFLICTS WITH FREIGHT

MOG P 15-2 of Goods Policy 15-2: Minimize conflicts between trucks and other modes, especially bicycles and pedestrians.

SAFETY EDUCATION

MOP IM 6 Continue to implement programs to promote pedestrian safety through outreach to both pedestrians and motorists.

SAFE STREET DESIGN

MOP IM 10 Design safer streets by using traffic calming techniques [such as roundabouts and sidewalk extensions] and by providing more frequent and innovative crosswalks, pedestrian signals, and clearly marked bicycle lanes.

HUMANIZE SPEED LIMITS

Transition adopted traffic speed limits to be based on human tolerances versus automobile limits. The speeds should be based on varieties of conflicts, types of infrastructure and potential collisions. Initiate campaign to educate drivers to the purpose and implementation of the amended speed limits.

SYNCHRONIZE TRAFFIC SPEED

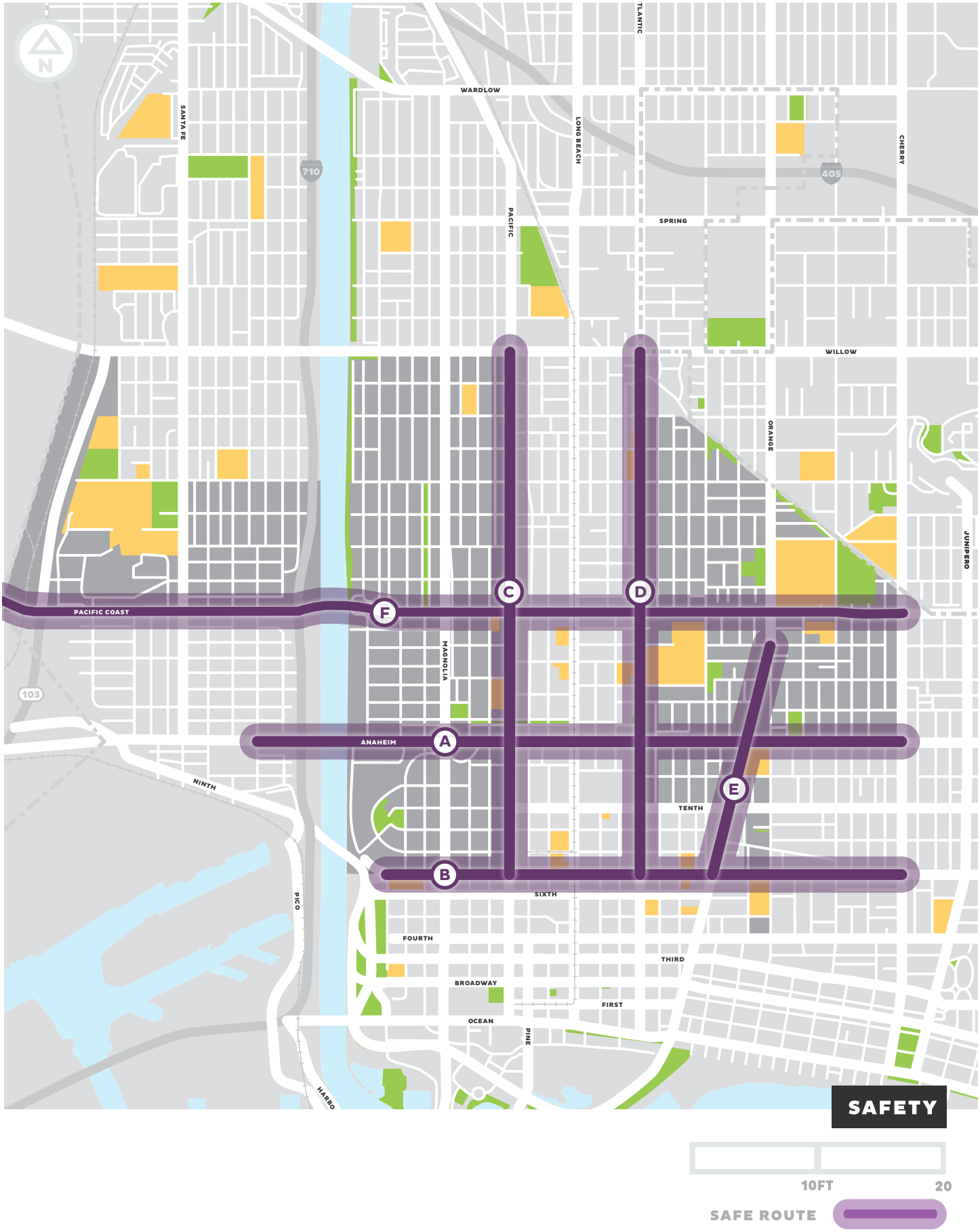
Traffic signals should be synchronized to modulate vehicle traffic to within appropriate speeds. Consider installing additional traffic signals at intermediate intersections when there is long distance between existing signalized intersections.

BASELINE SAFETY IMPROVEMENTS

Incorporate baseline safety improvements on all street projects including but not limited to advance stop lines, pedestrian countdown signals and enhanced pedestrian lighting. The pedestrian safety enhancements are to be programmed during the design phase and incorporated into the budget.

SAFETY ANALYSIS PROJECT KICKOFF

Evaluate the pedestrian environment regularly, accessing existing conditions through walk audits, collecting traffic and safety data and interviewing stakeholders.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SAFE ROUTE

PROJECTS

A ANAHEIM STREET SAFETY IMPROVEMENTS

This project enhancements include vehicular traffic calming and pedestrian crossing enhancements along Anaheim Street between Cherry Avenue and Harbor Avenue. This include additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks & landscaped medians.

B 7TH STREET SAFETY IMPROVEMENTS

This project enhancements include traffic calming and pedestrian crossing enhancements along 7th Street between Cherry Avenue and the Los Angeles River. This include additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks and landscaped medians. Traffic signals should be synchronized to modulate traffic speeds to within the allowed limits.

C PACIFIC AVENUE SAFETY IMPROVEMENTS

This project enhancements include traffic calming and pedestrian crossing enhancements along Pacific Avenue between 7th Street and Willow Street. This include additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks and landscaped medians.

D ATLANTIC AVENUE SAFETY IMPROVEMENTS

This project enhancements include traffic calming and pedestrian crossing enhancements along Atlantic Avenue between 7th Street and Willow Street. This include additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks and landscaped medians.

E ALAMITOS AVENUE SAFETY IMPROVEMENTS

This project enhancements include traffic calming and pedestrian crossing enhancements along Alamitos Avenue between 7th Street and 17th Street. This includes a road diet, additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks, landscaped medians and enhanced uncontrolled intersections.

F PACIFIC COAST HIGHWAY SAFETY IMPROVEMENTS

This project enhancements include traffic calming and pedestrian crossing enhancements along PCH between 7th Street and 17th Street. This includes a road diet, additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks, landscaped medians and enhanced uncontrolled intersections.

LEFT
Vision Zero Director Leah Shahum leads a group of urban planners and city officials around San Francisco.
PHOTO COURTESY OF VOLKER NEUMANN FOR THE SF BICYCLE COALITION

Safe Routes

A variety of roadway improvements may be used to enhance the safety and mobility of children in school zones. The use of well-trained adult crossing guards has been found to be one of the most effective measures for assisting children in crossing streets safely. Sidewalks or separated walkways and paths are essential for a safe trip from home to school on foot or by bike.

Adult crossing guards require training and monitoring and should be equipped with a bright and reflective safety vest and a STOP paddle. Police enforcement in school zones may be needed in situations where drivers are speeding or not yielding to children in crosswalks.

Schools should develop "safe routes to school" plans and work with local agencies to identify and correct problem areas. Marked crosswalks can help guide children to the best routes to school. School administrators and parent-teacher organizations need to educate students and parents about school safety and access to and from school. Education, enforcement and well-designed roads must all be in place to encourage motorists to drive appropriately.

For a longer term solution, it is preferable to create an environment where children can walk or bicycle safely to school, provided they live within a suitable distance. A combination of student, parent and administration education programs and safe driving awareness campaigns can help augment infrastructure treatments.

POLICES & PROGRAMS

SAFE ROUTE COORDINATION

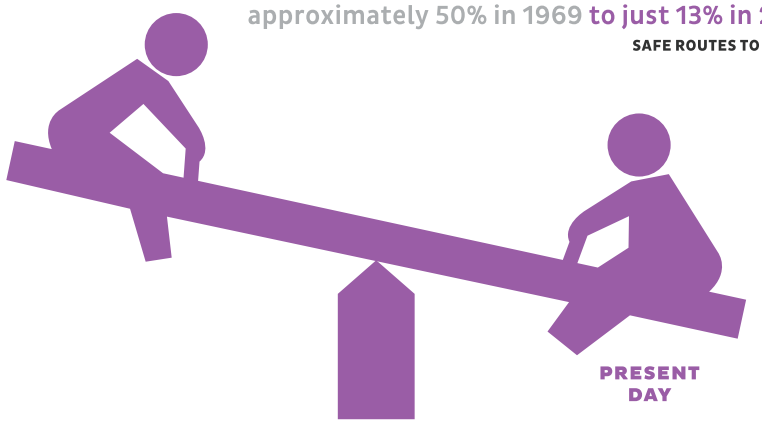
MOP **M-24** Coordinate and collaborate with local school districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout Long Beach.

NEIGHBORHOOD TRAFFIC CONTROL

MOP **M-8** Use Neighborhood Traffic Control techniques when excessive vehicle speed, excessive volume, or pedestrian/vehicle safety concerns warrant them.

Within the span of one generation, the percentage of children walking or bicycling to school has dropped precipitously, from approximately 50% in 1969 **to just 13% in 2009.**

SAFE ROUTES TO SCHOOL



EXPAND PEDESTRIAN SAFETY COMMISSION

The Pedestrian Safety Commission recommends to the City Council which intersections necessitate installation of an adult crossing guard, and shall advise the city council of its findings and recommendations. The scope of this Commission should be expanded to consider all available tools for improving safety around every school campus and park.

REVISE SCHOOL ZONE SPEED LIMIT

Many school zones currently have speed limits of 25 mph. New California state law allows cities to expand school zones to within 1,000 feet of a school or lower speed limits to 15 mph when children are present.

SAFE ROUTE MAPPING

Regularly update safe-route to school material for elementary schools and expand the program to include all school campuses

WALKING SCHOOL BUS

Support walking bus program is when an adult accompanies children to school, starting at one location and picking children up along the way. Children walk two by two under the supervision of a responsible adult who is mindful of street crossings.

The Safe Routes to School [SRTS] program provides an opportunity to make walking & bicycling to school safer & more accessible for children, including those with disabilities.

On a broader level, SRTS programs can enhance children's health and well-being, ease traffic congestion near schools, improve air quality, and improve community member's overall quality of life.

SRTS programs examine conditions around schools & conduct projects and activities that work to improve safety and accessibility and reduce traffic and air pollution in the vicinity of schools. As a result, these programs help make bicycling and walking to school safer and more appealing transportation choices thus encouraging a healthy and active lifestyle from an early age. SRTS operates in more than 40 countries and all 50 states.

ABOVE
These traffic sign mascots help educate youth about road safety in a fun and engaging way.
PHOTO COURTESY OF ALLAN CRAWFORD

OPPOSITE, TOP
Safe and pleasant sidewalks connecting schools to their surrounding neighborhood encourages students to walk to school.
PHOTO COURTESY OF ALLAN CRAWFORD

20'S PLENTY

The UK national campaign for a 20 mph default speed limit began in 2007 and has inspired other cities, like New York, to develop similar initiatives.

PHOTO COURTESY OF HOLDEN STRUB

PROJECTS

A BURNETT STREET SAFETY ENHANCEMENTS

This project along Burnett Street between the Los Angeles River and Pacific Electric Greenbelt includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Lafayette Elementary, Smith Elementary and Holy Innocents School.

B WEST HILL STREET SAFETY ENHANCEMENTS

This project along West Hill Street between the Los Angeles River and Webster Street includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Garfield Elementary, Hudson K-8, Reid High School, Cabrillo High School, Hudson Park and Admiral Kidd Park.

C EAST HILL STREET SAFETY ENHANCEMENTS

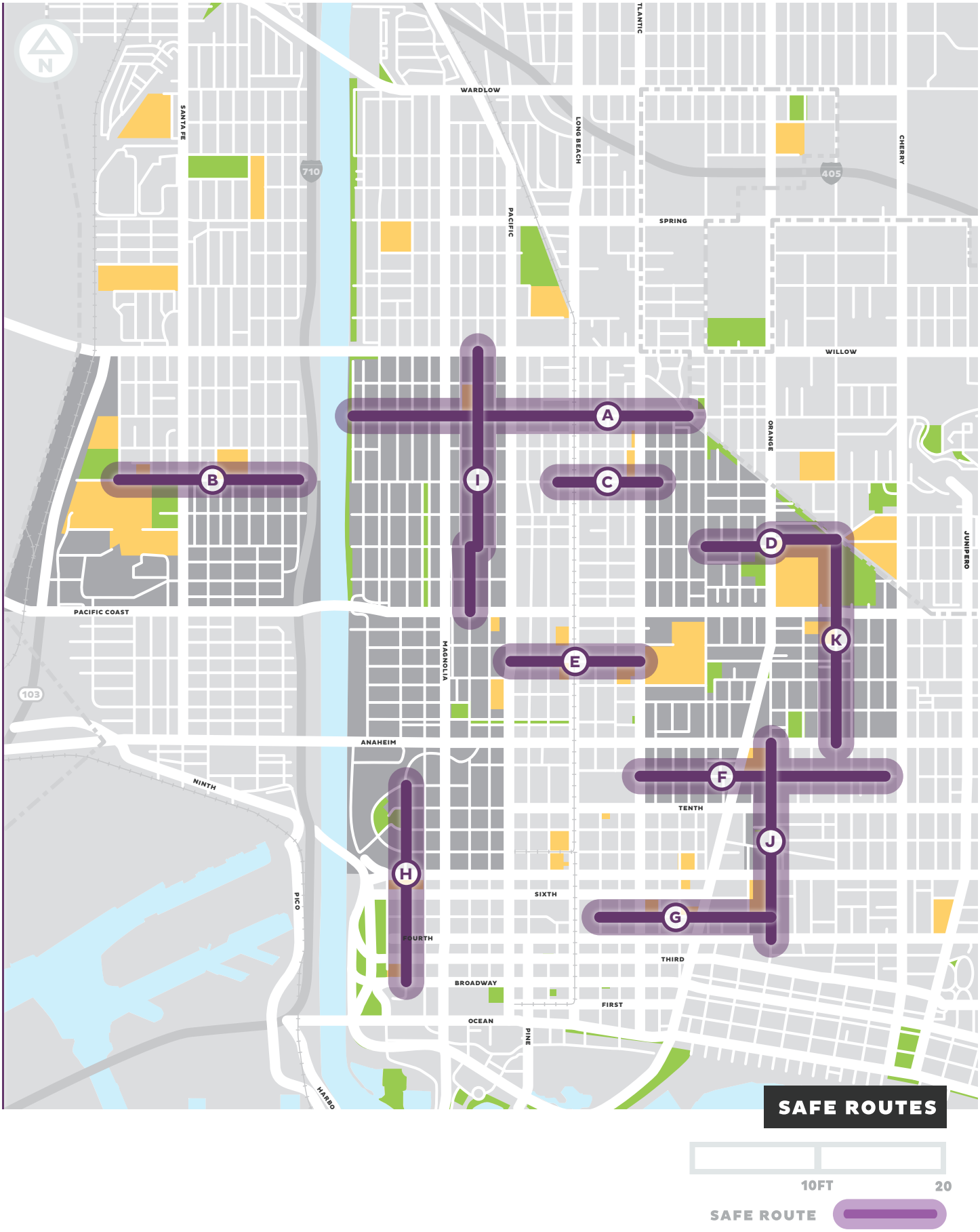
This project along East Hill Street between Locust Avenue and Lime Avenue includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Smith Elementary and Burnett Library.

D 20TH STREET SAFETY ENHANCEMENTS

This project along 20th Street between Martin Luther King Jr. Avenue and Signal Hill includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares, and reconfiguration of intersections at Orange Avenue and Walnut Avenue. It serves Mary Butler Elementary, Alvarado Elementary, Nelson Academy, Martin Luther King Jr. Park, Long Beach City College and Chittick Field.

E 16TH STREET SAFETY ENHANCEMENTS

This project along 16th Street between Atlantic Avenue and Pacific Avenue includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Roosevelt Elementary, Washington Middle School, Poly Academy and Poly High School.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SAFE ROUTES
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SAFE ROUTE

SPEED

F 11TH STREET SAFETY ENHANCEMENTS

This project along 11th Street between Atlantic Avenue and Gardenia Avenue includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Lincoln Elementary, shifting the primary east-west safe route from Anaheim Street.

G 5TH STREET SAFETY ENHANCEMENTS

This project along 5th Street between Elm Avenue and Orange Avenue includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Stevenson Elementary, Franklin Middle School and St. Anthony School.

H MAINE AVENUE SAFETY ENHANCEMENTS

This project along Maine Avenue between Broadway and 11th Street includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Chavez Elementary, Edison Elementary and Drake Park.

I CHESTNUT AVENUE SAFETY ENHANCEMENTS

This project along Chestnut Avenue between Pacific Coast Highway & Willow Street includes traffic calming and management, traffic controls & pedestrian safety enhancements at thoroughfares. It serves Lafayette Elementary.

J ORANGE AVENUE SAFETY ENHANCEMENTS

This project along Orange Avenue between 4th Street and Anaheim Street includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. It serves Lincoln Elementary, Franklin Middle School and Craftsman Village Park.

K WALNUT AVENUE SAFETY ENHANCEMENTS

This project along Walnut Avenue between Anaheim Street and Signal Hill includes traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares, and reconfiguration of the intersections at 20th Street. It serves Mary Butler Elementary, Whittier Elementary, Long Beach City College and Chittick Field.

LEFT
A return to children moving around their neighborhoods by foot or by bicycle, particularly traveling to and from school, is a sign of a safe and equitable neighborhood.
PHOTO COURTESY OF ANDY FANG

Universal City

As a city that was initially developed during a period of walking and transit Long Beach has a thorough distribution of accessible pedestrian facilities with most streets in the city flanked by sidewalks. There are areas of the city where the network of sidewalks break down and are either obstructed, uneven, too narrow or missing entirely. There are typically ramps at intersections that vertically transition sidewalks to streets and crosswalks.

The collapse of accessible pedestrian infrastructure is often lost on walkers but those with limited mobility, whether in a wheelchair or stroller, or use crutches or cane can find themselves barred from travelling further upon arrival. Without a sidewalk or appropriately located curb ramps, those in wheelchairs are often forced to travel in the street. Very few of these streets are equipped with shoulders thus the pedestrian must travel in the travel lane with vehicle traffic.

Traffic signals create gaps in the traffic flow, allowing pedestrians to cross the street safely. They should allow adequate crossing time for pedestrians and an adequate clearance interval based upon

TOP
Universal design techniques accommodate pedestrians of all ages and abilities
PHOTO COURTESY OF ALLAN CRAWFORD

ABOVE INSET
An elegant and subtle ramp was integrated into this public staircase.
PHOTO COURTESY OF BEAU LEBENS VIA FLICKR

walking speeds for pedestrians with limited mobility. In areas where there is a heavy concentration of the elderly or children, a slower speed should be used in determining pedestrian clearance time. Signals are particularly important at high-use, mid-block crossings on higher speed roads, multi-lane roads, or at highly congested intersections.

Nearly a quarter of residents living in the CX3 neighborhoods have limited mobility due to their age [under 6 or over 65] or health conditions. As the city's population continues to age, greater accommodations need to be made to maintain and enhance their connections to healthy activities and daily services. Providing wide, clear, accessible walkways and sufficient opportunity to cross streets will be the basis of accessibility projects.

POLICES & PROGRAMS

UNIVERSAL DESIGN

MOP P 1-14 Use universal design techniques to accommodate pedestrians of all abilities and ensure compliance with the Americans with Disabilities Act.

CLEAR PATH OF TRAVEL

MOP P 2-18 Provide adequate sidewalk widths and clear path of travel as determined by street type classification, adjoining land uses and expected pedestrian usage.

WIDE SIDEWALKS

MOP P 2-19 Where feasible, widen sidewalks to improve the pedestrian environment by providing space for necessary infrastructure, amenities and streetscape improvements.

I-710 FREEWAY PCH INTERCHANGE

MOG P 15-12 Vigorously support increased east-west pedestrian and bicycle connectivity related to the I-710 Corridor Project, including streetscape improvements and new pedestrian and bicycle facilities.

CURB RAMP UPGRADES

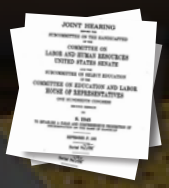
Install or upgrade American Disability Act compliant curb ramps at all legal street crossings during any street or sidewalk improvement or maintenance project.

DRIVEWAY IMPROVEMENTS

As part of any street project, work with adjacent property owners to minimize, improve, consolidate or eliminate driveways where feasible in order to maintain an appropriate slope along the pedestrian path of travel.

A BRIEF HISTORY OF THE AMERICANS WITH DISABILITIES ACT

1986
The National Council on the Handicapped issued its report titled *Toward Independence*



1988
The NCD issued report *On the Threshold of Independence*, while Congressional Task Force on the Rights & Empowerment of Americans with Disabilities was created

1989
ADA Passed the Senate by a vote of 76 to 8

1990
ADA Passed the House

1990
ADA was passed & signed into law by President George H.W. Bush on July 26, 1990

1991
Regulations for Employment [Title I], State and Local Governments [Title II], Public Accomodations [Title III], and Telecomunications [Title IV] issued.

1999
Three supreme court rulings, known as The Sutton Trilogy, narrowed the definition of disability by holding that people who use "mitigating measures," such as medication, may not be protected by the ADA

1999
Olmstead V. L.C. Ruling recognized that the services for persons with disabilities must be provided in integrated, community-based settings when possible.

2002
The Supreme Court ruled in favor of further narrowing the protections of the ADA

2004
The National Council on Disability issued its report Righting the Americans with Disabilities Act.

2006
Updated Transportation Regulations

2008
ADA Amendments Act [ADAAA] Signed

2010/11
Updated Regulations

Show your commitment to the ADA
PLEDGE, ON!

2014
PLEDGE on to the ADA campaigned launched

ADA 25 AMERICANS WITH DISABILITIES ACT 1990-2015

2015
Americans with Disabilities Act celebrates its 25th year

PROJECTS

A HILL STREET BIKE + PEDESTRIAN BRIDGE

This project will provide a link between Wrigley and West Long Beach by constructing a bicycle and pedestrian bridge over the Los Angeles River and I-710 Freeway at Hill Street.

B WILLOW STREET BRIDGE PEDESTRIAN FACILITIES

This project provides suitable sidewalks on the north and south sides of Willow Street between Golden Avenue and Fashion Avenue and minimizes conflicts at the interchange with the I-710 Freeway. Area for the sidewalks would be created by narrowing vehicle travel lanes to minimum standards.

C PACIFIC COAST HIGHWAY BRIDGE PEDESTRIAN FACILITIES

This project provides suitable sidewalks on the north and south sides of Pacific Coast Highway between Golden Avenue and Harbor Avenue and minimizes conflicts at the interchange with the I-710 Freeway. Area for the sidewalks would be created by narrowing vehicle travel lanes to minimum standards.

D ANAHEIM STREET BRIDGE PEDESTRIAN FACILITIES

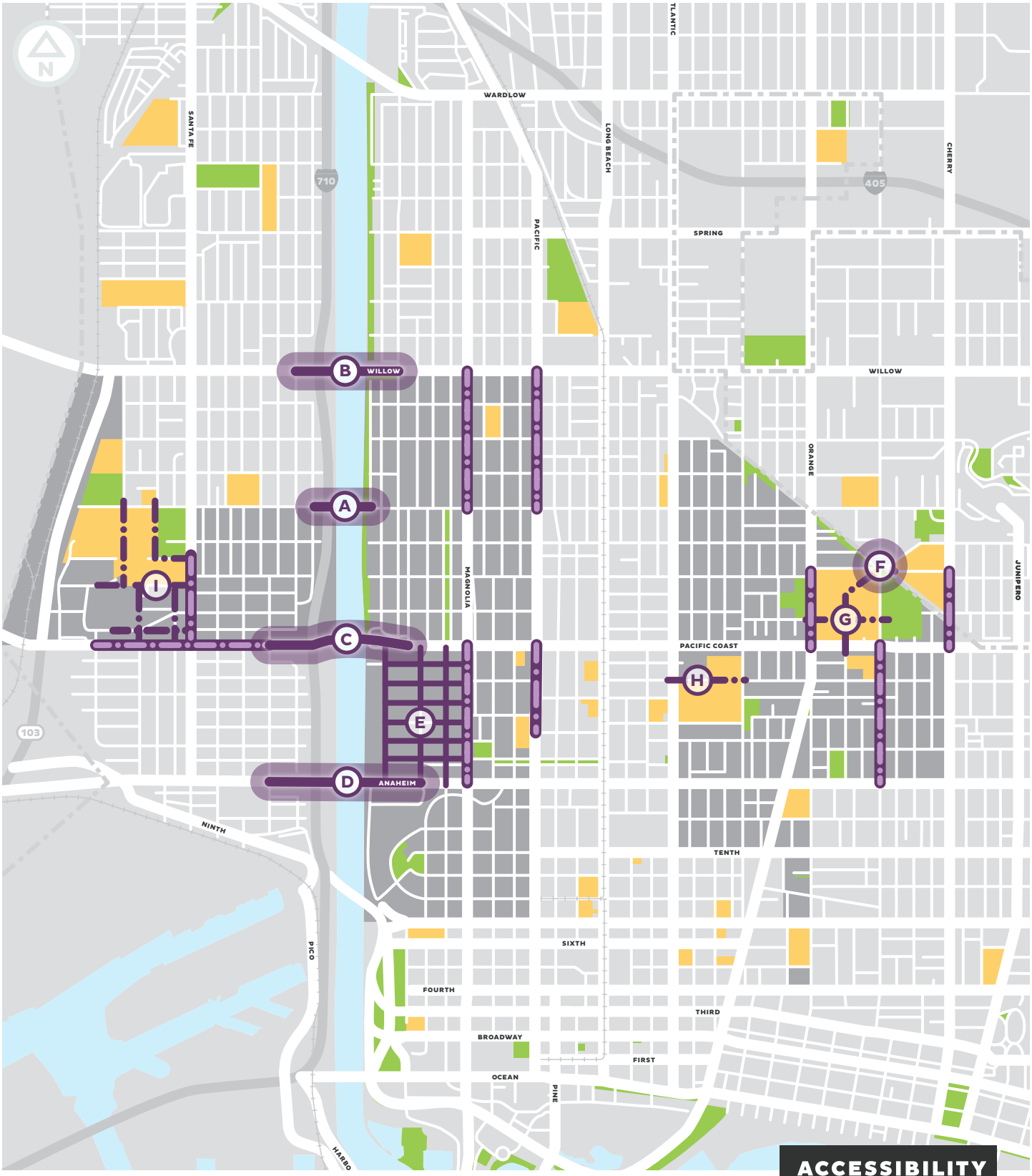
This project provides suitable sidewalks on the north and south sides of Anaheim Street between Oregon Avenue and Harbor Avenue and minimizes conflicts at the interchange with the I-710 Freeway. Area for the sidewalks would be created by narrowing vehicle travel lanes to minimum standards.

E MAGNOLIA INDUSTRIAL AREA ACCESSIBILITY PROJECT

This project installs sidewalks and accessible curb ramps at appropriate locations throughout the Magnolia Industrial Area as defined by Magnolia Avenue, Pacific Coast Highway, Drake Park Greenbelt and Los Angeles River. The project also includes driveway improvements to maintain appropriate slopes along the pedestrian paths of travel.

F 20TH STREET + ALAMITOS AVENUE RECONFIGURATION

This project reconfigures the intersections of Alamitos Avenue, Walnut Avenue, 20th Street and Westley Street to simplify vehicle movement and improve pedestrian access. Surplus public right-of-way would be incorporated into the Pacific Electric Greenbelt.



ACCESSIBILITY

10FT 20

ADA UPGRADE PROGRAM

IMPROVED ACCESS

PERMEABLE OPPORTUNITIES

INCREASED CROSSINGS

G LONG BEACH CITY COLLEGE PERMEABILITY

This project enhances pedestrian connections to and through the Pacific Coast campus of Long Beach City College, to provide greater accessibility. The project integrates the Measure LB improvements to the campus circulation plan with pedestrian crossings on Orange Avenue, Pacific Coast Highway and Walnut Avenue.

H POLY HIGH SCHOOL PERMEABILITY

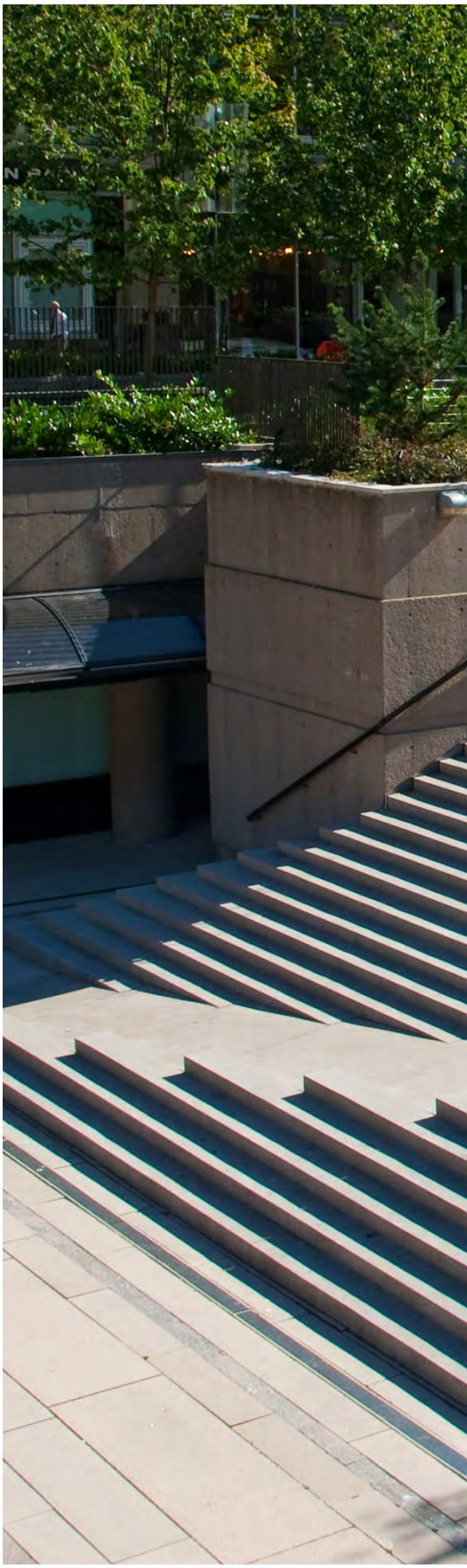
This project enhances pedestrian connections to and through the Poly High School campus, specifically along Jackrabbit Lane/17th Street, to provide greater accessibility. The project integrates the Measure K improvements to the campus circulation plan with pedestrian crossings on Martin Luther King Jr Avenue.

I CABRILLO CAMPUS [PD-31] PERMEABILITY

This project enhances pedestrian connections to and through the Cabrillo Campus [PD-31], to provide greater accessibility. The project integrates improvements taking place between the various properties to enhance pedestrian connectivity between Terminal Island Freeway right-of-way, Pacific Coast Highway, Santa Fe Avenue and Hill Street.

J INTERMEDIATE TRAFFIC CONTROL + CROSSWALKS

This project installs marked crosswalks, curb ramps and appropriate traffic controls where the distance between existing controlled intersections are more than a quarter mile apart.



TOP
Ramps should be well integrated into public stairwell designs to encourage and promote use.
PHOTO COURTESY

First and Last Block

Every resident of Long Beach lives within a quarter-mile of a bus route, with most residences in the CX3 within a 5 minute walk of multiple transit stops. One of the primary goals of the Mobility Element was to increase use of transit as a viable option for both work and non-work trips. Accomplishing this goal requires an improved transit system capable of providing quicker and more frequent trips while maintaining safe, clean and dependable service.

There are significantly more residents who are transit dependent in the CX3 neighborhoods than across the rest of the city. At the same time, the area is also the best served in Long Beach based on the number of buses, density of routes and destinations reached. Yet space within the local street network is in high demand between pedestrians, bicyclists, drivers and transit operations. Often this has left streets with narrow sidewalks which precludes the necessary area for bus shelters and in some cases even bus benches.

Within the Mobility Element of the General Plan primary transit streets are identified throughout the city to provide regional connections,

TOP
Transit stops, like this one on Pine Ave, can accommodate many waiting pedestrians.
PHOTO COURTESY OF ALLAN CRAWFORD

ABOVE INSET
While seating is provided, this bus stop could provide shelter from the sun and elements to better accommodate waiting transit passengers .
PHOTO COURTESY OF VANDERHAWK.COM

serve high volumes of riders and offer frequent service with short transit headways. Utilizing transit signal prioritization, bus only lanes and transit curb extensions, buses can provide more efficient service with limited investment. On these streets, transit will be given priority over autos. Along primary transit corridors, a high priority must also be also be given to enhancing the pedestrian experience, in the design of both streets and buildings.

It is essential to coordinate planning and investment into transit facilities with other modes of transportation for bridging the first and last mile of transit riders' trips. As the majority of transit riders in within Long Beach travel on foot before and after their bus ride, specific coordination between transit and pedestrian infrastructure is essential. Ensuring that riders can access bus stops along desired paths using safe sidewalks and crosswalks is important but so is maintaining a comfortable pedestrian environment to enhance the riders' wait.

Investments toward pedestrian improvements along primary and secondary transit corridors should be coordinated with Long Beach Transit whether it is bus stops locations relative to controlled intersections or have new street furniture complement the bus shelters. Such coordination should take place throughout the respective planning processes, into the capital investment programs through to implementation, operations and maintenance. Doing so will makes the total infrastructure investment made by the multiple agencies while maximizing the total transportation network.

POLICES & PROGRAMS

TRANSIT ACCESS

MOP P 2-6 Ensure high-quality, on-street access to transit stops and stations.

TRANSIT STOP DESIGN STANDARDS

MOP M-37 Actively support and assist Long Beach Transit in the implementation of design guidelines for bus shelters and other bus stop amenities.

MINI-TRANSIT HUBS

MOP M-41 Actively support and assist Long Beach Transit's establishment of mini-transit hubs throughout the City that provide multimodal connectivity.

TRANSIT INTEGRATION INTO CAPITAL IMPROVEMENT PROGRAM

MOP M-50 Review all capital improvement projects to ensure improvements located on existing and planned bus routes include modification of street, curb and sidewalk configurations to allow for easier and more efficient bus operation and improved passenger access and safety while maintaining overall pedestrian and bicycle safety and convenience.

SAFE + ACCESSIBLE TRANSIT STOPS

Walk audits should be conducted for Long Beach Transit bus stops in the city for safety and accessibility. Recommendations should be provided and prioritized for implementation as part of the Capital Improvement Program.

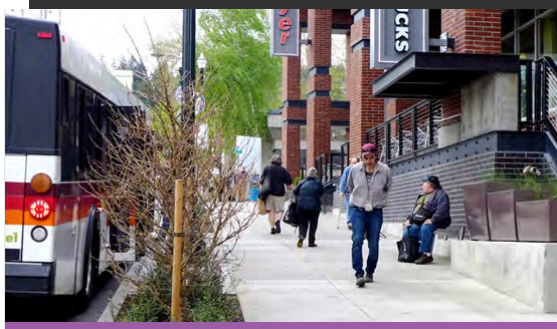
ST PROJECT HIGHLIGHT

Pedestrian Network Analysis Project

Portland, Oregon

TriMet provides bus, light rail and commuter rail transit services in the Portland, Oregon, metro area. Many areas throughout the TriMet service district may lack the infrastructure for bus stops, but there is still a need to provide transit service to nearby neighborhoods, especially in low income areas where many are transit dependent. In 2012, TriMet released the Pedestrian Network Analysis, highlighting some of those areas with the most need and the most opportunity for pedestrian improvements that would make it easier for people to ride transit.

BEFORE



AFTER

BEFORE
Riders previously experienced a tight sidewalk and tight shelter on this on West Portland block.
PHOTO COURTESY OF TRIMET

AFTER
TriMet worked with developers to create a wide sidewalk with a covered bus stop bench designed into the side of the building.
PHOTO COURTESY OF TRIMET

PLAYFUL AND PRACTICAL

This clever bus stop design in Baltimore fuses public art and transit user comfort with giant benches that form the word 'BUS.'

PHOTO COURTESY

PROJECTS

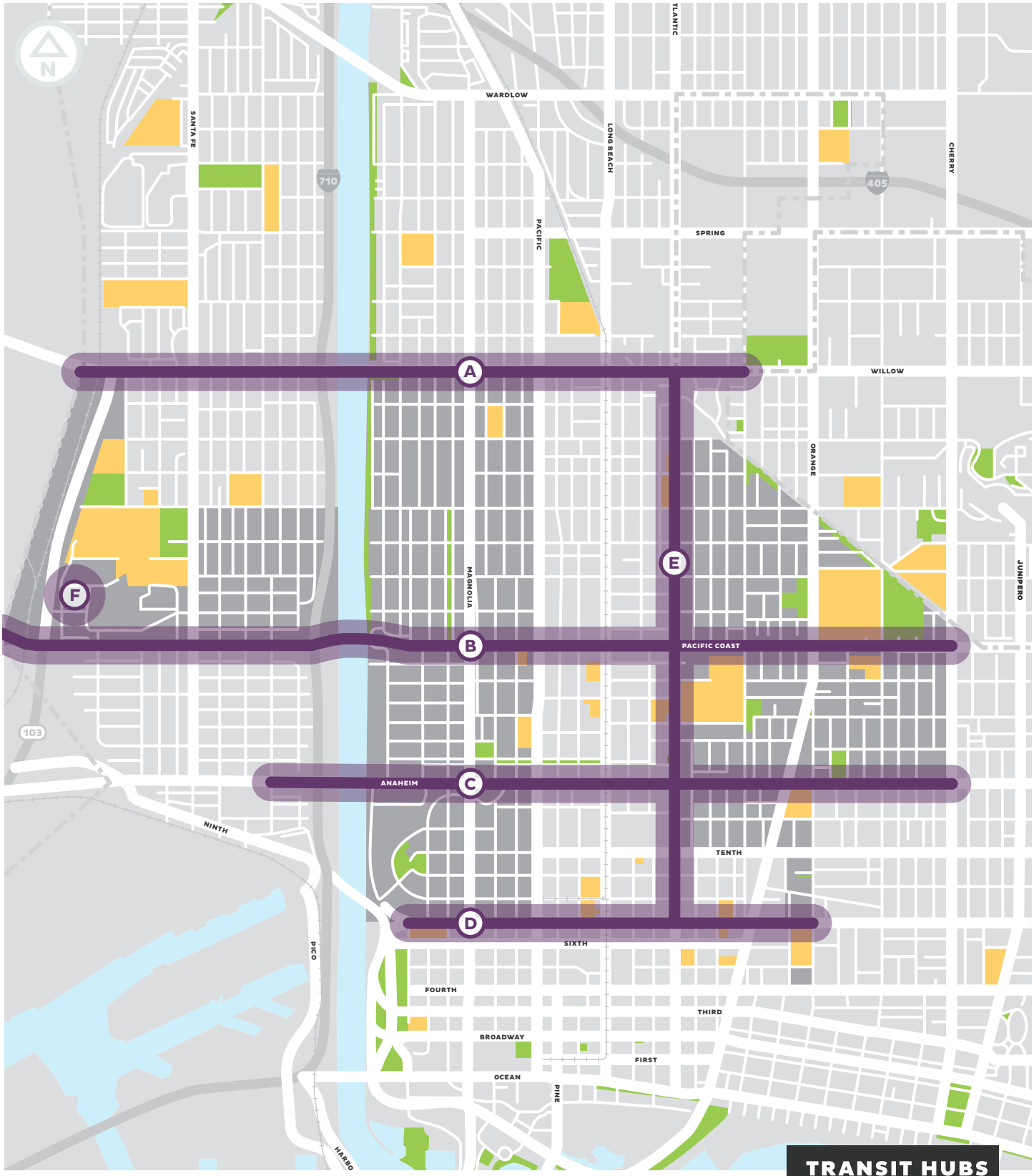
PRIMARY TRANSIT CORRIDORS IMPLEMENTATION

Add amenities to existing stops along primary transit corridors that could include solar powered non-advertising bus stop shelters and freestanding benches, security lighting, trash receptacles and crosswalk enhancements. Bus Rapid Transit or high-capacity transit service investments are also anticipated. These projects include:

- **A** WILLOW STREET
- **B** PACIFIC COAST HIGHWAY
- **C** ANAHEIM STREET
- **D** 7TH STREET
- **E** ATLANTIC AVENUE

F VILLAGES AT CABRILLO TRANSIT HUB

This project establishes a multi-modal transit center within the Villages at Cabrillo campus including multiple bus layover spaces, shelters and benches, secure bicycle parking and pedestrian infrastructure enhancements. The new transit facility would be located to a transit dependent residential population while providing amenities for bus drivers.



TRANSIT HUBS

10FT 20

PRIMARY TRANSIT CORRIDOR

Neighborhood Connectors

While Pedestrian Priority Areas primarily focus enhancements in commercial districts and multi-use neighborhoods, Neighborhood Connectors enhance active mobility infrastructure on local streets in residential neighborhoods. Expanding the Bike Boulevard network to include pedestrian-oriented enhancements would connect walkers locally as well as across longer distances in the city. The Neighborhood Connectors can thus provide recreational use as well as more utility accessibility to other parts of Long Beach.

Neighborhood Connectors expand upon the existing and proposed bicycle boulevard in the city to include infrastructure improves for pedestrians as well, understanding that the traffic calming devices and additional traffic controls serve both bicyclists and walkers. Each Neighborhood Connectors has unique features based on the street characteristics, the desires of the surrounding residents and businesses, the safety concerns and available funding.

Neighborhood Connectors can include, but are not limited to, traffic calming and management treatments, enhanced crossings at major thoroughfares and additional pedestrian amenities like furniture and street trees.

TOP
Locals laying down some chalk art for a temporary placemaking event on Downtown's Third St Cycle Track.
PHOTO COURTESY OF ALLAN CRAWFORD

ABOVE INSET
Neighborhood connector improvements in this residential neighborhood help calm traffic for bicyclists as well as pedestrians.
PHOTO COURTESY OF VANDERHAWK.COM

POLICES & PROGRAMS

TRANSIT ACCESS
STREETS AS OPEN SPACE

MOP P 2-6 Treat streets as an important part of the public open space system, and integral part of the City's urban forest.

NEIGHBORHOOD TRAFFIC CALMING

MOP M-8 Mobility of People Implementation Measure-8: Use Neighborhood Traffic Control techniques when excessive vehicle speed, excessive volume, or pedestrian/vehicle safety concerns warrant them.

BIKE BOULEVARDS BECOME NEIGHBORHOOD CONNECTORS

Expand bicycle boulevard network to include pedestrian-oriented enhancements, traffic calming and management treatments, safety features. The Neighborhood Connectors would retain their bike facility designation within the citywide network.

A big reason I prefer to walk, rather than drive, to local destinations is because they are close to my home and my neighborhood has safe and comfortable streets.

POLY RESIDENT

NEIGHBORHOOD CONNECTORS DESIGN STANDARDS

Develop standards for Neighborhood Connectors that streamlines the planning, public outreach and design process for expanding the network. The standards should consider context sensitive design while establishing consistent treatments along current and future Neighborhoods Connectors in the network.

COMMUNITY COORDINATION OF NEIGHBORHOOD CONNECTORS

Work with local residents and community stakeholders when planning and designing the Neighborhood Connector network, recognizing that these facilities by nature travel through residential neighborhoods. This coordination should also include neighborhood initiatives around beautification, community building and identity, including but not limited to tree plantings and neighborhood markers.

ADOPT A CIRCLE/ROUNDABOUT PROGRAM

The planted area of the mini-traffic circles and roundabouts are opportunities for community groups and residents to personalize their neighborhood. Following established design standards, develop an Adopt a Mini-Traffic Circle/Roundabout program with roles, responsibilities and criteria.

The Indianapolis Cultural Trail is an 8-mile world class urban bike and pedestrian path that connects six cultural neighborhoods in downtown Indianapolis, Indiana. The beautifully maintained and vibrant community asset took 18 years to design and construct at a cost of over $60 million in public and private funding.

The eight miles of the bike and pedestrian path was created by converting parking and/or a car travel lanes into trail space and features public art installations, lush landscaping and bioswales to absorb stormwater runoff, all while connecting people and places in downtown Indianapolis.

INDIANAPOLIS CULTURAL TRAIL
A Legacy of Gene & Marilyn Glick

ABOVE
The Indianapolis Cultural Trail creates the feeling of an off-street trail in the middle of a Midwestern downtown.
PHOTO COURTESY OF INDIANAPOLIS CULTURAL TRAIL

PROJECTS

A BURNETT STREET NEIGHBORHOOD CONNECTOR

Design and construct new 2-mile long neighborhood connector, generally traversing Burnett Street the Pacific Electric Greenbelt and the western boundary of Long Beach.

B HILL STREET NEIGHBORHOOD CONNECTOR

Design and construct new 3-mile long neighborhood connector, generally traversing Hill Street the Pacific Electric Greenbelt and the western boundary of Long Beach.

C 20TH STREET NEIGHBORHOOD CONNECTOR

Design and construct new 3-mile long neighborhood connector, generally traversing 20th Street the Pacific Electric Greenbelt and the western boundary of Long Beach.

D 15TH STREET NEIGHBORHOOD CONNECTOR

Design and construct new neighborhood connector, generally traversing 15th Street Corridor.

E DELTA AVENUE NEIGHBORHOOD CONNECTOR

Design and construct new neighborhood connector generally traversing Delta Avenue between Anaheim Street and Wardlow Road.

F MARTIN LUTHER KING JR AVENUE NEIGHBORHOOD CONNECTOR

Design and construct the five-mile long Martin Luther King Jr/California Avenue neighborhood connector, providing a North – South bike route between Gumbiner Park on 7th Street and Del Amo Boulevard.

G DAISY AVENUE NEIGHBORHOOD CONNECTOR

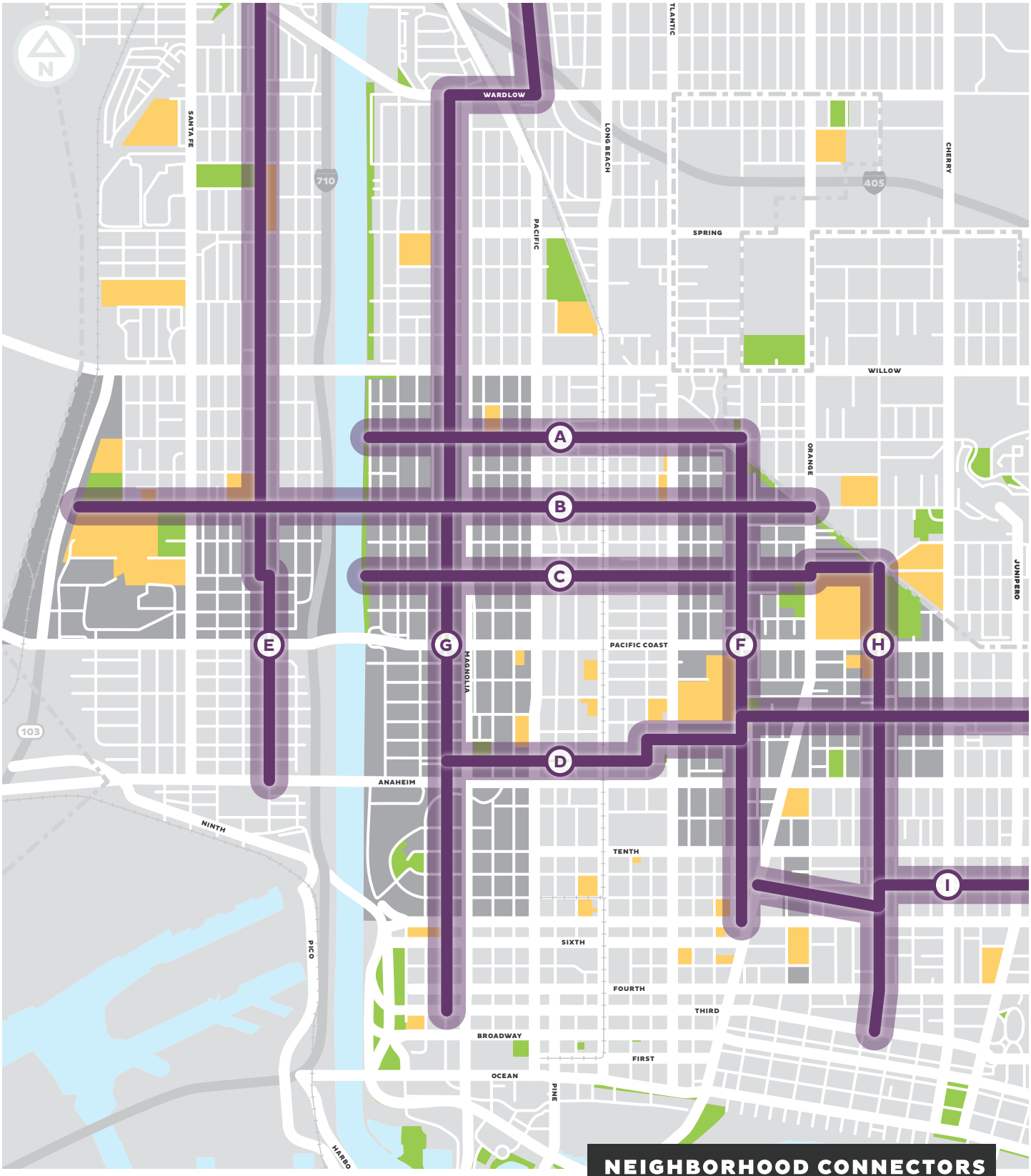
Construct the nine-mile long Daisy / Myrtle neighborhood connector, providing a North – South bike route extending from the new Courthouse on 3rd Street to the northern boundary of Long Beach.

H WALNUT AVENUE NEIGHBORHOOD CONNECTOR

Design and construct new neighborhood connector, generally traversing Walnut Avenue between 3rd Street and 52nd Street.

I HELLMAN/8TH STREET NEIGHBORHOOD CONNECTOR

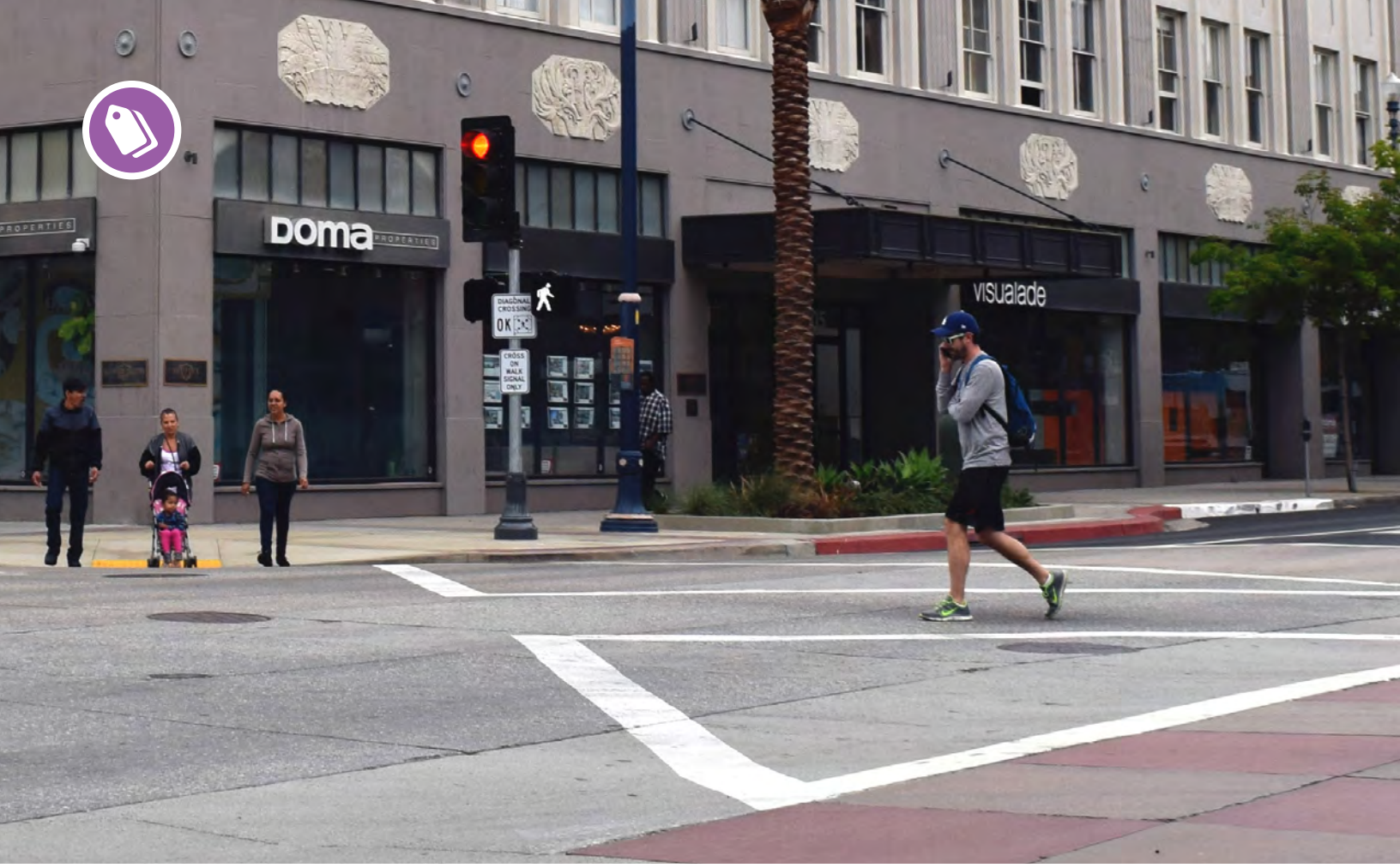
Design and construct new 2-mile long neighborhood connector, generally traversing 8th Street between the Pacific Electric Greenbelt and Walnut Avenue and Hellman Street between Walnut Avenue and Alamitos Avenue.



NEIGHBORHOOD CONNECTORS

10FT 20

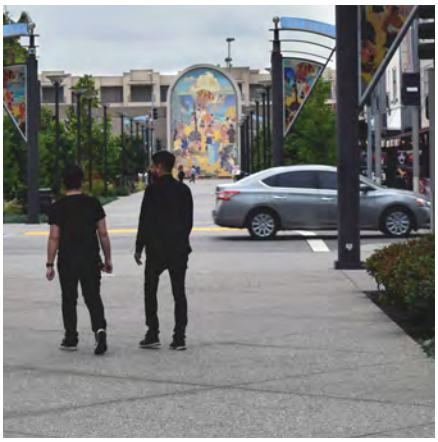
BIKE BOULEVARD



Pedestrian Priority Areas

Pedestrian safety has always been and will continue to be the City's highest priority in street design. For those pedestrian priority areas already deemed walkable, the City will continue to maintain and improve the street design with additional enhancements. At the same time, the City plans to improve other areas not yet established as walkable to enhance the pedestrian experience and encourage more walking. Over time, these areas will become more walkable districts.

These Pedestrian Priority Areas are typically located in commercial districts and multi-use neighborhoods, in areas with land-uses that support greater density of people. Enhancements related to pedestrian comfort should be built on a foundation of safe, accessible infrastructure. Sidewalks should be wide enough and free from obstructions to safely accommodate passing pedestrian traffic, including people in wheelchairs or guiding young children. Controlled, marked crosswalks should be located with enough frequency to allow pedestrians to safely cross busy streets as the desire requires. Vehicle traffic speeds and driver behavior need to be respectful



TOP
Pine Avenue's recently installed diagonal crosswalks improve the pedestrian experience.
PHOTO COURTESY OF CITY FABRICK

ABOVE INSET
The Promenade is a six block long pedestrian thoroughfare in the heart of Downtown Long Beach
PHOTO COURTESY OF CITY FABRICK

of pedestrians as they are more exposed to injury in accidents; likewise, pedestrians should always be aware of their environment.

To improve pedestrian safety and comfort by providing safe and comfortable sidewalks and ample opportunities to safely cross the street, enhancing the pedestrian realm, pedestrian priority areas, both existing and emerging, the City plans to add significant pedestrian amenities, including street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters. Building design and land uses that reinforce an active pedestrian realm will also be emphasized in these areas, as directed by the Land Use

POLICES & PROGRAMS

TRAFFIC CALMING

MOP **M-10** Design safer streets by using traffic calming techniques [such as roundabouts and sidewalk extensions] and by providing more frequent and innovative crosswalks, pedestrian signals and clearly marked bicycle lanes.

MAJOR EMPLOYMENT CENTERS MULTI-MODAL IMPROVEMENTS

MOP **P 1-13** Increase multimodal access to major employers and educational institutions, including Long Beach Community College.

CONSISTENT SPEED LIMIT FOR PEDESTRIAN PRIORITY AREAS

The speed limit of the designated pedestrian priority areas vary from 25 to 40 mph, effecting pedestrian safety, accessibility and comfort significantly. The speed limit should be set no more than 25 mph.

PEDESTRIAN ORIENTED BUSINESS DISTRICT PARKING STANDARDS

Create development standards that encourage property owners, businesses and developers in Pedestrian Priority Areas to reconfigure private parking lots to minimize the visual and physical impacts. They would focus on parking reductions, shared parking, parking alternatives and parking lot screening.

PROJECTS

A SANTA FE AVENUE STREETSCAPE ENHANCEMENTS [$5M]

Design and implement streetscape enhancements on Santa Fe Avenue from Pacific Coast Highway to Wardlow Road.

B ANAHEIM STREET CORRIDOR IMPROVEMENTS [$5M]

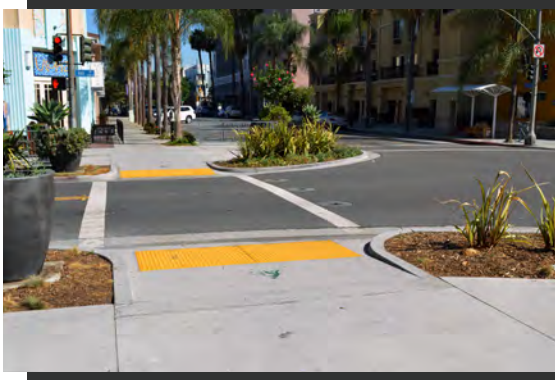
This project includes signal upgrades, synchronization communications for all modes, streetscape and pedestrian amenities.

ST PROJECT HIGHLIGHT

First + Linden
East Village

In 2009, Long Beach implemented a series of urban design interventions at the corner of First and Linden Avenue in Downtown's East Village Arts District. The block was given a road diet, while the intersection received corner curb extensions and added landscaping. The pedestrian realm has been expanded by over 3,000 square feet, providing adequate space for outdoor restaurant dining, street furniture like benches and bike racks and drought tolerant native landscaping with large planters.

Most importantly, the new human-scaled design reduces traffic speed and makes for a safer and more pleasant pedestrian experience.



TOP
Today, these bulb-outs are fully integrated into the street infrastructure.
PHOTO COURTESY OF STUDIO ONE ELEVEN

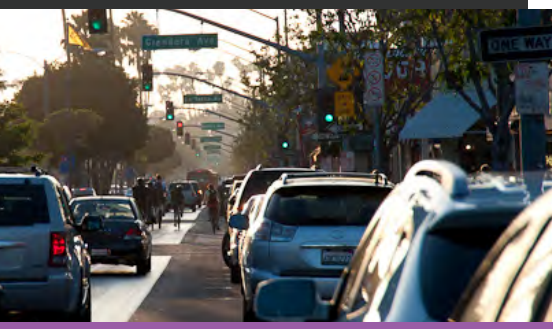
ABOVE
The project reduced the curb-to-curb distance for pedestrians crossing the street by up to 60%.
PHOTO COURTESY OF STUDIO ONE ELEVEN

ST PROJECT HIGHLIGHT

Second Street
Belmont Shore

Belmont Shore's Second Street has always been a pedestrian oriented commercial district since its inception nearly 100 years ago. The consistent sidewalks, exceptionally short blocks and dense residential neighborhoods flanking either side continues to fuel the strolling environment. In the nineties, the local Business Improvement District enhanced the infrastructure along the street, adding curb extensions, vehicle traffic controls and marked crosswalks at most intersections. The improvements made the major thoroughfare more permeable for walking across while calming vehicular traffic speed for a safer pedestrian environment.

1970s



TODAY

1970s
By the mid 1970s, Belmont Shore's main commercial drag became a car-centric thoroughfare that lacked adequate pedestrian amenities like crosswalks.
PHOTO COURTESY OF JUSTIN RUDD

TODAY
The stretch of Second Street in Belmont shore now has over twice as many signalized intersections.
PHOTO COURTESY OF JUSTIN RUDD

C ALAMITOS AVENUE CORRIDOR IMPROVEMENTS [$3M+]

This project may include eliminating parking on Alamitos Avenue from Ocean Boulevard to 17th 7th Street, and reconfigure street with bike lane and streetscape amenities, bus improvements, left-turn pockets and complete utility undergrounding northward.

D WILLOW STREET STREETSCAPE ENHANCEMENTS

This project enhances pedestrian amenities along Willow Street between Signal Hill and the west City border, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters.

E PACIFIC COAST HIGHWAY STREETSCAPE ENHANCEMENTS

This project enhances pedestrian amenities along Pacific Coast Highway between Signal Hill and Orange Avenue, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters.

F PACIFIC AVENUE STREETSCAPE ENHANCEMENTS

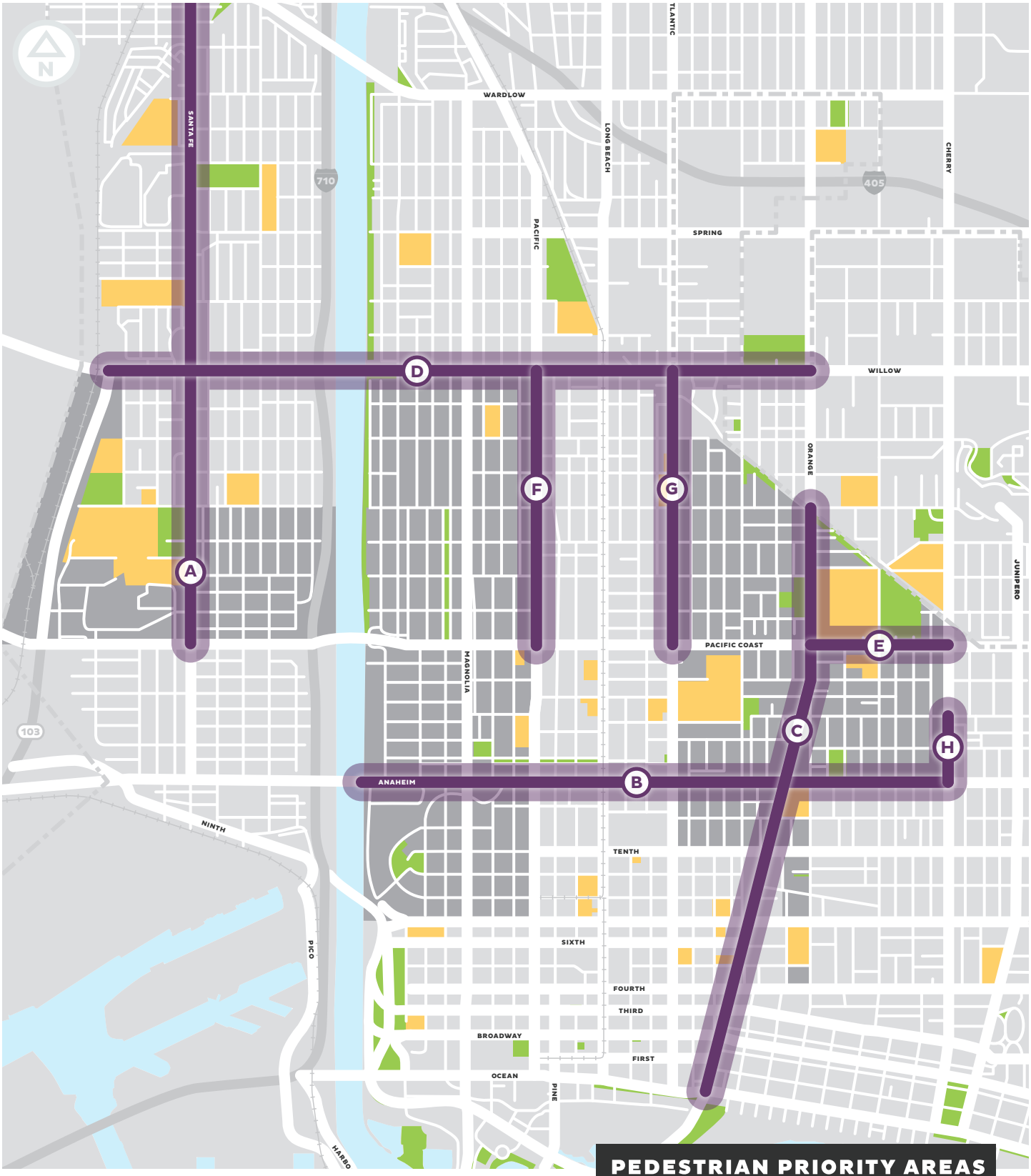
This project enhances pedestrian amenities along Pacific Avenue between Pacific Coast Highway and Willow Street, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters.

G ATLANTIC AVENUE STREETSCAPE ENHANCEMENTS

This project enhances pedestrian amenities along Atlantic Avenue between Pacific Coast Highway and Willow Street, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters.

H CHERRY AVENUE STREETSCAPE ENHANCEMENTS

This project enhances pedestrian amenities along Cherry Avenue between Anaheim Street and 15th Street, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, bollards, outdoor dining, enhanced crosswalks and landscaped planters.



PEDESTRIAN PRIORITY AREAS

10FT 20

PEDESTRIAN PRIORITY AREA

Walk Long Beach

Walking for the sake of walking is often lost on transportation planners as the focus tends to focus on connecting pedestrians between living, working and playing. Instead sometimes it is more about the journey and less about the destination. Long Beach pedestrians are fortunate to have great walking experiences along the over a dozen miles of waterfront canals, marinas and beaches.

Other recreational walking experiences exist in East Long Beach through the expansive regional parks El Dorado, Recreation and Heartwell Parks. Long Beach State University and the Liberal Arts Campus of Long Beach City College offer beautifully landscaped and well-designed architecture as back drops for pleasurable strolls. The trails through reclaimed wastelands of Signal Hill and the Dominguez Gap wetlands also provide environments for walking in relative peace.

Residents in the CX3 neighborhoods often cited such parts of the city as where they enjoy unencumbered walking, where they can walk just to...walk. While commercial districts like Second Street in Belmont Shore or the winding streets of Carroll Park are some of the most pedestrian friendly environments in Long Beach, residents have expressed interest to have paths that are uninterrupted by vehicle traffic for long stretches. These areas are safe and enjoyable enough to let children walk free, to wear headphones or to pick up speed for a jog.

ABOVE
A local explores Downtown's East Village Arts District with one of over 25 walking loop cards.
PHOTO COURTESY OF LISA BETH ANDERSON

POLICES & PROGRAMS

RAILS TO TRAILS

MOP P 2-20 Preserve the ability and opportunity to transform any abandoned and underused railroad right of-way for the movement of other modes.

RAILS TO/WITH TRAILS PROGRAM

MOP M-35 Establish Rails to Trails Program to repurpose, share, or reconfigure surplus rights-of-way to greenbelts with bicycles and pedestrian facilities.

TRANSITION TRANSMISSION CORRIDORS

MOP M-34 Convert electricity transmission corridors to parks, as resources and leases become available.

WALKING LOOPS

MOP M-5 Create walking loops with stepping-stone mile markers and other supportive features to support active living.

PARK PATH NETWORKS

Study walking path networks in and around public parks and work with users to determine any necessary improvements to create more complete walking loops with the existing park area. Consider way-finding signage, lighting, street furniture and fitness equipment to augment these walking paths.

The Bixby Strollers have walked **1383 miles** [& counting] since conception

=

WALKING FROM LONG BEACH TO

WICHITA, KANSAS

=

PARTAKING IN

MARATHONS

SCHOOL RACETRACKS SHARED-USE

Negotiate with Long Beach Unified School District and other local learning institutions to provide access for residents to running tracks on school campuses. These can be done through arrangements with community walking/running clubs or through public access during set times/days.

WALK LONG BEACH

Foster collaboration between community groups, business associations and relevant city agencies to promote walking as a form of physical activity and community development. Pursue opportunities to support formation of neighborhood walking groups and citywide walking events.

THE BIXBY STROLLERS

Launched in 2008, the Bixby Strollers bring together local business owners, residents, friends and family for a weekly neighborhood walking club. The Strollers explore every nook and cranny of the greater Bixby Knolls area. From Forrest Lawn Cemetery to the Metro Station. From California Heights to Rancho Los Cerritos.

TOP
A large group of the Strollers walking along the Dominguez Gap trail in North Long Beach.
PHOTO COURTESY OF THE BIXBY KNOLLS STROLLERS

ABOVE
The walking club that meets every Saturday morning at 7:30am to stroll through the neighborhood.
PHOTO COURTESY OF THE BIXBY KNOLLS STROLLERS

The Walking Loop Card set has grown to over 25, covering all parts of the city.
PHOTO COURTESY OF CITY FABRICK

PROJECTS

A PACIFIC ELECTRIC GREENBELT GAP CLOSURE

This project completes the 1-mile long bike and pedestrian path along the Pacific Electric Greenbelt between Pacific Coast Highway and Martin Luther King Jr Avenue. The project includes acquiring and improving 1.55 acre parcel along the former rail right-of-way between Lemon Avenue and Orange Avenue.

B 14TH STREET PARK WALKING PATH

This project creates a half mile dedicated walking trail within the Daisy Avenue Greenbelt between Pacific Coast Highway and Hill Street. The streets intersecting Daisy Avenue would be narrowed through the greenbelt area while the walking path would travel through the remaining roadway area.

C CESAR CHAVEZ PARK + DRAKE PARK GREENBELT INTEGRATION

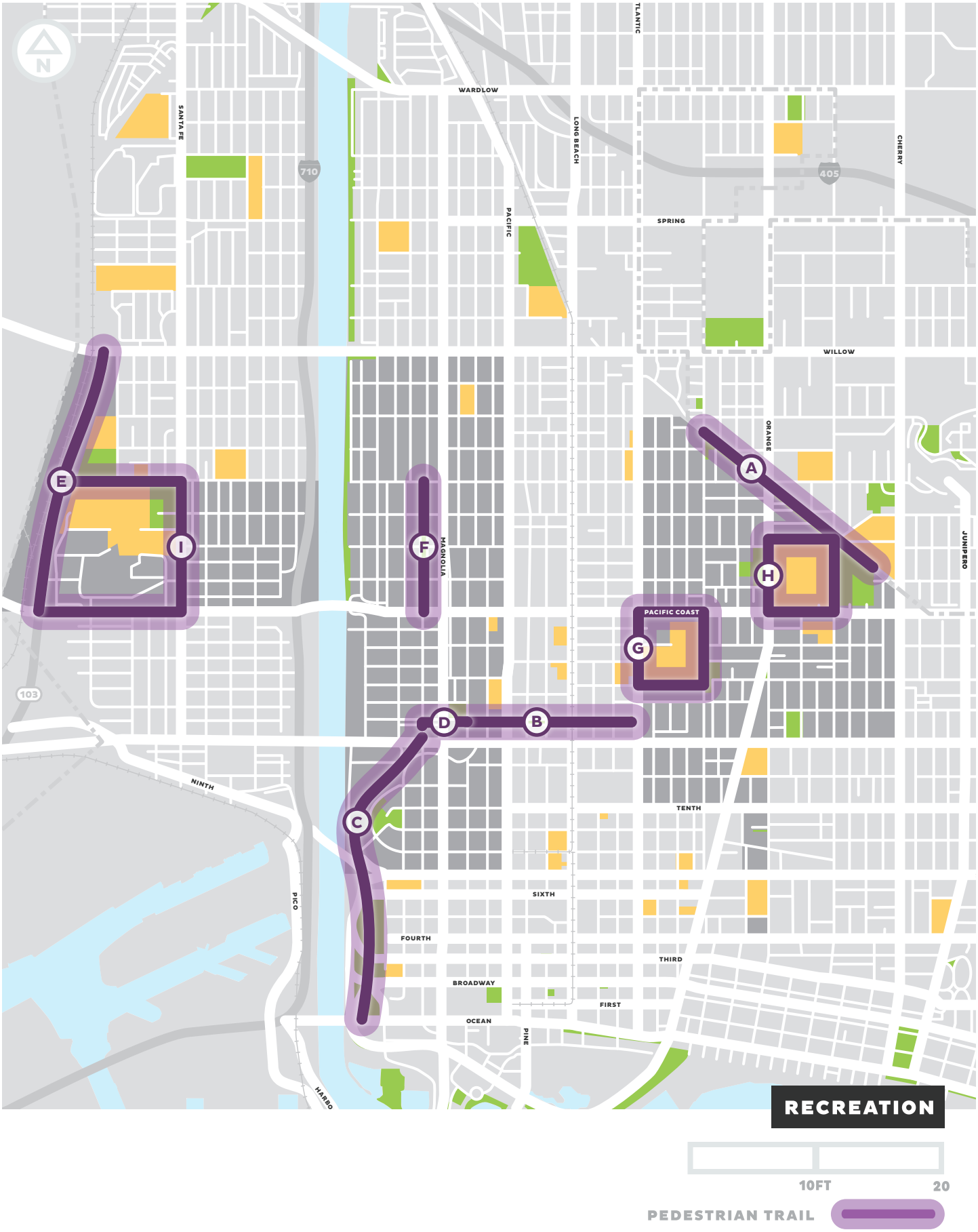
This project integrates the program, landscape design and circulation network of the existing and proposed Cesar Chavez Park expansion and the new Drake Park Greenbelt. The pedestrian and bicycle path network would extend from Ocean Boulevard to Anaheim Street between the residential neighborhoods and the east bank of the Los Angeles River.

I've noticed that Long Beach is getting better in terms of walking. I particularly like what's going on in Downtown, like the diagonal crosswalks. Can we have those in this neighborhood?

CABRILLO RESIDENT

D 14TH STREET PARK + DRAKE PARK GAP CLOSURE

This project completes the 2-mile long pedestrian path along the 14th Street Park, Cesar Chavez and Drake Park Greenbelt. The project includes acquiring and improving 0.50 acre parcel along the 14th Street and working with other property owners on Magnolia Avenue and Anaheim Street.


N
WARDLOW
SANTA FE
LONG BEACH
TLANTIC
CHERRY
710
405
PACIFIC
SPRING
WILLOW
ORANGE
JUNIPERO
MAGNOLIA
PACIFIC COAST
103
NINTH
TENTH
SIXTH
FOURTH
THIRD
BROADWAY
FIRST
OCEAN
PINE
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RECREATION
10FT
20
PEDESTRIAN TRAIL

E TERMINAL ISLAND FREEWAY GREENBELT

This project creates public open space as well as dedicated pedestrian and bicycle facilities between Pacific Coast Highway and Willow Street along the Terminal Island Freeway corridor utilizing surplus public right-of-way created through the freeway's transformation to a local road.

F DAISY AVENUE WALKING PATH

This project creates a half mile dedicated walking trail within the Daisy Avenue Greenbelt between Pacific Coast Highway and Hill Street. The streets intersecting Daisy Avenue would be narrowed through the greenbelt area while the walking path would travel through the remaining roadway area.

G POLY HIGH SCHOOL WALKING LOOP

This project establishes a mile long walking loop around the Poly High School campus using adjacent sidewalks on Atlantic Avenue, Pacific Coast Highway, Martin Luther King Jr. Avenue and 15 Street. The project includes driveway improvements, curb extensions and sidewalk widening utilizing adjacent setbacks.

H LONG BEACH CITY COLLEGE WALKING LOOP

This project establishes a mile long walking loop around the Long Beach City College Pacific Campus using adjacent sidewalks on Orange Avenue, Pacific Coast Highway, Walnut Avenue and 20th Street. The project includes driveway improvements, curb extensions and sidewalk widening utilizing adjacent setbacks and surplus roadway.

I CENTURY VILLAGES AT CABRILLO WALKING LOOP

This project establishes a two mile long walking loop around the Century Villages of Cabrillo Campus using adjacent sidewalks on W. Hill Street, Santa Fe Avenue, Pacific Coast Highway and the potential Green TI Freeway. In the interim period before the Green TI develops, San Gabriel Avenue can also be considered. The project includes driveway improvements, curb extensions and sidewalk widening utilizing adjacent setbacks and surplus roadway.

RIGHT
A pop-up walking workshop is set up in Central Long Beach for the international Park[ing] Day event.
PHOTO COURTESY OF CITY FABRICK

ABOVE
A group of Wrigley Residents are guided on a Walk Long Beach tour and audit of their neighborhood.
PHOTO COURTESY OF CITY FABRICK

Street parklet
Center median
NEIGHBORHOOD WALKABILITY NOTES

Street Character Change

Certain streets in Long Beach with excess vehicle capacity may be better suited for street redesign to better accommodate the needs of pedestrians, bicyclists and transit riders. By reducing the width or number of travel and parking lanes, selected streets can be reconfigured to accommodate a variety of improvements, such as wider sidewalks with trees, bike paths or lanes, dedicated transit lanes and landscaped medians or curb extensions that make the streets more attractive and usable for pedestrians.

Road Diets use a street's excess traffic capacity and surplus roadway to serve other users. In Long Beach, specifically the CX3 neighborhoods, the surplus right-of-way can dramatically enhance livability by creating new open space, dedicate bike facilities and enhanced pedestrian environments. Road diets can be applied with little more than paint during resurfacing projects but could also include more widespread changes that reimagines the entire right-of-way.

TOP
Protected bike lanes in Downtown Long Beach change the character of 3rd St and Broadway.
PHOTO COURTESY OF ALLAN CRAWFORD

ABOVE INSET
A city traffic engineer explains new bike boulevard sign options at a community meeting.
PHOTO COURTESY OF ALLAN CRAWFORD

POLICES & PROGRAMS

ANALYZE SURPLUS ROADWAY

MOP P 2-12 Preserve the ability and opportunity to transform any abandoned and underused railroad right of-way for the movement of other modes.

ANALYZE SURPLUS CAPACITY

MOP M-33 Continue to implement pedestrian streetscape designs, especially on streets with projected excess vehicle capacity, to reduce either the number of travel lanes or the roadway width, and use the available public rights-of-way to provide wider sidewalks, bicycle lanes, transit amenities, or landscaping.

PROJECTS

A "DE-FREEWAY" TERMINAL ISLAND FREEWAY [$20M]

The Terminal Island Freeway Transition Plan would define the community's vision for a future for the City-owned right-of-way that no longer carries freight trucks, but instead becomes a neighborhood-scale multimodal transportation corridor with contributing public amenities. As part of the plan, the designated truck route would end at the Pacific Coast Highway interchange. Goods movement currently using the last mile of the Terminal Island Freeway would be shifted to the Alameda Corridor [State Route 47] less than a mile away.

B SANTA FE AVENUE ROAD DIET

Using surplus roadway, Santa Fe Avenue would be reconfigured to add class II bicycle facilities [bike lanes] while maintaining current capacity.

C PACIFIC AVENUE ROAD DIET

The class II bicycle facilities [bike lanes] on Pacific Avenue would be extended south from Willow Street to Pacific Coast Highway utilizing surplus roadway.

D ALAMITOS AVENUE ROAD DIET

Utilizing surplus capacity, Alamitos Avenue south of 7th Street would be reconfigured from a four lane [2 northbound – 2 southbound] road to three lanes [1 northbound – 1 southbound – 1 left turn] adding class II bicycle facilities [bike lanes].

E WILLOW STREET ROAD DIET

Using surplus roadway, Willow Street west of Atlantic Avenue would be reconfigured to add class II bicycle facilities [bike lanes] while maintaining current capacity.

ST PROJECT HIGHLIGHT

8th Avenue
Manhattan

Since 2007, the New York City Department of Transportation has installed over 30 miles of protected bicycle lanes as a means of improving air quality, reducing energy costs, reducing congestion on existing roadways and helping to provide for lower overall transportation costs. The roughly four-block-long protected lane on Eight Avenue, running from Bank St. to 14th St. and incorporating a "cycle track" design that physically separates cyclists from motor vehicles. Crashes with injuries on Eight Avenue have been reduced by 17% while travel times on 8th Avenue improved by an average of 14%.

BEFORE

AFTER

ABOVE
While Eight Avenue already had marked bike lanes, the fast-moving traffic deterred some riders.
PHOTO COURTESY OF NYC DOT

OPPOSITE, TOP
The new protected bike lanes reduce a lane of traffic while the landscaped buffer provides a tree canopy for bicyclists and pedestrians.
PHOTO COURTESY OF NYC DOT

ST PROJECT HIGHLIGHT

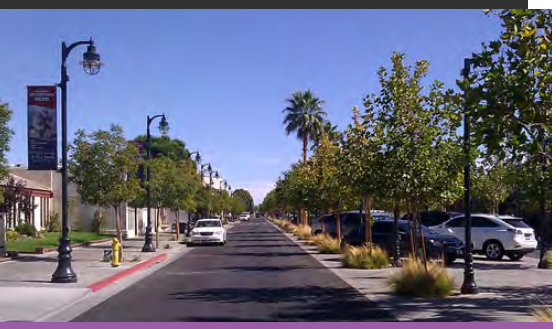
Lancaster Boulevard

Lancaster, CA

Lancaster, a sprawling suburban community northeast of Los Angeles, completely overhauled their main Commercial drag in 2009, turning the declining 5-lane thoroughfare into a pedestrian oasis. The median was turned into a "ramblas" style promenade that evokes a distinctive sense of place, providing a high quality urban setting for shopping and a variety of community activities and special events.

The project has been recognized by the U.S. Environmental Protection Agency with their 2012 Overall Smart Growth Achievement Award.

BEFORE



AFTER

BEFORE
Lancaster's namesake Main street lost much of its traditional downtown character over a century of sprawling suburban development.
PHOTO COURTESY OF MOULE & POLYZOIDES

AFTER
The boulevard now has a double row of trees, occupied by angled parking most of the time and periodically by a public market and other special events.
PHOTO COURTESY OF MOULE & POLYZOIDES

F PACIFIC COAST HIGHWAY ROAD DIET

Utilizing surplus capacity, Pacific Coast Highway west of the traffic circle would reconfigure the third travel lane into class II bicycle facilities [bike lanes] and parking lane.

G WEST HILL STREET ROAD DIET

Portions of Hill Street west of Golden Avenue would be reconfigured to add class II bicycle facilities [bike lanes].

H DAISY AVENUE ROAD DIET

Portions of Daisy Avenue between Pacific Coast Highway and Willow Street would be reconfigured to add class II bicycle facilities [bike lanes] and expand the greenbelt.

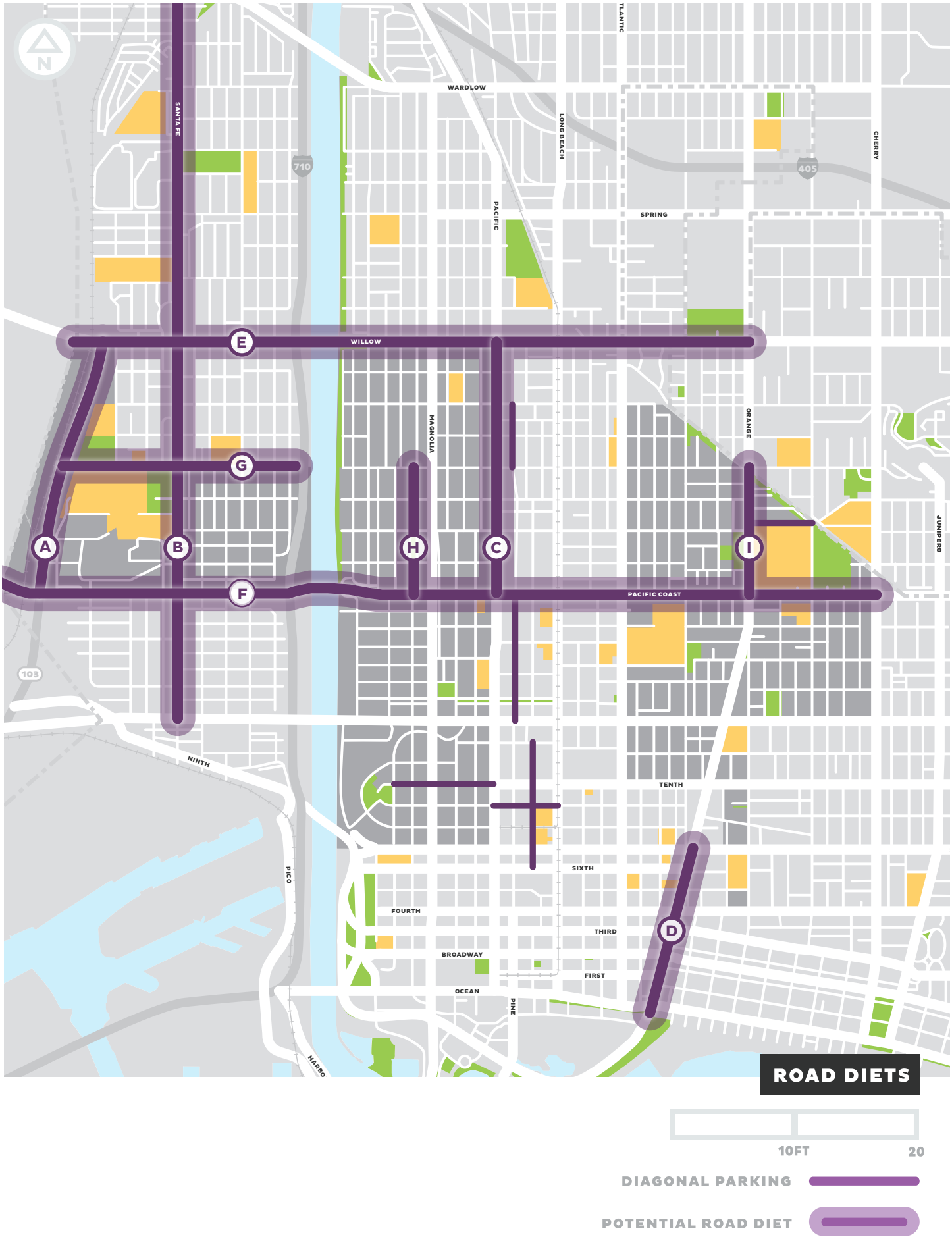
I ORANGE AVENUE ROAD DIET

Orange Avenue between Pacific Coast Highway and Hill Street would be reconfigured to add bicycle facilities, expanded sidewalks and other public amenities.

J DIAGONAL PARKING

Local streets in Parking Impacted Areas with surplus roadway would be reconfigured on-street parallel parking to diagonal. These include the following:

- 9th Street, Pacific Avenue to Long Beach Boulevard
- 10th Street, Pacific Avenue to Maine Avenue
- Locust Avenue, 6th Street to 12th Street
- Pine Avenue, Hill Street to Burnett Street
- Pine Avenue, Anaheim Street to Pacific Coast Highway
- 20th Street, Orange Avenue to Walnut Avenue


N
SANTA FE
WARDLOW
LONG BEACH
ATLANTIC
CHERRY
710
405
PACIFIC
SPRING
E
WILLOW
MAGNOLIA
ORANGE
G
A
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I
JUNIPERO
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PACIFIC COAST
103
NINTH
TENTH
PICO
SIXTH
FOURTH
THIRD
D
BROADWAY
FIRST
OCEAN
PINE
HARBO
ROAD DIETS
10FT
20
DIAGONAL PARKING
POTENTIAL ROAD DIET

Pavement to Places

Streets and other public rights-of-way make up over 25% of the City's land area. Long Beach has its share of excessively wide streets that contain large zones of wasted space, especially at intersections with lower traffic volume. The "Pavement to Plazas" concept seeks to temporarily or permanently reclaim these unused swaths of roadway and turn them into small public plazas. Reclaiming this excess space is a fairly simple process: paint or treat the asphalt, place protective barriers along the periphery, install moveable planters, tables and chairs – and you will have an attractive, safe gathering space

Reconfiguring streets to maximize public benefits beyond expedient movement of automobiles can have substantial advantages including improved safety, accessibility and livability while creating more space for people to recreate and socialize. Removing pavement can expand area for planting while increasing permeability of the public right-of-way which can have substantial environmental benefits including more sustainable stormwater management as well as reduced urban heat island. While managing current and future traffic demands on the city's street network repurposing portions of the right-of-way into public open space can help fill gaps in Long Beach's park system.

There are variety of approaches to reimagining streets for people from the temporary Open Streets events that shuts down a corridor for mile long block parties, to painted plaza programs that repurpose odd portions of streets for park spaces to complete transformations of streets using pavement, barriers and landscape. In many cases there are a series of experiments to prove a concept having the first leads to the second then to the third. These pilot projects can test the benefits

to the community versus potential impacts to the transportation network, all while allowing for course corrections before permanent changes are made.

POLICES & PROGRAMS

SHARED STREETS

MOP P 1-4 Allow for flexible use of the public right-of-way to accommodate all users of the street system, while maintaining safety standards.

TEMPORARY STREET CLOSURES

MOP P 2-10 Mobility of People Policy 2-10: Support the temporary closure of streets for community and commercial activity that encourages residents to see their streets as public spaces and promote biking and walking in the City.

PAVEMENT TO PLAZA

MOP IM 36 Establish a Pavement to Plazas Program to realign irregular intersections and repurpose surplus public rights-of-way for public space.

PROJECTS

A 14TH STREET SHARED STREET

This project closes the roadway of Cedar Avenue, Locust Avenue and Palmer Court through the 14th Street Park. The remaining roadway is narrowed and resurfaced with decorative, raised pavement to calm traffic flow and create continuity with the greenbelt.

B WILLMORE CITY COURTS & WAYS [$2M]

Design and implement pedestrian enhancements and sustainable practice for Willmore City Courts and Ways to improve pedestrian safety and connectivity.

San Francisco paved over parking lots to put up a pedestrian paradise.

Launched in 2010, the Pavement to Parks Program is a collaborative effort between the San Francisco Planning Department, the Department of Public Works and the Municipal Transportation Agency. The program seeks to test the possibilities of these underused areas of land by quickly and inexpensively converting them into new pedestrian spaces.

PAVEMENT TO PARKS

PERSIA TRIANGLE

COLUMBUS ST PARKLET

PERSIA TRIANGLE
This project transform a centrally-located site in the Excelsior neighborhood from a hazardous and unattractive collection of crossroads into a beautiful hub of community engagement and civic vitality.
PHOTO COURTESY OF SAN FRANCISCO PLANNING DEPARTMENT

COLUMBUS PARKLET
Both local residents and a tourist enjoy the parklet outside of Reveille Coffee on Columbus Ave.
PHOTO COURTESY OF SAN FRANCISCO PLANNING DEPARTMENT

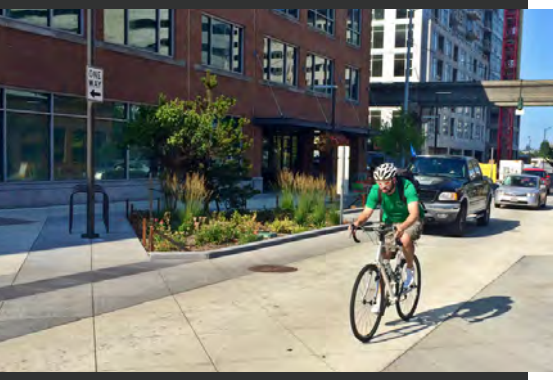
ST **PROJECT HIGHLIGHT**

Bell Street Park

Seattle, Washington

Bell Street Park is a hybrid of a street, sidewalk and park. The $3 million project transformed four blocks of Seattle's Bell Street into a new street park that blurs the boundaries between pedestrian and vehicular areas to get pedestrians, cyclists and automobiles to share the space . One traffic lane and one parking lane was reclaimed for pedestrian use.

This is the first phase of a long-range vision for a green corridor connecting two neighborhoods in Chicago.



ABOVE , TOP
The corridor was enhanced with planters, perches, mixed car-and-ped zones, zebra crosswalks and a dog park.
PHOTO COURTESY OF SVR DESIGN

ABOVE, BOTTOM
The woonerf style street means cars, bikes and pestrians share the same space.
PHOTO COURTESY OF SVR DESIGN

C DAISY AVENUE SHARED STREET

This project narrows the roadway of 18th Street, 19th Street and 20th Street as they cross through the Daisy Avenue greenbelt. The remaining roadway is resurfaced with decorative, raised pavement to calm traffic flow and create continuity with the greenbelt.

D ROSA PARKS PLAZA

This project expands Rosa Parks Park by narrowing Alamitos Avenue and Orange Avenue between 15th Street and 16th Street. It also includes traffic management and calming as well as decorative, raised pavement to the remaining roadway of Orange Avenue.

E SMITH ELEMENTARY SCHOOL PLAY STREET

This project transforms Maine Avenue between 6th Street and 7th Street into a shared street that enhances connectivity between the east and west portions of the Edison Elementary School campus. Security and traffic management devices would be designed to control circulation on and through the campus based on school operations. Planning and design should be coordinated with Measure K improvements to the campus.

F EDISON ELEMENTARY SCHOOL PLAY STREET

This project transforms 23rd Street between Linden Avenue and Atlantic Avenue into a shared street to enhance connections between the north and south portions of the Smith Elementary School campus. Security and traffic management devices would be designed to control circulation on and through the campus based on school operations. Planning and design should be coordinated with Measure K improvements to the campus.

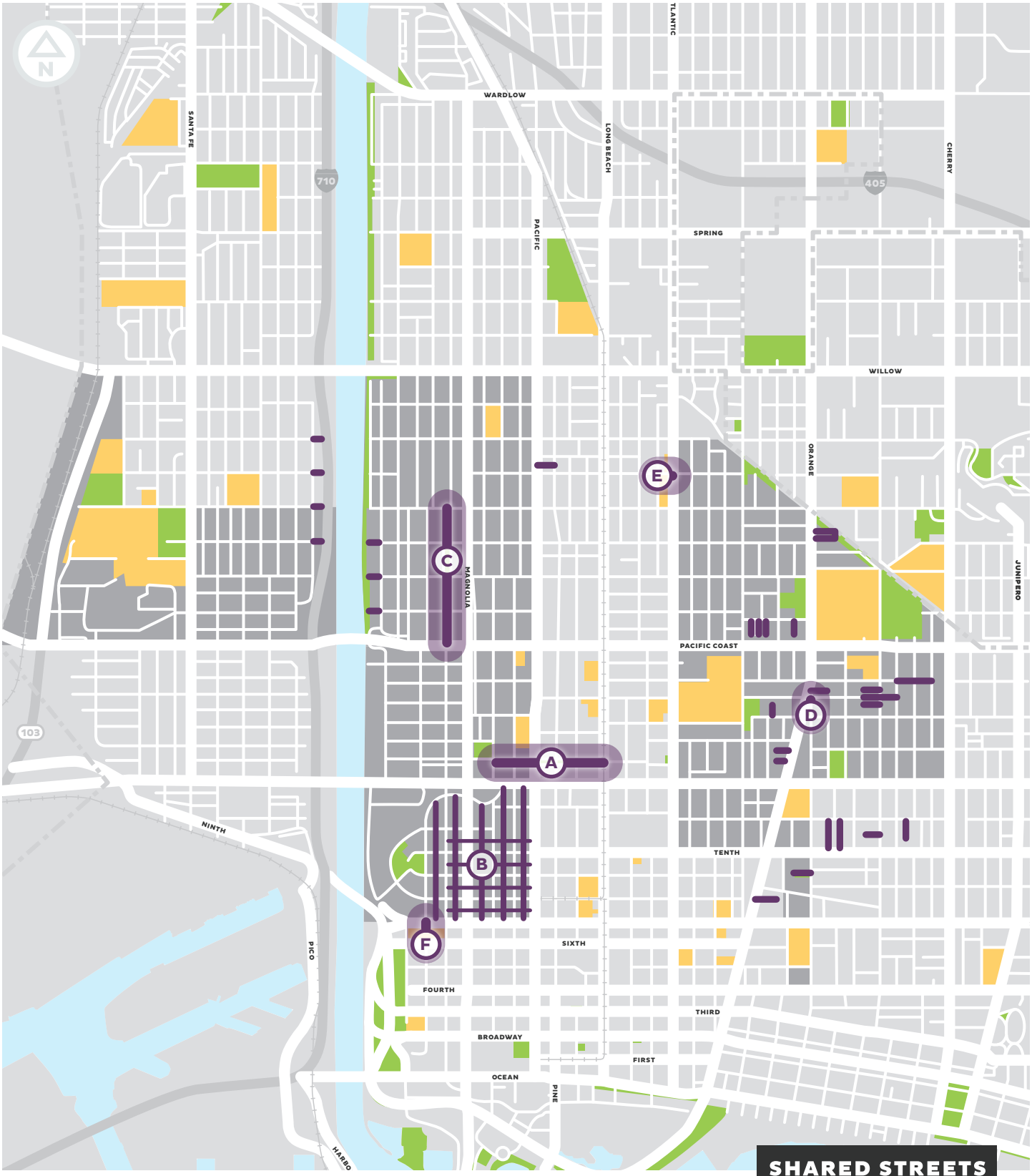
G PLACE & LANE WOONERFS

These projects are pedestrian, landscape and sustainable infrastructure enhancements that blend sidewalks and roadway to improve pedestrian safety and connectivity while increasing livability for residents living on narrow streets.

Gunther Way
Minerva
9th Place
Brenner
Barcelona
Sunrise

Doidge
Alhambra
Arcadia
Walnut Way
Bailey
6th Way

Lindley-Lewis
Corinne-Cerritos/19th
Leigh, Orchard
17th Place
15th/15th



SHARED STREETS

10FT 20

COURTS + WAYS

PLACES + LANES

SHARED STREETS

COMMUNITY VOICE

CX3 RESIDENT + STAKEHOLDER FEEDBACK

ECONOMICS 5%

ACCESSIBILITY 6%

SOCIAL 6%

RECREATION 9%

LIVABILITY 10%

ENVIRONMENT 13%

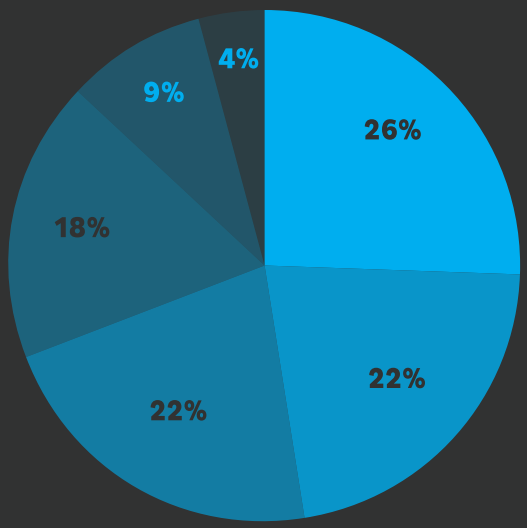
BEAUTY 16%

SAFETY 30%

RESIDENTS' PRIORITIES

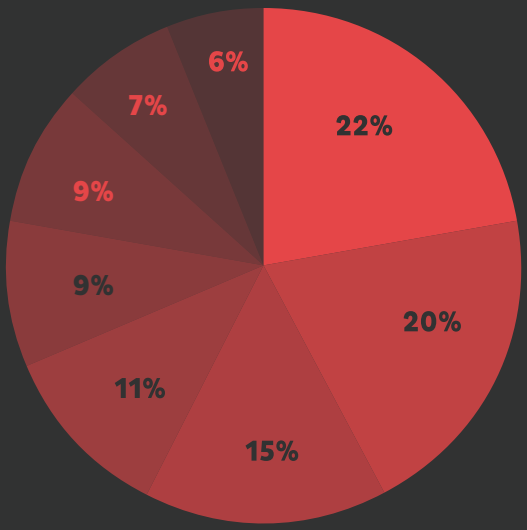
WHAT DO YOU LIKE ABOUT YOUR WALK IN LONG BEACH?

CX3 Neighborhood residents and stakeholders were asked where they are currently walking and what they like about those walks. Below is a breakdown for what they enjoy about walking in their neighborhood.



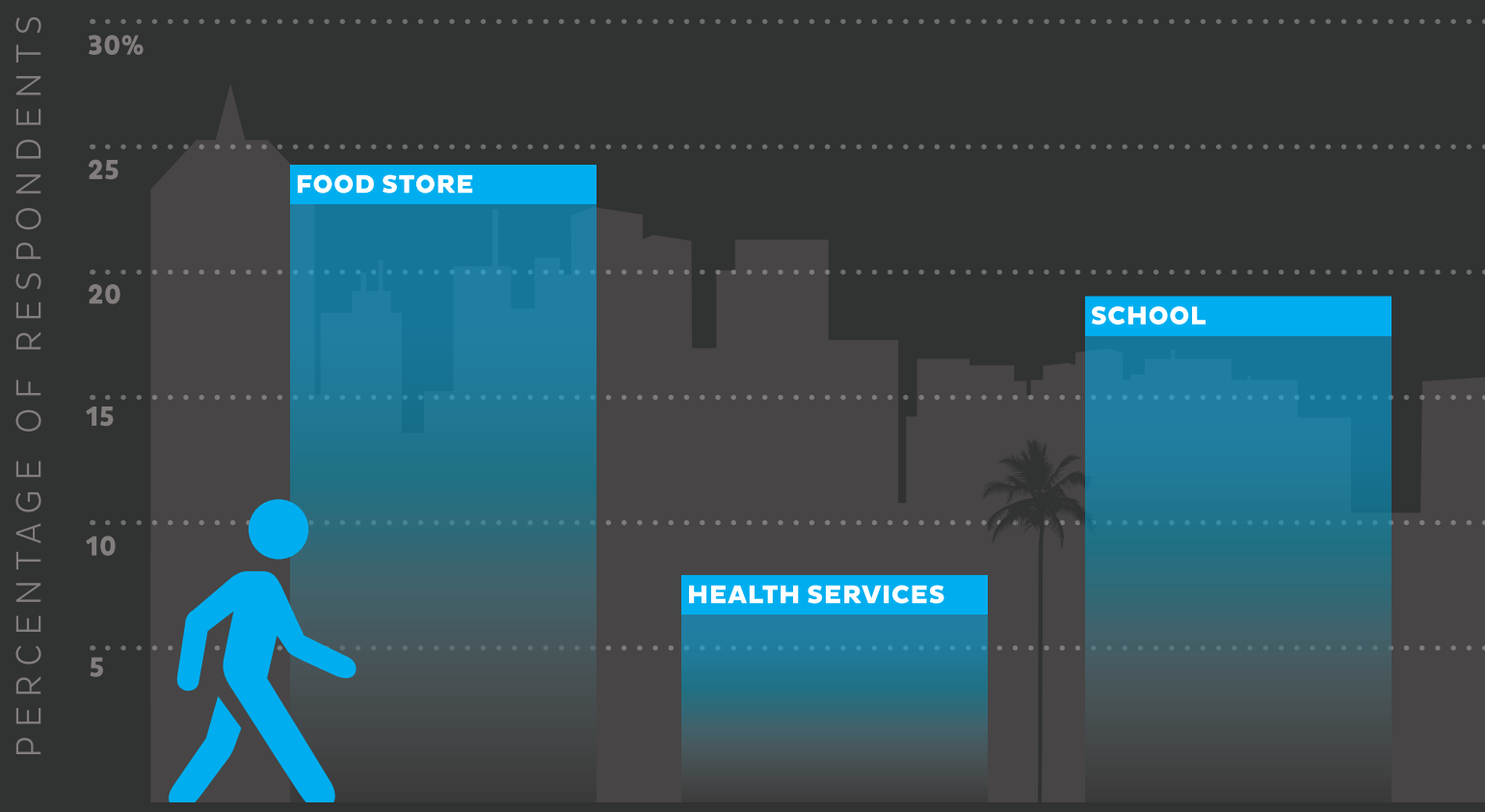
WHAT DO YOU NOT LIKE ABOUT YOUR WALK IN LONG BEACH?

CX3 Neighborhood residents and stakeholders were asked why they don't currently walk to places they otherwise would like to. Below is a breakdown of those reasons preventing them from walking in their neighborhood.



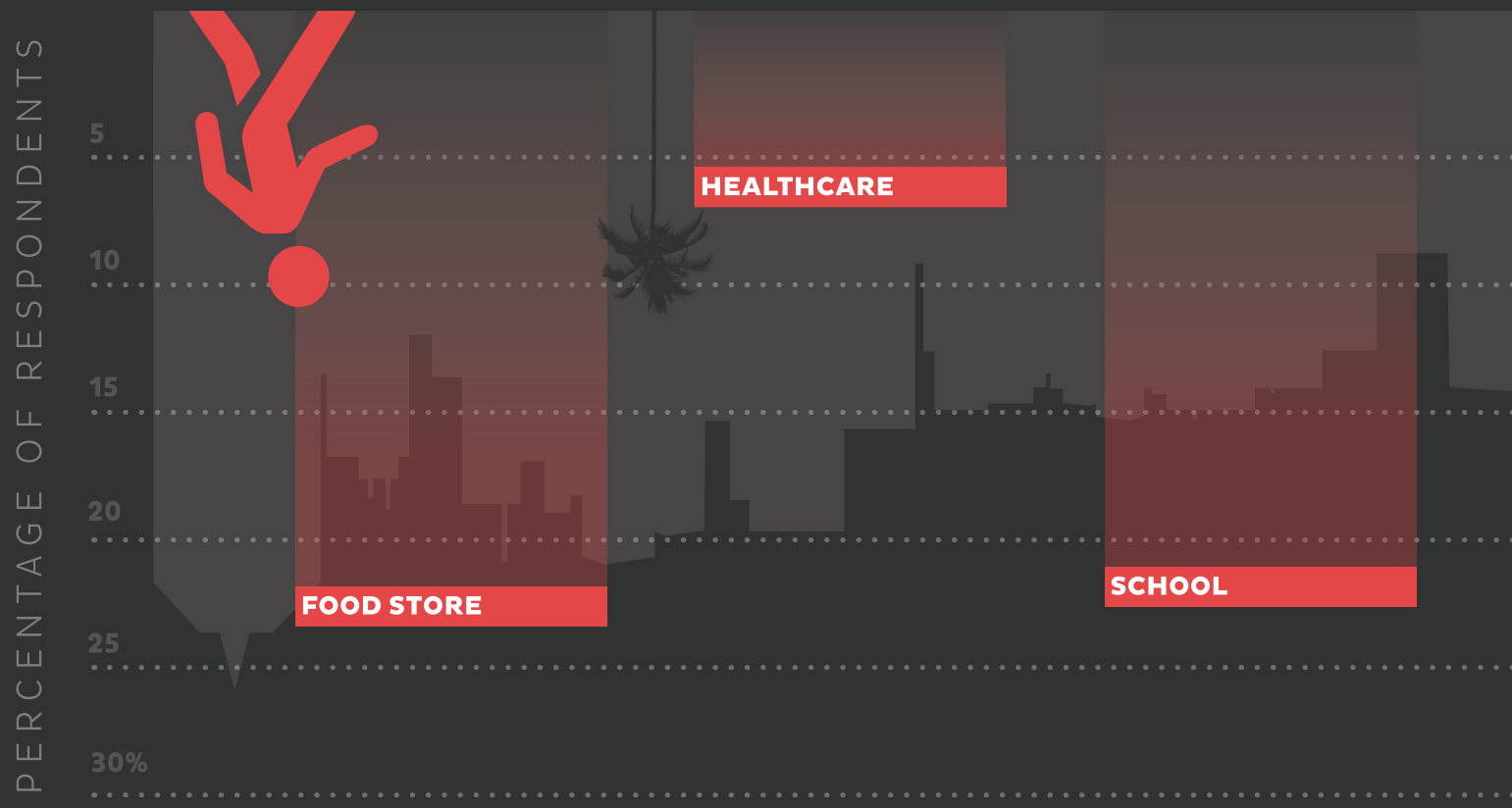
Where do you like walking?
GREAT WALK
OKAY WALK
BAD WALK
N
10+
6-9
2-5
1
NUMBER OF CX3 RESIDENT RESPONSES

COMMUNITY VOICE **CX3 RESIDENT + STAKEHOLDER FEEDBACK**

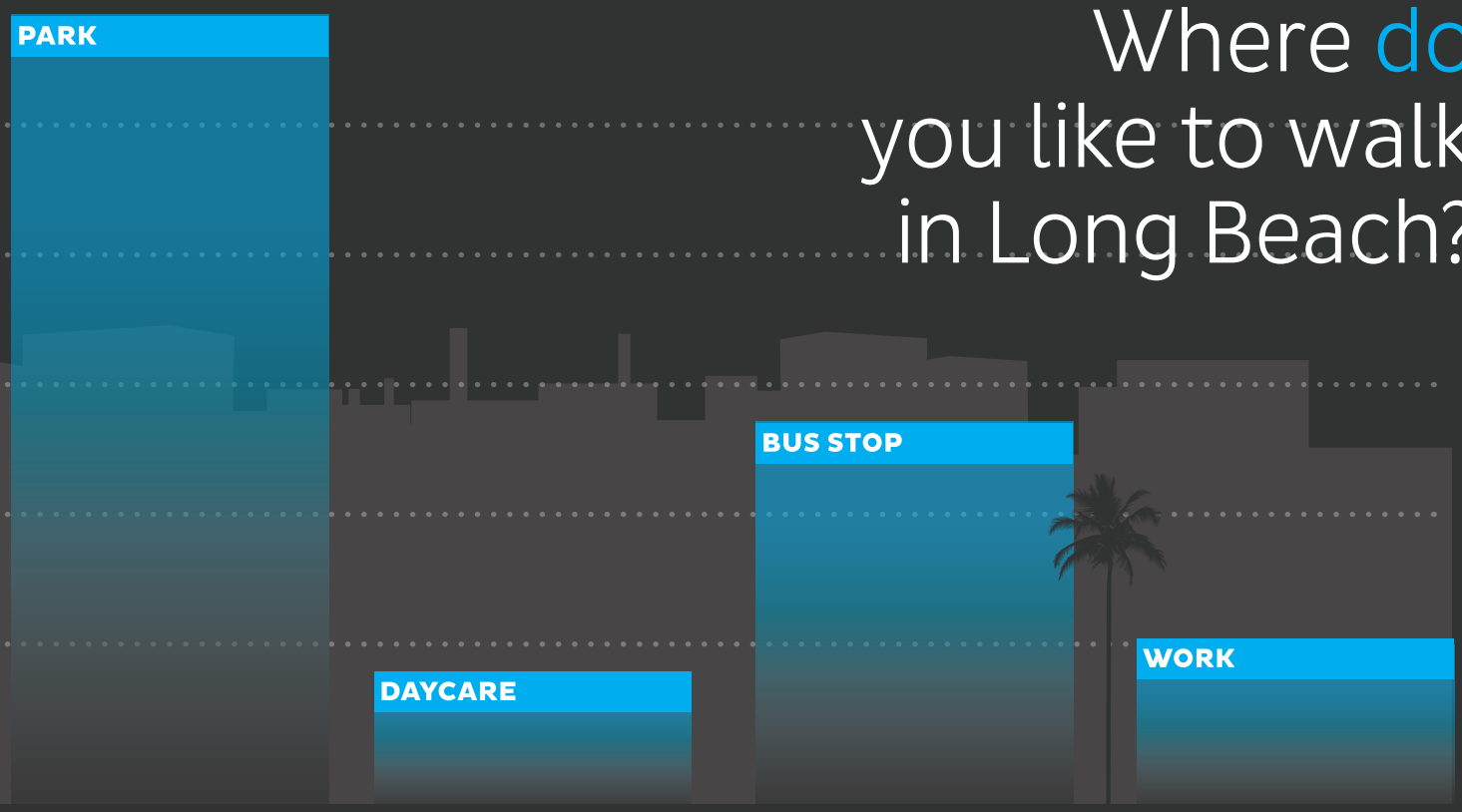


POPULAR LOCATIONS

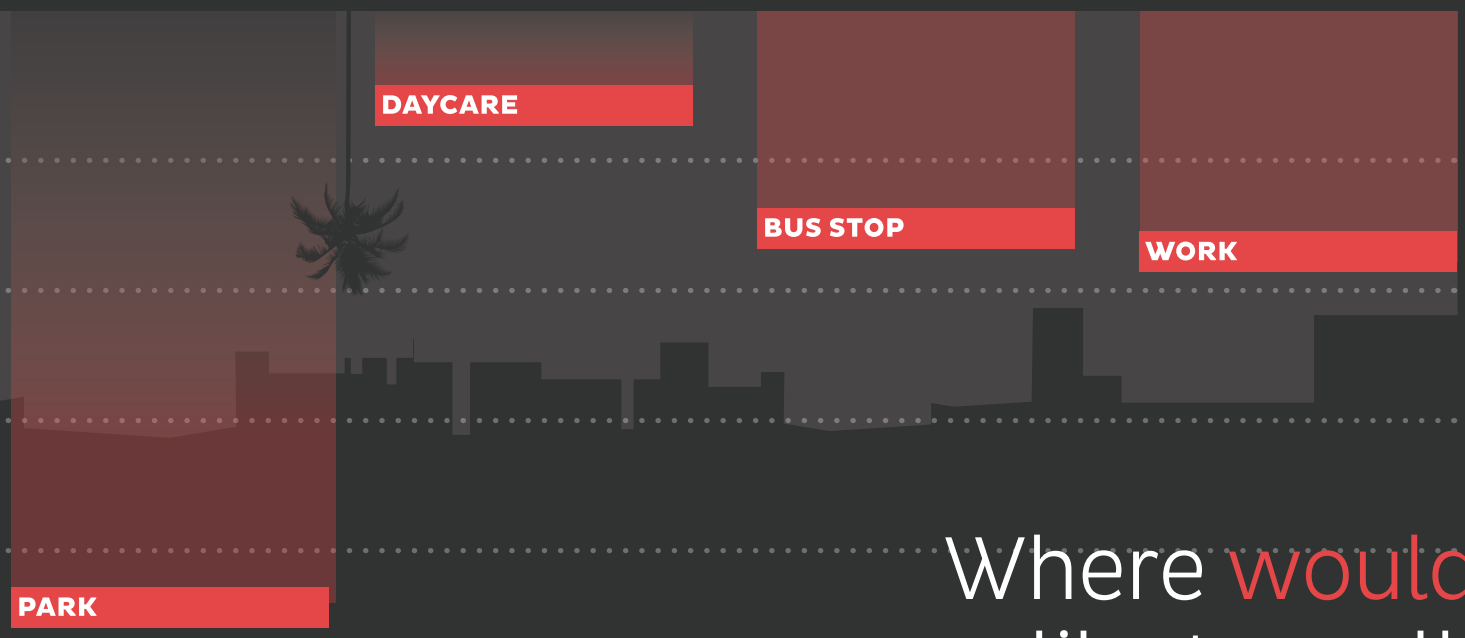
Food 4 Less	Traffic Circle Kaiser	Elementary School
Superior Market	VA Hospital	Middle School
Northgate	St Mary's Hospital	Long Beach City College
Trader Joes	Memorial Hospital	Vocational Training



Where do you like to walk in Long Beach?



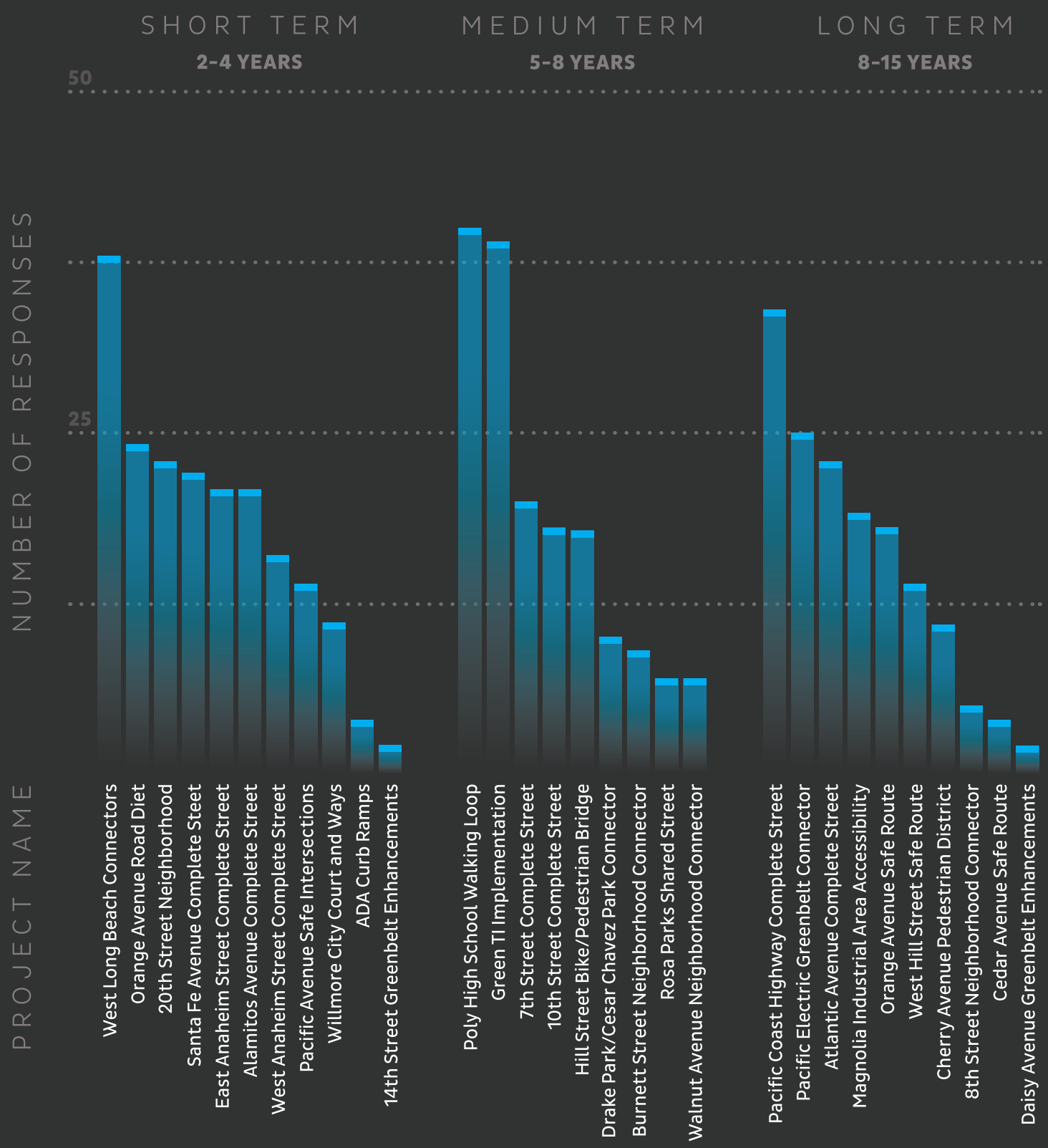
Bixby	Boys & Girls Club	Orange + PCH	Downtown
Houghton	Play & Learn YMCA	Long Beach Blvd	East
Chittick Field	Child Development Services	Transit Mall	Central
Skyline	Burnett Elementary	Villages at Cabrillo	Outside of City



Where would you like to walk in Long Beach?

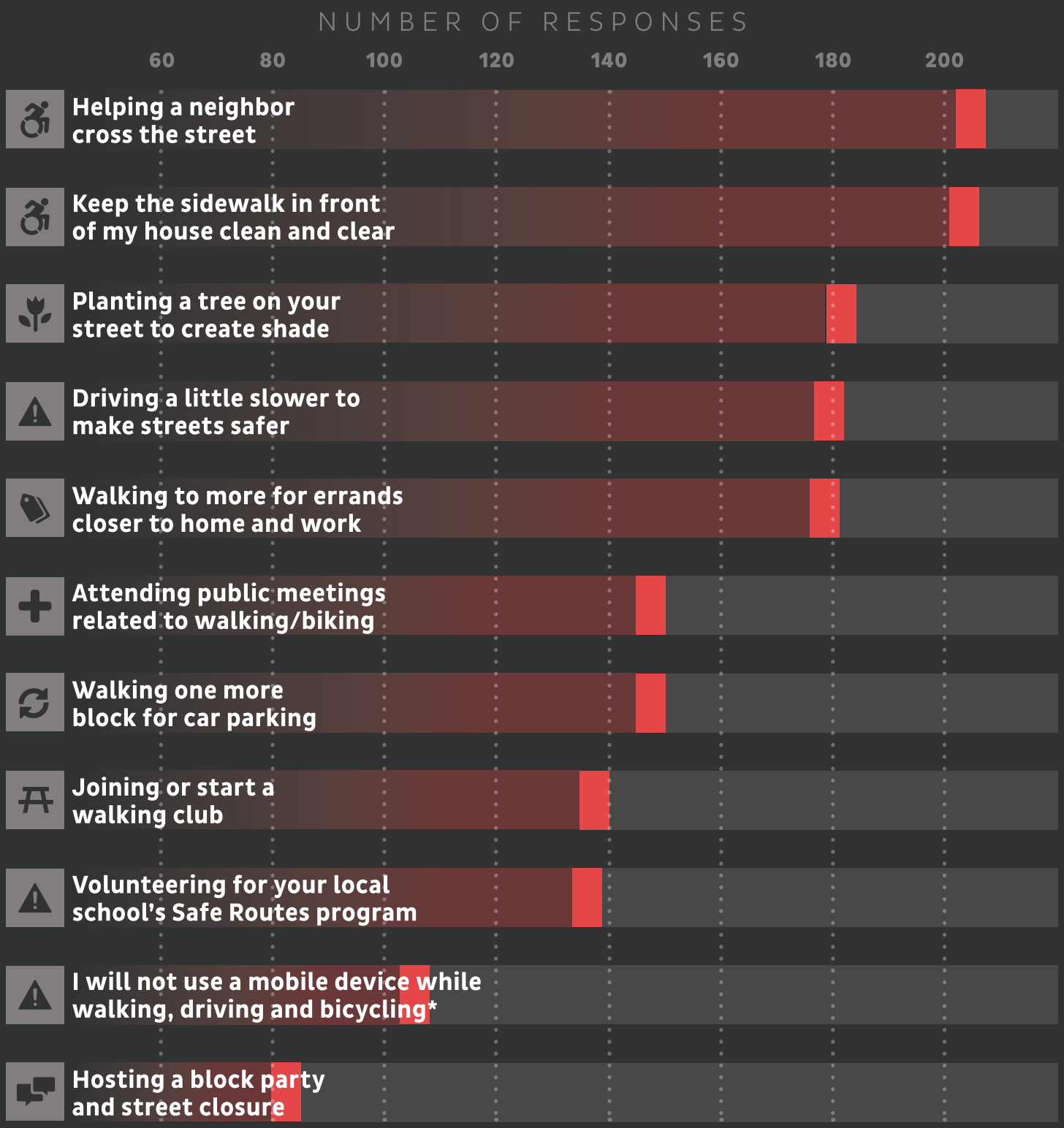
PRIORITIZING CX3 PEDESTRIAN PROJECTS

Over a series of six public outreach meetings in the months of August, approximately 109 people throughout the CX3 area participated in choosing their favorite short, medium, and long term projects that are identified in the CX3 Implementation Chapter. The following results represent the findings from this prioritization activity.



PLEDGING TO IMPROVE THE PEDESTRIAN ENVIRONMENT

The CX3 Pedestrian Plan proposes changes at the larger policy and planning level. The CX3 Pledge activity supplements the Plan by asking individuals to try and improve their behavior and actions to help create a better pedestrian environment. Overall, there were approximatly 282 participants and their results are captured below:



* The response to "not use a mobile device while walking, driving and bicycling" was added after the second outreach event.

CHAPTER 7

Making Long Beach Walkable

WHERE THE RUBBER SOLE MEETS TO SIDEWALK, THE PEDESTRIAN PLAN IS INTENDED TO BE A TOOL FOR MAKING LONG BEACH MORE WALKABLE.

The previous chapters of the Pedestrian Plan collectively lead to the Priorities and Implementation chapter. The Priorities and Implementation Chapter is the map for making Central Long Beach more walkable, articulating the programs, projects and policies to execute in the short, medium and long term. The Existing Conditions, Neighborhood Snapshots and Community Voice Chapter share the need and opportunities while the Toolkit and Initiative Chapters provide the mechanism for solutions. Those chapters should be reflected upon even for projects, programs and policies not identified in this chapter as opportunities and challenges present themselves.

Priorities

Throughout the information collection and community engagement when developing the Pedestrian Plan, the process maintained connection to eight characteristics of a walkable environment. This was done in order to maintain consistent communications with different stakeholders throughout the various stages of the process while providing a foundation for prioritizing project goals. These characteristics are linked to input and analysis that are geographically specific to form priority projects.

Outside of "safety", opinions varied widely as far as what participants identified as their three primary characteristics of a walkable community. Based on community consensus, policy-maker direction and supporting data safety forms the basis of most every priority project, program and policy. This takes the form of Vision Zero, Safe Routes to School, Complete Streets and Neighborhood Connectors, among many others.

These priorities are largely generalized and not specific to any geography, though participants often applied "economics" to the properties along thoroughfares and in commercial districts, while "livability" related to the quality of the residential neighborhoods. The self-applied geographic priorities between livability/neighborhoods and economics/thoroughfares provided by community stakeholders are considered with many projects focused in and between neighborhoods.

TOP
A person pushes a child in a stroller onto the sidewalk using the curb ramp with a truncated dome.
PHOTO COURTESY OF CITY FABRICK

Priorities

The dark grey ring surrounding each of the priorities indicates the level of importance as identified by the community, from a scale of 1-6; 1 being "less important" and 6 being "very important".

SAFETY

Throughout the engagement process, safety was a nearly unanimous priority for enhancing the pedestrian environment and thus should forms the foundation for any transportation project, program or policy.

BEAUTY

While seemingly superficial, the most walkable communities are typically attractive and residents commonly expressed that interest for beauty to make their neighborhoods more walkable.

RECREATION

Recreation was identified by the community as an important trait of a walkable environment as residents “just want to walk.” Serving this desire for physical activity can fuel healthier communities.

LIVABILITY

There is a growing awareness of how noise, visual and air pollution at the very local scale to the regional scale effects public health and wellbeing. Our neighborhoods will need to become more livable to be truly more walkable.

ENVIRONMENT

Many participants felt shifting from driving to more walking and biking, can significantly benefit the environment, thus wanted to find how pedestrians can be better connected to their regular essentials.

SOCIAL

The sidewalk as a social space is a foreign concept to many today and thus was considered a minor characteristic of a walkable community. For many, the sidewalk is part of the journey not the destination.

ECONOMIC

Much of the community discussion related to the economic benefits to walkable environments focused on commercial nodes within the study area including Anaheim Street, Willow Street and Pacific Avenue.

ACCESSIBILITY

Often an important issue identified by seniors and those with limited mobility, accessibility would be a core tenant for creating an inclusive and equitable pedestrian environment which is only solidified by law.

Deciding to Walk

A quarter of Long Beach's fifty square mile land area is made up of public right-of-way; the network of streets, sidewalks and bike lanes that connect people through the city. The Planning Commission and City Council guided and adopted the Mobility Element update of the General Plan which provides the overarching framework for future transportation investment over the next two decades. Portions of the Mobility Element are being further defined in the Bike Master Plan and two pedestrian plans among other efforts which will have further community stakeholder, Planning Commission and City Council input. Outside of these efforts, there has been limited amount of commission and community stakeholder input provided in the past to these transportation infrastructure projects. Priorities for projects and programs are largely interpreted from the Mobility Element with limited City Council guidance and little from any appointed Commissions. The design and execution of these transportation projects, whether simple street resurfacing or more significant realignments of major infrastructure in the past receive sparing input from community stakeholders or appointed and elected policy makers. While there is no standing Transportation Commission like those that exist in other municipal governments of comparable sizes, Long Beach does have a network of standing commissions and boards that have relevance and expertise in transportation, specifically related to pedestrian infrastructure.

TOP
A person is exiting the Metro Blue Line and plans to ride their bicycle to their next destination.
PHOTO COURTESY OF CITY FABRICK

POLICY MAKERS

PLANNING COMMISSION

The Commission provides advice, insight and leadership on all matters affecting development throughout our City. While the Commission serves as an advisory body on zoning and the general plan [including the Mobility Element], Commissioners also serve as the public hearing authority for development applications, including public infrastructure. This scope should be expanded to include transportation infrastructure.

LONG BEACH TRANSPORTATION BOARD

The Board provides broad policy and financial decisions, setting direction for management and operations for Long Beach Transit's public transportation system in the City of Long Beach and surrounding areas. Long Beach Transit integration into the city's street network [every resident within a 1/4 mile of a bus route], first and last mile transportation planning should be built into every bus stop. Taken to its logical limits the first and last mile considerations would include the entirety of Long Beach.

PEDESTRIAN SAFETY COMMISSION

The Pedestrian Safety Commission shall determine whether any intersection utilized by children in coming to and from school poses a special problem of safety requiring the installation of an adult crossing guard and shall advise the city council of its findings and recommendations. The scope of this Commission should be expanded from solely Safe Routes to School to consider all city streets for pedestrian safety and accessibility on behalf of residents of all ages. Specifically, the Pedestrian Safety Commission would be ideally suited for advising and providing leadership for any Vision Zero Initiative.

BOARD OF HEALTH AND HUMAN SERVICES

The Board of Health and Human Services shall act as an advisory body to consult on any matter relating to the funding of local social services and to the public health in the City. As the Department of Health and Human Services weighs more directly into the policies related to public health through the physical environment, the advisory body should be consulted as to how the character of the public realm affects public health. This includes how the city's transportation systems provide residents access to healthy food, physical recreation and medical services.

CITIZENS' ADVISORY COMMISSION ON DISABILITIES

The Citizen's Advisory Commission on Disabilities acts in an advisory capacity on specific topics requiring input in dealing with concerns and/or issues affecting people with disabilities. As mobility within the city transportation network is a major concern for those with disabilities, the Commission should be actively engaged in transportation decisions at the planning, design and implementation levels. The Commission is ideally suited for providing advice and leadership for the Universal City initiative identified in the Pedestrian Plan.

SENIOR CITIZEN ADVISORY COMMISSION

As senior residents have less access to private automobiles, they become more reliant on public transportation and walking to meet their daily needs. The Commission's duties are to act in an advisory capacity to concerns with senior citizen problems on all matters pertaining to older Americans and their needs, including accessibility and safety for those senior residents, including transportation. The Commission is ideally suited for providing advice and leadership for the Universal City initiative identified in the Pedestrian Plan.

PARKS AND RECREATION COMMISSION

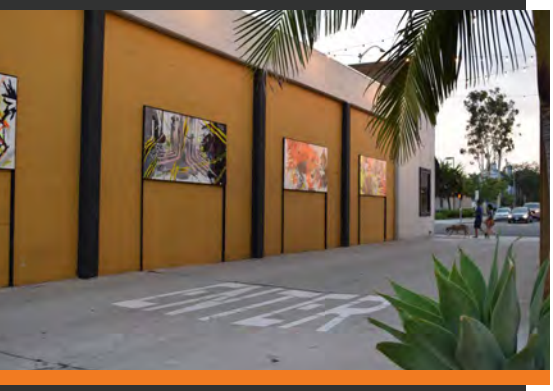
Recommends to the City Council plans for development, beautification and maintenance of public parks and recreational areas and authorizes issuance of permits and negotiation of leases and contracts. As Long Beach promotes walking for physical activity and recreation, many of the parks will provide the foundation for pedestrian programming and infrastructure. The Parks and Recreation Commission would guide how these facilities and programs manifest.

SUSTAINABILITY COMMISSION

The Commission is to make advisory policy recommendations on issues relating to the environment, a sustainable City plan, efforts or programs to address environmental impact and programs to increase education and awareness of the environment. As reduction of greenhouse gases locally relies heavily on reducing use of the private automobile, the Commission should be actively engaged in policies related to active transportation in the city, including those related to improving walkability.

CASE STUDY: BURLING HALL

Burling Hall, otherwise known as the "allery", is a temporary transformation of an underutilized alley into a vibrant meeting spot for the Bixby Knolls community. The space was designed with temporary, low-cost materials to demonstrate the potential opportunity of an activated alley. The Bixby Knolls Business Improvement District worked with community leaders to prototype this project and now it is well-utilized as an arts, music and culture exhibition space. At the first friday of each month, Burling Hall is used as a programming space too promote and support local artists and musicians by providing them with an outlet to showcase their work.



TOP
How the alley looked before there were any temporary improvements done in the space.
PHOTO COURTESY OF CITY FABRICK

BOTTOM
Burling Hall as it exists today with improvements including space for art pieces to be mounted on.
PHOTO COURTESY OF CITY FABRICK

COMMUNITY ENGAGEMENT

The public should be considered an asset in the design, execution and programming of the pedestrian realm. As local residents and stakeholders are often walking the streets of their community on a daily basis, they can provide valuable insight on the challenges and opportunities of creating a more walkable environment.

MOP P 1-4

Involve citizens in transportation planning and project design decisions for improving the City's "complete streets" and bicycle and pedestrian networks.

ENGAGE

Community stakeholders and local residents should be included in the planning and design process for transportation projects from the early stages through construction. An engaged constituency can help craft the project to best serve the needs of all users while limiting impacts. At the same time, their engagement through the process will likely provide greater ownership of the project and even stewardship of the asset going forward.

MOP IM 3

Provide neighborhood and business groups the opportunity to review preliminary plans for major street improvements included in this plan before final design and implementation.

EMPOWER

In the beginning, stakeholders can typically provide relevant input regarding areas of concerns as well as opportunities within the project area. Their guidance through the project can insure the needs of the community are being met while considering the larger transportation network. Empowered stakeholders will often participate in the project's development, whether educating fellow community members of the process and the project as well even providing sweat equity in the form of tree plantings or other accompanying beautification.

MOP M-6

Continue to implement programs to promote pedestrian safety through outreach to both pedestrians and motorists.

EDUCATION

Making Long Beach truly more walkable will require partnerships between government agencies, community organizations and local stakeholders. For these collaborations to be successful it is important for everyone to be speaking a similar language. Planners and engineers need to simplify how they speak about transportation and infrastructure while residents and local stakeholders need to be cultivated to participate in the discussion.

This can be done through targeted programming like workshops and events oriented around walkability, facilitated by city officials or community partners. The planning and design process itself can also be an opportunity for educating the public by providing more context to what is being discussed. It takes more time for the facilitators as well as the participants but the results of knowledgeable constituents participating can yield decisively better discussion.

EVALUATION

It is important to evaluate the pedestrian environment regularly, accessing existing conditions through walk audits, collecting traffic and safety data and interviewing stakeholders. This provides a foundation to judge change annually, whether these efforts make any positive impact or otherwise. This information is also essential to processes for many grants funding sources and will often determine the application's competitiveness.

MOP IM 22

Continue to conduct annual bike counts, walk audits and other data collection and analysis related to bicycle facilities for program evaluation and to support grant-making efforts.to both pedestrians and motorists.

RIGHT
A person is hosting a community meeting where people are expressing their thoughts on a new capital improvement project.
PHOTO COURTESY OF CITY FABRICK

Funding Sources

Long Beach has had a successful track record of securing grants to support active transportation projects which should continue for executing many of the projects within CX3 Pedestrian Plan. Baseline pedestrian oriented improvements should be included as part of every relevant infrastructure project as part of Long Beach's Complete Street policies. Maintenance of expanded pedestrian improvements should be funded with fees and assessments borne primarily by those properties and stakeholders directly benefiting from the investment.

MOP P 1-4

Routinely integrate the financing, design and construction of pedestrian facilities with street projects. Build pedestrian improvements at the same time as improvements for vehicular circulation.

TOP
Person pays for street parking which helps to fund improvements and maintenance in the area.
PHOTO COURTESY OF CITY FABRICK

ABOVE INSET
Applications for different sources of capitial improvement projects.
PHOTO COURTESY OF CITY FABRICK

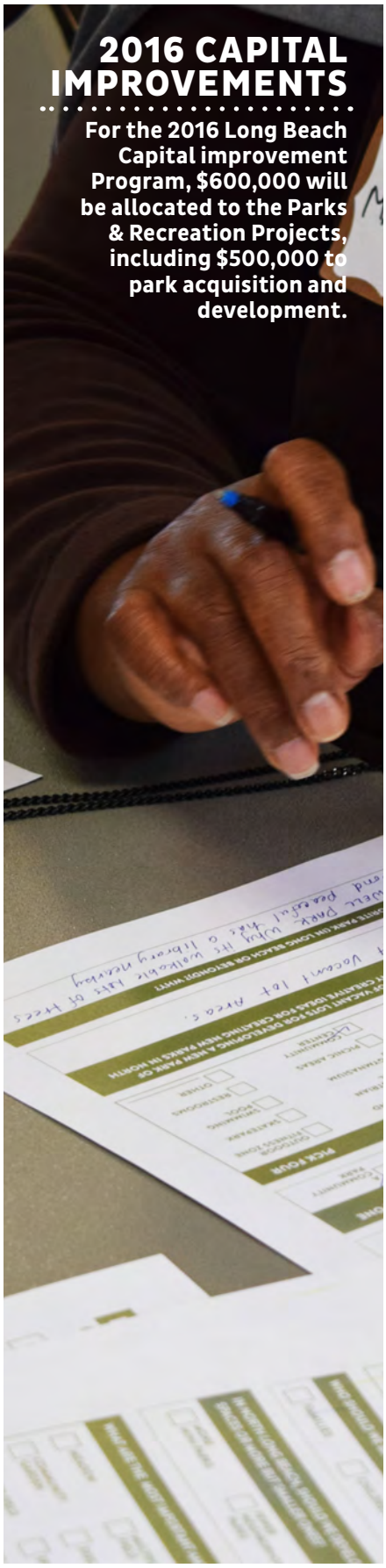
CAPITAL IMPROVEMENTS

Because of Long Beach's population density, built environment and socio-economic conditions, the city would be competitive on a wide range of grant and other outside funding opportunities. The most promising grant sources for pedestrian-related improvements are listed below:

- California State Transportation Agency's Active Transportation Program [ATP]
- Federal Department of Transportation's Transportation, Community and System Preservation Program [TCSP]
- Federal Transit Administration TIGER Grants
- Federal Department of Transportation's Bus Livability Program
- Federal Surface Transportation [STP] programs [Caltrans]
- The State Transportation Improvement Program [STIP] [Caltrans]
- Federal Congestion Mitigation and Air Quality Improvement Program [CMAQ]
- Los Angeles Metropolitan Transportation Commission's Call for Projects
- The Funders' Network for Smart Growth and Livable Communities [TFN]
- Land and Water Conservation Fund [LWCF]
- Federal Department of Housing and Urban Development [HUD]'s Choice Neighborhood Implementation Grants [CNIG]
- State Department of Fire and Forestry's Urban and Community Forest grants
- Moving Ahead for Progress in the 21st Century [MAP-21] – A Federal Program available through MPOs
- Safe Routes to School Program [SR25] – Federal grant program [Caltrans]
- Federal Grant Administered through Caltrans
- Proposition C, 20 Percent Local Return Funds – Allocated to cities based upon population
- Measure R Transportation 15 percent Local Return Funds - Allocated to cities based upon population
- Two Percent Transportation Development Act [TDA] Article 3 – 85 percent allocated to local jurisdiction based upon population and 15 percent to county unincorporated areas

MOP IM 3

Actively seek funding to implement the Pedestrian and Bicycle Master Plans.



2016 CAPITAL IMPROVEMENTS

For the 2016 Long Beach Capital improvement Program, $600,000 will be allocated to the Parks & Recreation Projects, including $500,000 to park acquisition and development.

CASE STUDY: DOWNTOWN LONG BEACH ASSOCIATES

The Downtown Long Beach Associates [DLBA] is a non-profit organization providing operational, maintenance and other public realm services to commercial and residential property owners and their tenants. Property owners within the DLBA's service area agree to pay an extra fee [assessment] that is used to improve the area's safety, cleanliness and visibility; all of which contribute to a more walkable environment.

In 2010:

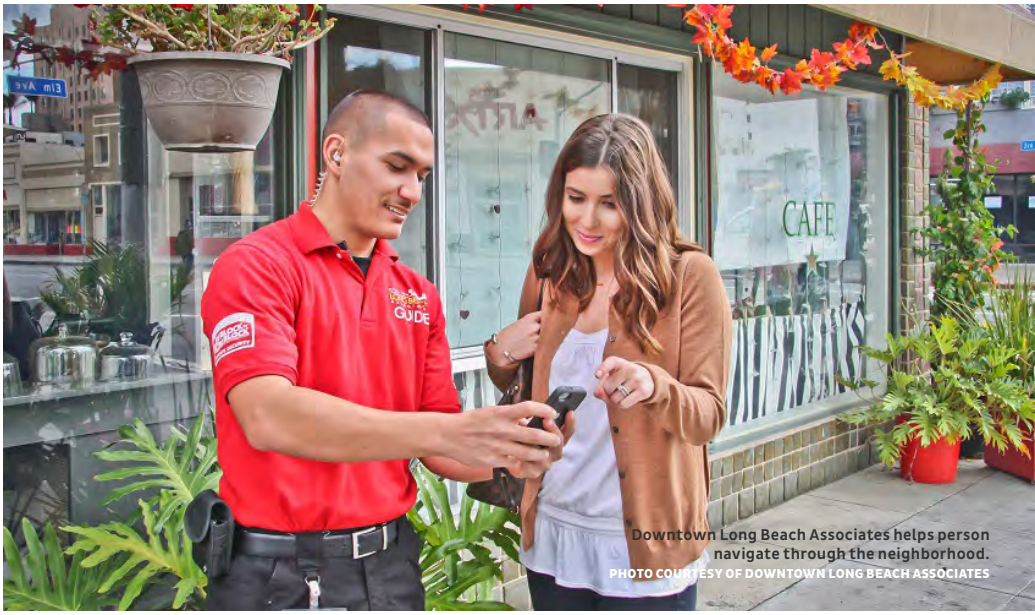
The DLBA Clean and Safe program provided directions and other assistance to 31,000 people.

They collected over 270 tons of trash

and power-washed over 30 million square feet of sidewalk

and removed over 8,900 instances of graffiti

From the 2010 DLBA at a Glance, Downtown Long Beach Associates



Downtown Long Beach Associates helps person navigate through the neighborhood.
PHOTO COURTESY OF DOWNTOWN LONG BEACH ASSOCIATES

LOCAL TAXES AND FEES

Since these pedestrian improvements will enhance property values and improve the economics of development projects, some recapture of that value to help fund these improvements is appropriate. The methods for value recapture could include the following:

- **Development Impact Fees** – There is a strong case to be made for having new development that benefit from these pedestrian improvements to pay a Development Impact Fee to help with their construction. These improvements will accelerate absorption, elevate rents or sales prices and improve a developer's pro forma. A nexus study will likely be required for the Pedestrian Improvements Impact Fee to be implemented.
- **Developer Contribution** – For major development projects that benefit from a specific section of pedestrian improvements, a reasonable requirement would be for the developer to pay for all or a major portion of said improvement as a condition of entitlement. If an effective Pedestrian Improvement Impact Fee were adopted, the rationale for developer contribution or exaction would be substantially reduced.
- **Surcharge on Property Transfer Tax** – For land or improvements that turn over, the pedestrian improvements will enhance their market value on sale. A modest surcharge on the Property Transfer Tax is a reasonable method for the City to recapture a portion of that value increase. The City Attorney would need to determine if a zonal property transfer tax or surcharge could be implemented.
- **Enhanced Infrastructure Financing Districts [EIFD]** – An EIFD may be used to fund the construction of public infrastructure with the property tax increments of those taxing agencies, excluding school districts, which consent. Only effective if other taxing jurisdictions [county, transit districts, special districts, etc.] agree to forego some portion of their future property tax revenue stream above the base year level.
- **Storm-water User Fee** – For certain specific improvements that facilitate storm-water flow, a Storm-water User Fee could be considered.

SPONSORSHIP AND OFF-SITE IMPROVEMENTS

Long Beach is in a position to solicit corporate and foundation sponsorships for selected high profile pedestrian improvements. Based on companies that have a significant presence in Long Beach, there is potential for a Mediterranean Shipping Company Greenway, or Horizon Lines Greenbelt. It will require staff time and City resources to solicit such sponsorships.

MAINTENANCE AND OPERATIONS

Long Beach has a number of business improvement districts that assess business licenses and/or property fees to fund maintenance and other operational sevices in the area. Among them, the Downtown Long Beach Associates and Bixby Knolls Business Improvement Association have leveraged the additional resources to develop, program and maintenance pedestrian oriented improvements in their respective services areas. More recently, the Midtown Business Improvement District was established along East Anaheim Street within the CX3 Pedestrian Plan study area. The assessments fund enhanced maintenance, public safety, beautification, marketing and economic development programs, above and beyond the levels provided by the City of Long Beach.

The City is dedicated to implementing inclusive, healthy and innovative transportation alternatives that offer more choice and convenience for those who live and work in Long Beach or come to visit.

MAYOR ROBERT GARCIA ABOUT THE ALAMITOS AVENUE ROAD

POTENTIAL PEDESTRIAN PARTNERS

Business Improvement Districts
- Downtown Long Beach PBIA
- Long Beach Tourism BIA - Downtown
- Magnolia Industrial Group PBID
- Midtown PBID

Neighborhood Associations
- AOC7
- Atlantic Friendly Neighborhood Coalition
- Craftsman VIllage
- Downtown Residential Council
- Friends of Alice Robinson
- Friends of Daryle Black Park
- Long Beach Central Area Association
- Lower West Madres Unidas
- North Alamitos Beach Association
- Parents On a Mission - West LB
- Semillas de Esperanza
- The Friendship Neighborhood Association
- Washington School Neighborhood Association
- West Long Beach Association
- Willmore City Heritage Association
- Wrigley Area Neighborhood Alliance, Inc.
- Wrigley Association
- Wrigley Historic District
- Wrigley Is Going Green

Business Associations
- Cambodia Town Inc.
- East Spring Street Business Association
- Long Beach Area Chamber of Commerce
- Magnolia Industrial Group

TOP
Community members help remove graffiti as well as help prepare a mural installation.

Implementation

The CX3 Pedestrian Plan is intended to be a comprehensive approach to making Long Beach neighborhoods more walkable. It was developed through extensive research into best practices and relevant plans, intensive resident and community stakeholder engagement and coordination with multiple city departments and agencies. The Pedestrian Plan's success will be based on the level of integration of the outlined policies, programs and projects into regular city building and operations.

The primacy of moving and storing automobiles must be balanced with those of other modes of transportation, the health and wellness of residents and the economic and environmental sustainability of the city. In order to better serve pedestrians, this will necessitate their consideration if every project, program and policy. When developing the annual capital improvement program, pedestrians should not be a category to be funded solely by Active Transportation grants but are considered as equal to road projects.

Every street project is to become a complete street project, providing and improving facilities for pedestrians as well as bicyclists and public transit. Resources must be aggressively sought to improve pedestrian facilities and develop programming that supports more walkable communities in Long Beach. There is also the opportunity to collaborate with residents and community stakeholders to further enhance the pedestrian environment through continued dialogue of issues and opportunities, as well as neighborhood-oriented projects.

CAPITAL IMPROVEMENT PROGRAM

To become a truly walkable city, there needs to be a paradigm shift as to how the capital improvement program is planned, financed and executed. Active transportation projects shall no longer be considered special, as an accessory to the overall transportation infrastructure program. Instead, transportation projects shall consider all modes of transportation, clearly articulating how each benefit, whether for safety, accessibility, efficiency or otherwise.

There is a logic to making baseline repairs and improvements as part of capital investments where it makes sense. The city has gone through great effort to coordinate the work of the Gas and Oil Department and the Water Department before street resurfacing projects to insure they had a chance to upgrade any underground infrastructure while roadway demolition is taking place. This is an attempt to save costs and avoid one of the departments cutting into the roadway soon after completion. Federal and State law requires that sidewalks are repaired and curb ramps installed as part of significant road projects in order provide accessible routes for disabled pedestrians.

These are just a few examples of the baseline improvements that are made as part of most infrastructure projects. The following are a kit of relatively low-cost, baseline improvements that shall be included as part of typical transportation investments in order to improve pedestrian safety and accessibility, core criteria for a walkable environment. Additional pedestrian-oriented design elements should be considered where and when appropriate.

POLICES & PROGRAMS

MOP **P 1-4** Integrate all planning and development policies and strategies into the annual development of the Capital Improvement Program [CIP] to ensure projects are programmed in a cost-efficient manner.

MOP **M-2** Routinely incorporate complete streets features into all street redesign and repaving projects.

MOP **M-30** Ensure that all planning processes, such as neighborhood and specific plans, identify areas where pedestrian, bike and transit improvements can be made, such as new connections, increased sidewalk width, improved crosswalks, improved lighting and new street furniture.

MOP **M-50** Review all capital improvement projects to ensure improvements located on existing and planned bus routes include modification of street, curb and sidewalk configurations to allow for easier and more efficient bus operation and improved passenger access and safety while maintaining overall pedestrian and bicycle safety and convenience.

GUMBINER PARK

Currently under construction, Gumbiner Park was developed partially in response to a 2010 study which found that the highest level of pedestrian-involved collisions was at the intersection of Martin Luther King Avenue and Seventh Street. This prompted the closure of a part of the roadway to develop 36,590 square feet of new public open space.

CASE STUDY: RAINBOW CROSSWALKS

In advance of the 2106 Beach Streets Downtown event, the crosswalks of four intersections of the Broadway corridor have been painted with the colors of the Pride Flag, thanks to funding provided by Vice Mayor Suja Lowenthal's Council District Infrastructure Allocation, according to the Long Beach Public Works Department. The rainbow crosswalks address the need, identified by Public Works, to start adding "continental" crosswalks to the city, where instead of the traditional two white lines outlining the length of the walking distance, known as transverse crosswalks, thicker and ladder-like stripes paint the way.

TOP
Person crosses the street using the newly-painted rainbow crosswalk on Broadway.
PHOTO COURTESY OF THE LONG BEACH POST

SAFETY AND ACCESS ANALYSIS

In advance of any significant transportation project a safety and access analysis should be conducted to identify sources of conflict that can and should be resolved as part of the project.

CURB RAMPS

Already required as part of the American Disability Act, any street or sidewalk work requires improvements that provide equal access for disabled individuals including clear paths and curb ramps.

ENHANCED CROSSWALKS

High-visibility "continental style" marked crosswalks should be included as part of all major street projects. Additional crosswalk treatments should be considered for intersections with significant pedestrian traffic or safety concerns.

ADVANCE STOP LINES

Advance stop lines shall be included as part of any marked crosswalk, setback at an appropriate distance for the volume and speed of traffic.

DRIVEWAY IMPROVEMENTS

There shall be analysis of existing driveways along all street projects to determine whether they can be removed, consolidated or redesigned to minimize their impact to the sidewalk.

STREET TREES
Street trees shall be preserved where possible and new trees planted at regular intervals. Parkways and trees wells shall be created where space is available.

ON-STREET PARKING
Existing on-street parking should be analyzed to maximize available stall capacity while providing appropriate visibility between pedestrians and drivers at intersections and driveways.

ROAD DIET
When there is surplus roadway, reduce the number of travel lane widths to widen sidewalks, create bicycle lanes, transit amenities and/or landscaping.

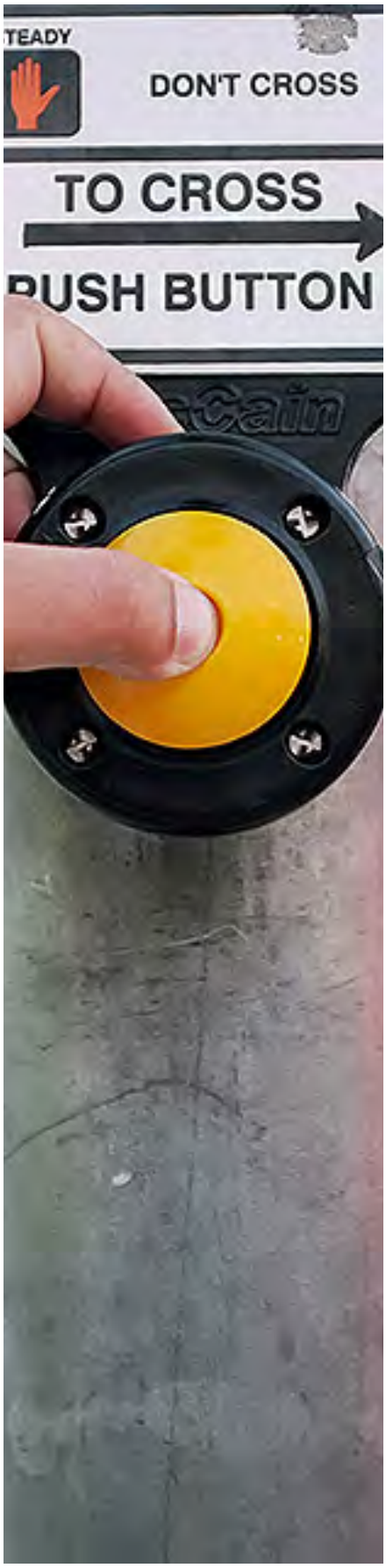
CURB RADIUS REDUCTION
Curb radii at intersections shall be reduced to the minimum required for emergency and city service vehicle maneuvering.

PEDESTRIAN COUNTDOWN
Long Beach has been phasing in pedestrian countdown signals throughout the city. This should continue, including as part of any new transportation project.

REMOVE PEDESTRIAN ACTUATORS
Pedestrian actuators shall be phased out of all signalized intersections as signaling projects are being implemented.

INTERMEDIATE CROSSINGS
Spacing between safe pedestrian crossings should be no less than a quarter mile apart and should be shorter intervals in pedestrian oriented areas. Marked crosswalks and appropriate traffic controls should be installed at intermediate intersections to meet this goal.

LEADING PEDESTRIAN INTERVAL
Leading pedestrian intervals shall be considered as part of the phasing of any signalized intersection project, especially where there are significant pedestrian traffic or safety concerns.



WHAT IS COMPLETE STREETS AND WHAT ARE ITS BENEFITS?

Approved in 2008, the California Complete Streets Act, or Assembly Bill 1358, is a law that requires the legislative body of each county and city to include complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, older people and disabled people, as well as motorists. Roadways that are designed with these groups in mind can provide several benefits, including:

TRANSPORTATION COSTS 1

American families spend a lot of money on transportation and the costs are increasing. According to the Union of Concentrated Heath Scientists, transportation is the second largest expense for households—more than food, clothing and health care.

PUBLIC HEALTH 2

As Americans move less and drive more, our health is at risk. According to the United States Centers for Disease Control & Prevention, between 1980 and 2004, the number of overweight and obese children nearly tripled. According to the American Journal of Preventative Medicine, an additional one kilometer of walking can lead to a 5% likelihood of obesity.

SAFETY 3

Streets without safe places to walk, cross, catch a bus, or bicycle put people at risk. According to the National Highway Traffic Safety Administration, more than 4,400 pedestrian-involved collisions were fatal.

CLIMATE CHANGE 4

Choosing other modes of travel besides driving reduces carbon emissions and complete streets make different travel options easier for more people. According to the Federal Highway Administration, 72% of trips under one mile are now made by automobile, a distance that is walkable.

EVERY STREET IS COMPLETE

MOP STRATEGY 1

Establish a network of complete streets that complements the related street type.

To create complete streets that meet the needs of all users, the City must make modifications to existing streets and public right-of-way to better accommodate public transit and active transportation, including pedestrian. These enhancements to the public right-of-way would rebalance the priorities from typically serving the primacy of private vehicles to walking, biking and public transit. For example, adding a bicycle lane or widening a sidewalk for pedestrians may require narrower or fewer travel lanes for private automobiles. These compromises are needed to create a balanced transportation system that provides efficient, safe routes for each mode of travel, while enhancing the quality of life for local residents along these corridors.

In these cases, the projects can be funded through similar models that current roadway projects are planned, financed and executed through. The difference is that the project goals become diversified to include pedestrians, bicyclists and transit riders, along with drivers. Along the baseline pedestrian-oriented improvements, additional, more significant design components shall be considered. These can include, but are not, limited to changing the street profile to expand sidewalk areas, the addition of landscaped medians and reconfiguration of intersections to improve pedestrian safety and accessibility.

POLICES & PROGRAMS

MOP **P 1-1** To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach" which considers walking, those with mobility constraints, bicyclists, public transit users and various other modes of mobility in parallel.

MOP **P 2-11** Consider every street in Long Beach as a street that bicyclists and pedestrians will use.

CREATING A PEDESTRIAN PARADISE

To create a walkers' paradise, further investment in pedestrian-oriented infrastructure and programs will be necessary. Pedestrians would be identified as the primary client of these projects in order to clearly define the project goals. This is important in order to pursue the most relevant funding sources and to in some cases, weigh significant changes to the transportation network, whether due to street closures or other traffic management techniques.

It is anticipated that the construction of these expressly pedestrian-oriented projects will require grant funding as identified in the earlier section and maintained by a special arrangement with local stakeholders, either adjoining property owners or through a Business Improvement District [BID]. As these pedestrian-oriented projects typically have intensive focus on the sidewalk area, special effort should be made to incorporate existing structures, businesses and private development in order to maximize the community benefit and limit any potential negative impacts related to access and visibility.

Some of the pedestrian projects would actually be built on park property and thus would be developed and managed through the Parks, Recreation and Marine Department. In these cases, the projects might be able to leverage park development and recreation grants.

An ideal walking environment for me would be some place that is social, lively, safe and has a lot of cool destinations.

LONG BEACH RESIDENT

Community Projects

Community projects involve a high-level of public participation to help identify and address local infrastructure needs. From funding to implementation, community members can be involved in various parts of the planning and decision-making process. This model of planning assumes that locals are the experts when it comes to knowing what the greatest issues are in their community. It also assumes that locals have a high interest in a project's success as they will experience the most immediate benefits. Community projects may depend on professionals to offer viable solutions, but they may act more as an advocate or facilitator for the community to achieve their goals. Also, the more that people are involved with a project, the more likely it is that there will be community support, including from elected officials who could help champion a project onto its completion.

Outreach should be conducted in ways that are both creative and thought provoking, but not excluding anyone in the community from participating. When it comes to planning engagement exercises it is important to remember that people speak different languages, have individual schedules, use different forms of transportation and may have

TOP
Artist Aaron De La Cruz paints a mural in the East Village during the 2015 Long Beach POW! WOW!
PHOTO COURTESY OF POW! WOW!

ABOVE INSET
A volunteer helps to remove graffiti from a traffic sign in Long Beach.
PHOTO COURTESY OF CITY FABRICK

technological constraints. A robust community engagement process involves having multiple ways for people to share their thoughts and concerns. This model of planning has become increasingly popular and should be considered with any new CX3 project.

In terms of enhancing walkability, this chapter highlights some examples of community projects that have been successfully implemented in Long Beach or in the greater Los Angeles region. In total, there are eight types of community projects that have multiple pedestrian-friendly benefits. The size and scale of these projects may vary, but they should all be sensitive of the surrounding neighborhood context. Projects that are more difficult to implement can still be accomplished by starting off with a pilot or temporary stage that can quantitatively and qualitatively demonstrate benefits. Additionally, projects that can be implemented simultaneously with a preplanned effort, such as a street resurfacing or sidewalk enhancement, can prove much easier to implement both financially and politically.

Priorities

LANDSCAPING

PARKLETS

PUBLIC ART

WALKING LOOPS

STREET FURNITURE

COMMUNITY CLEAN UP

WAYFINDING

OPEN STREETS

CASE STUDY: TREE PLANTING ALONG 10TH STREET LONG BEACH

In 2014, AOC7, a Long Beach neighborhood organization committed to improving the quality of life in their community, co-hosted a tree planting event along 10th Street from Cherry Avenue to Alamitos Avenue. Together in partnership with the council districts and City departments, volunteers planted a total of 39 crepe myrtle street trees along the corridor. The event was highly acclaimed by people in the community and was a catalyst for the 10th Street Vision Plan in 2016 which looks at enhancing 10th Street for pedestrians.

TOP
Volunteers participate in installing street trees into a treewell along 10th Street.
PHOTO COURTESY OF AOC7

LANDSCAPING

Climate-appropriate and well-maintained landscaping can help to improve the overall pedestrian experience.

Landscaping and street trees provide more than just an aesthetic benefit to our society. For example, the addition of street trees has proven to help calm traffic by helping to reduce the speed of drivers and the frequency and severity of pedestrian-involved collisions. Street trees and sidewalk landscaping also create a physical and mental barrier between the street and the sidewalk, keeping pedestrians, children and pets out of harm's way. People judge walking distances to be shorter on neighborhoods with street trees also and other plants and are therefore more likely to travel on foot. For residential neighborhoods, street trees help to absorb traffic noise and increase privacy. In a 2001 study based in Chicago, there were dramatically fewer occurrences of crime against both people and properties in apartment buildings surrounded by trees and greenery than in nearby identical apartments that were surrounded by barren land. These streets with landscaping were perceived to be safer in both urban and suburban conditions.

There are many other benefits to landscaping as well. For residential property owners, street trees have been reported to enhance the "curb appeal", thereby increasing property values. A 2009 study based in Portland, Oregon by Geoffery Donovan and David Butry found that on average, street trees add 3% to the median sale price of a house and reduce its time-on-market by 1.7 days. For businesses, a 2003 study by Kathleen W. Wolf found that consumers have a 12% higher willingness to pay for goods and services in retail areas that have streetscape landscaping. Environmentally, trees produce oxygen, clean the air and reduce global warming. Trees help to clean the air by absorbing greenhouse gases and capturing airborne particles that contribute to global warming and air pollution. Finally, neighborhood planting events brings community members together and builds civic pride.

Two medium-sized trees can supply the oxygen required for a single person for a year.

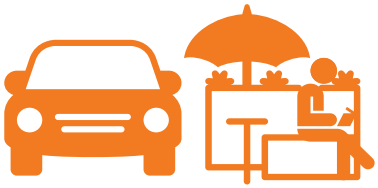
METRO SPRING 2015 COMMUNITY SURVEY

PARKLETS

Transforming these dead zones into parklets is also relatively easy to do.

Small spaces for people to relax, drink a cup of coffee, eat a meal and enjoy the city around them; parklets are created by building a platform in the parking lane. On the platform, benches, planters, landscaping, bike parking and cafe tables and chairs all come together to provide a welcoming new public space. Making these changes does not typically require large outlays of capital. And the benefits far outweigh the costs: better street life, additional space for businesses, more green space to filter stormwater pollution and more green space to filter stormwater pollution and more enjoyment for the people who live and work nearby.

There have been several studies that have quantified the economic and social benefits of parklets. The City of Long Beach also recognizes these benefits and have created the Long Beach Parklet Program as a city directed pilot to create safer streets for pedestrians and to give local restaurants the opportunity to expand their businesses. The program has helped increase revenue for business owners, helped to create job opportunities for local residents and has improved the overall ambiance for the community of Long Beach. The first parklet in the city is located at Lola's Mexican Cuisine and have proven to be a successful case study in both increasing sales revenue as well as creating a natural ambiance for guests of the restaurant. Since then, several other parklets have been built throughout the city and several more are in the planning or construction stages. What makes these parklets special is that they all have creative input from the business owners as to how the parklet should be designed and function.



The revenue for Lola's restaurant has increased by 20% since the implementation of the parklet.

LUIS NAVARRO, OWNER OF LOLA'S MEXICAN CUISINE

CASE STUDY: BENEFITS OF PARKLETS IN SAN FRANCISCO

The City and County of San Francisco Planning Department has studied the influence of parklets on pedestrian traffic, behavior and overall perception. In this study, they found that:

44% increase in average foot traffic after a parklet was installed on Stockton Street, from 304 to 438 people per hour.

71% increase in the number of people recorded using the Valencia Street parklet at any given time of the day.

84% of people rated the area around the Polk Street parklet is a "good" or "very good" place for socializing and having fun

0% of the businesses reported significant concerns about the parklet regarding loss of nearby street parking or other impacts on their business.

72% of the businesses observed that most of their customers are primarily from the surrounding neighborhood and arrive by foot.

From the 2011 Parklet Impact Study, San Francisco Great Streets Project

CASE STUDY: COMMUNITY-DRIVEN MURALS IN LA'S KOREATOWN

As part of LA Great Streets initiative, several local artists were commissioned to design eight murals on storefronts along Western Avenue in Koreatown to help celebrate the vibrancy of the community as well as help revitalize the underperforming corridor. In June of 2016, hundreds of community members volunteered in helping to paint the murals, with many participating in cleaning up trash, painting utility boxes, or planting trees. With everyone's help, the murals were completed in just a few hours.

TOP
Artists giving the volunteers art supplies and clean up materials to help with the day's festivities.
PHOTO COURTESY OF LA GREAT STREETS

MIDDLE
Community members paintng over undesirable graffiti so that artist can begin an outline for the design
PHOTO COURTESY OF LA GREAT STREETS

BOTTOM
Group of volunteers start the process of a mural that spans the length of a building.
PHOTO COURTESY OF LA GREAT STREETS

PUBLIC ART

Public art and murals can do more for a community than just add beauty and character.

Public art that involves local residents and businesses in the design process are more likely to garner community and political support. Artists that are commissioned to do art should engage with locals as early and as frequently as possible. In early stages of the design process, community members can help to inspire concepts that reflect the history, identity, or pride of the people. This may involve having critical conversations or creative engagement that distills stimulating ideas. The greater number of people involved in this early collaborative process, the better.

Once an art piece has been designed and approved by relevant businesses and organizations, community members can also help to paint the artwork. This can help to incite a greater sense of ownership and support in the future. It is also encouraged to have art that has an interactive element to them as this can be more engaging and interesting when admired by observers. In terms of commissioning artists, local artists and collaboration between artists should be favored over others.

In 2015, Long Beach hosted its first ever POW! WOW!, a gathering of contemporary artists that engages with broader community on the process and creation of art. This multi-day celebration of art resulted in the development of 14 pieces of art and brought excitement to the city. POW! WOW! returned to Long Beach in 2016 and this time, there was more initiative to involve the local community in the design process.

This event is about art, it's about community, it's about taking public and private space and making it accessible to everyone.

MAYOR ROBERT GARCIA ABOUT LONG BEACH POW! WOW!

WALKING LOOPS

In neighborhoods that lack access to parks or open space, walking loops can provide spaces for community members that desire physically activity.

Formalized walking loops can encourage people to integrate walking into their daily routine. Research has shown that walking can strengthen muscles, joints, bones and the heart, while contributing to weight loss, improved sleep and increased life expectancy. Beyond the physical health benefits, walking loops can improve mental health, preserve and restore open space, strengthen the economy through civic improvement and make our communities more livable. In urban environments such as Long Beach, park and open space comes at a premium cost and using existing sidewalks as an opportunity for a walking loop can be a low-cost alternative for recreational physical activity.

In September 2009, the YMCA of Greater Long Beach received a grant to implement the Pioneering Healthy Communities [PHC] project. The PHC project is a collaborative effort to create walking loops in five underserved neighborhoods. City Fabrick, a nonprofit organization that was in the process of developing walking loops for the Long Beach City College Green Jobs Training Program, collaborated on this project to provide the basis for a walking program and jumpstart the project in Long Beach. A Walk Long Beach committee consisting of Long Beach residents, stakeholders and relevant City Department representatives was formed to provide input and feedback for the effort.

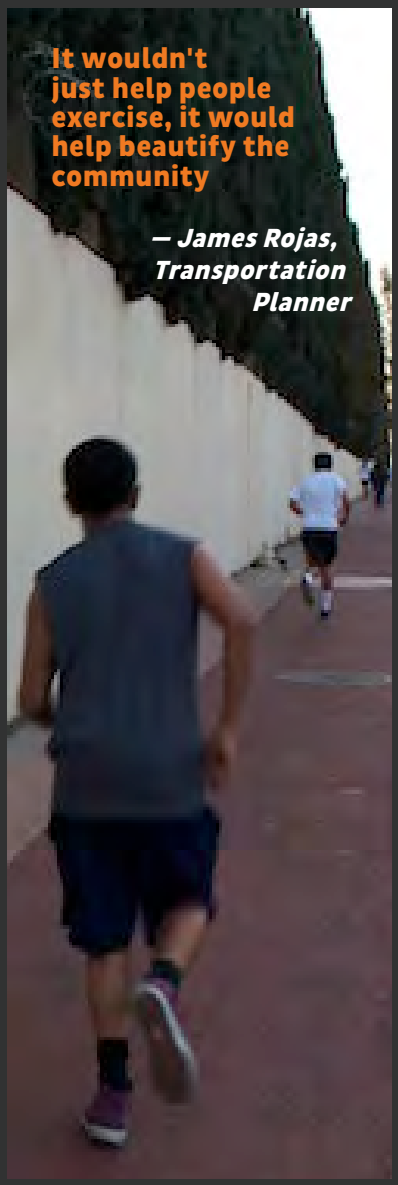
Walk audits were conducted with community members from each of these neighborhoods to analyze walking conditions and identify challenges or opportunities for improving pedestrian safety and comfort for all people, including the elderly, children and those with limited mobility. Knowledge of the individuality of the local area promotes civic pride and fosters community participation in the physical surroundings, area assets and businesses. Using the findings from the audit, walking loops were formalized in easy-to-access cards that delineate the walking paths as well as provide information on distances, difficulties and neighborhood landmarks.

MOP M-5

Create walking loops with stepping-stone mile markers and other supportive features to support active living.

CASE STUDY: BOYLE HEIGHTS EVERGREEN CEMETERY PATH

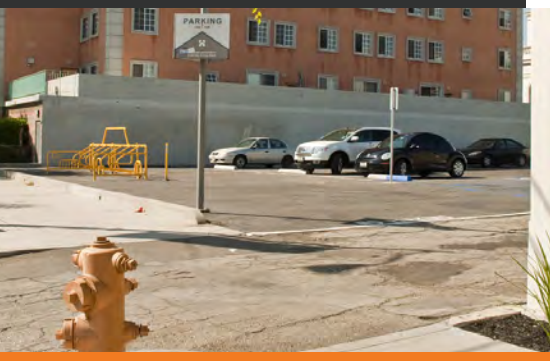
The Los Angeles neighborhood of Boyle Heights lacks sufficient public open space for its 91,000 residents. With no nearby parks available, exercise-minded Boyle Heights residents would regularly walk or jog around the Evergreen Cemetery. As a result, the Evergreen Jogging Path Coalition [EJPC] created an 1.5 mile rubberized walking loop circling the cemetery. In June 2003, the path opened and has since been popularly used by Boyle Heights residents as well as people from neighboring communities.



TOP
Local Boyle Heights resident jogs around the Evergreen Cemetery along the rubberized path.

CASE STUDY: PARK[D] PLAZA FOURTH STREET LONG BEACH

As part of the DITU [Do It Together Urbanism] program, this urban intervention reconfigures a public parking lot to create a temporary plaza, while improving handicap access and adding one parking stall. During 2011 Park[ing] Day event, City Fabrick collaborated with the City of Long Beach Planning Bureau to develop a temporary plaza installation as an example of more efficient land development in the city. Using black and white masking tape, portions of the parking lot on Fourth Street in the East Village were restriped to create a space for people for the day. A year later, working together with Vice Mayor Robert Garcia and various community partners, the entire parking lot was reconfigured to create a 30' by 75' plaza adjacent to the sidewalk. The plaza had colorful seating opportunities, umbrellas, and a bicycle corral.



TOP
The parking lot before the installation of the temporary plaza and its street furniture.
PHOTO COURTESY OF CITY FABRICK

BOTTOM
Final design of the temporary plaza with seating, umbrellas, ground treatments and a bike corral.
PHOTO COURTESY OF CITY FABRICK

STREET FURNITURE

Street furniture can help to improve the walkability and sustainability of a city.

Street furniture is a term used to describe elements installed on streets and sidewalks that can be used for various purposes. Common pieces of street furniture include benches, traffic barriers, bollards, post boxes, phone boxes, streetlamps, traffic lights, traffic signs, bus stops, public restrooms, fountains, memorials, public sculptures and waste receptacles. These elements are intended to provide a public or private benefit and enhance a pedestrian's experience.

Seating elements can prove to be an important element in improving walkability. Seating that is located in prime locations, such as where people work, shop, eat and socialize, encourages a person to linger, which can provide the additional economical benefit as well. Installing seating can be done affordably and sustainably. The use of temporary or recyclable materials, such as rapidly renewable plant material [bamboo and straw], recycled materials and other reusable products is encouraged by many cities. Much of the usability of seating is dependent on a safe atmosphere. The addition of pedestrian scaled lighting, bollard or large planters and proper maintenance can help to increase a person's sense of safety. Some people are concerned the addition of street furniture, such as seating, can encourage vandalism or an increase in homelessness, but certain design measures, such as graffiti-proof paint, can be deter undesired uses.

Business improvement districts [BIDs] and Business improvement areas [BIAs], such as the Downtown Long Beach Associates, Belmont Shore Business Association and Bixby Knolls BIA, provide a range of services in coordination with municipal governments, street furniture maintenance and improvements.

I would like to see more areas to sit and talk that are well lit, especially at night.

WASHINGTON RESIDENT

COMMUNITY CLEAN UP

We often underestimate the dedication that community members have in ensuring their streets and sidewalks are clean and well-maintained.

A community clean up involves local leaders who volunteer their time to improve public realm conditions in areas that are neglected, vandalized, or misused. In addition to picking up litter, community clean ups can involve graffiti removal, tree planting, landscaping, or repair of public infrastructure. Volunteers are more likely to help clean their streets, sidewalks and parks if they have a strong sense of ownership over a neighborhood. One way this can be encouraged is by inviting community members to participate early and frequently in the project planning process. People who are heavily involved in their local community can mobilize others in their local network to help with clean up and maintenance efforts.

There are several benefits to a clean ups beyond assisting City staff in maintaining the public realm. First, community clean ups are relatively easy to plan and can be done in any type of community. Also, clean ups show that people who use an area care about its appearance. Crime is less likely to occur when a neighborhood is clean and used frequently by residents and their friends. Lastly, clean ups help to strengthen community ties of those involved in the activity as everyone is working collectively towards a common goal.

In Long Beach, the City of Long Beach Department of Community Development, Neighborhood Services Bureau has the Neighborhood Clean-Up Assistance Program which helps community associations organize their own clean up event. They provide paint and paint supplies for graffiti paint-outs, brooms, shovels, rakes, gloves, dumpsters and trash bags as long as you contact them a few weeks in advance.

We had an awesome time today at our neighborhood cleanup...could not do it without Neighborhood Services Bureau and Litter-Free Long Beach!

AOC7 MEMBER IN JUNE 2016

TIMELINE FOR A TROUBLE-FREE CLEAN UP EVENT

The City of Long Beach Department of Development Services has created a Guide to Organizing a Clean-Up. Here is a timeline template that would help you plan your own community clean-up event.

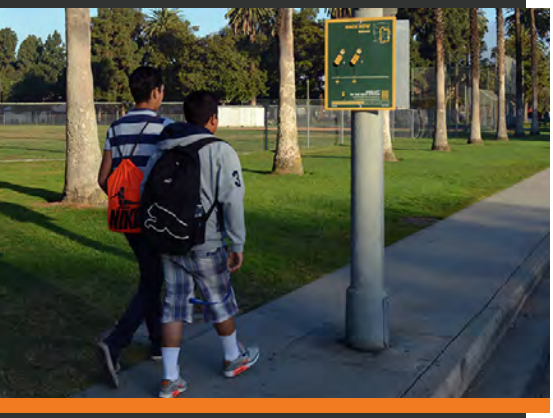
TIME BEFORE EVENT	TASK
3-4 weeks	**Meet** with your neighbors toselect a date and location for your cleanup. **Decide** who will be responsible for monitoring the dumpster during the clean up. **Decide** who will pick up and return the tools to the Neighborhood Services Bureau [NSB] warehouse.
3-4 weeks	**Submit** your completed "Neighborhood Clean-Up Assistance" application enclosed to the NSB. **Contact** Public Works at [562] 570-2725 if you need "No Parking" signs to reserve space for the dumpster on the street. **Create** a flyer to let your neighbors know about your clean up.
3-4 weeks	**YOU MUST CONFIRM that your clean-up is approved by calling [562] 570-6866.**
1 week	**Distribute** clean up flyer to your neighbors.
2 days	**Post** "No Parking" signs if needed. [The law requires that "No Parking" signs be posted 48 hours before the event.]
1 day	**Call** NSB staff to confirm your cleanup request is ready for Saturday.
Day of the Clean-Up	**Save** three car spaces where the dumpster will be placed. **Supervise** the dumpster and make sure that no hazardous waste is placed in the dumpster.
Someone Supervise the Dumpster!	**Close** dumpster doors before the dumpster is full and wait for truck driver to pick up the dumpster.

If you need to cancel your clean up, please call [562] 570-6866 as soon as possible!

Taken from the City of Long Beach Department of Development Services Neighborhood Services Bureau's Neighborhood Clean-Up Assistance Program " Your Guide to Organizing a Clean-Up".

CASE STUDY: HOUGHTON PARK FITNESS LOOP LONG BEACH

The Long Beach Department of Health and Human Services wanted to expand opportunites for physical activity and recreation in North Long Beach. Looking at the neighborhood's largest public assets, Houghton Park, City Fabrick, a local nonprofit design studio, developed temporary wayfinding signage using fun graphics and smart phone applications so that participants can learn how to do simple exercises along a half-mile loop in the park. City Fabrick used an intensive collaborative design process with community stakeholders and staff in order to develop an environmental graphic program that balances visibility and visual interest while not being distracting to other uses within the park, including nature. The fitness loop was installed to build interest and determine trends for an eventual permanent fitness loop with outdoor exercise equipment.



TOP
Wayfinding signage that both directs readers to their destination as well as encourages physical activity.
PHOTO COURTESY OF CITY FABRICK

BOTTOM
Teens travel from their house over to Houghton Park and use the wayfinding signage to guide their path.
PHOTO COURTESY OF CITY FABRICK

WAYFINDING

Wayfinding is a powerful tool that can help pedestrians navigate through the public realm more confidently.

The primary function of wayfinding is to orient people to their destination as well as help people interpret their surroundings, which is especially supportive for urban cities such as Long Beach. The infrastructure of wayfinding can take on many physical and virtual forms, including conventional signage, electronic signage, the use of landmarks and navigational aids and certain types of tactile features that employ a sense of touch. With the popularity of smartphone technology, many people are using user-friendly apps that also help with navigation.

Wayfinding can incorporate several elements but the newest approaches incorporate multisensory interaction. The human ability to interpret the senses of sound, sight, touch, smelling and taste can and have been, all utilized to perceive the world around us. That said, over half of our brains are dedicated directly or indirectly to the understanding of visual information, which in an urban environment can be overwhelming. Therefore, wayfinding should be designed to be interpreted easily by different types of users. The concept of "less is more" should be emphasized in design and should be legible and attractive from long and short distances. Successful wayfinding content should help to connect navigational gaps and highlight elements such as paths, districts, areas of interest, landmarks and other helpful information. Incorporating technology into this design, such as downloadable information, can increase its utility.

Long Beach is the process of updating it's wayfinding system. The City is currently surveying the various signage systems in an effort to reduce visual clutter, eliminate redundancies and create a cohesive system that can be easily read by tourists and locals alike.

Architectural signage and wayfinding isn't about building a nicely designed sign. It's about the information content and the analysis of the space or place that you're trying to move people through and coming up with a strategy of how you make this big complex thing understandable to the user.

SUE LABOUVIE, WAYFINDING EXPERT

OPEN STREETS

Open streets events are intended to help people rethink the ultilty of streets as more than paths where vehicles travel and park.

With their rise in popularity, cities throughout the nation have started to host open streets events, which involves temporarily closing streets to automobile traffic and utilizing the street as a public space for recreation and socializing. While street fairs and block parties provide positive community benefits, they do not support the broad range of activities related to alternative transportation.

Recent studies have attempted to quantify the public health, environmental, economic and social benefits of these events. Beyond the exercise that people are getting by walking or bicycling, a majority of these events incorporate a physical activity component into their program. Environmentally, temporarily removing automobiles from the road has shown significant improvements to air quality. Economically, a 2013 UCLA study found that businesses that were directly adjacent to the event experienced a 10% increase in sales, with businesses that were actively participating in the event experiencing a 57% increase in sales. However, the most apparent benefit to an open streets event is the social impact that offering a new type of public space has on a community.

MOP P 2–10

Support the temporary closure of streets for community and commercial activity that encourages residents to see their streets as public spaces and promote biking and walking in the City.

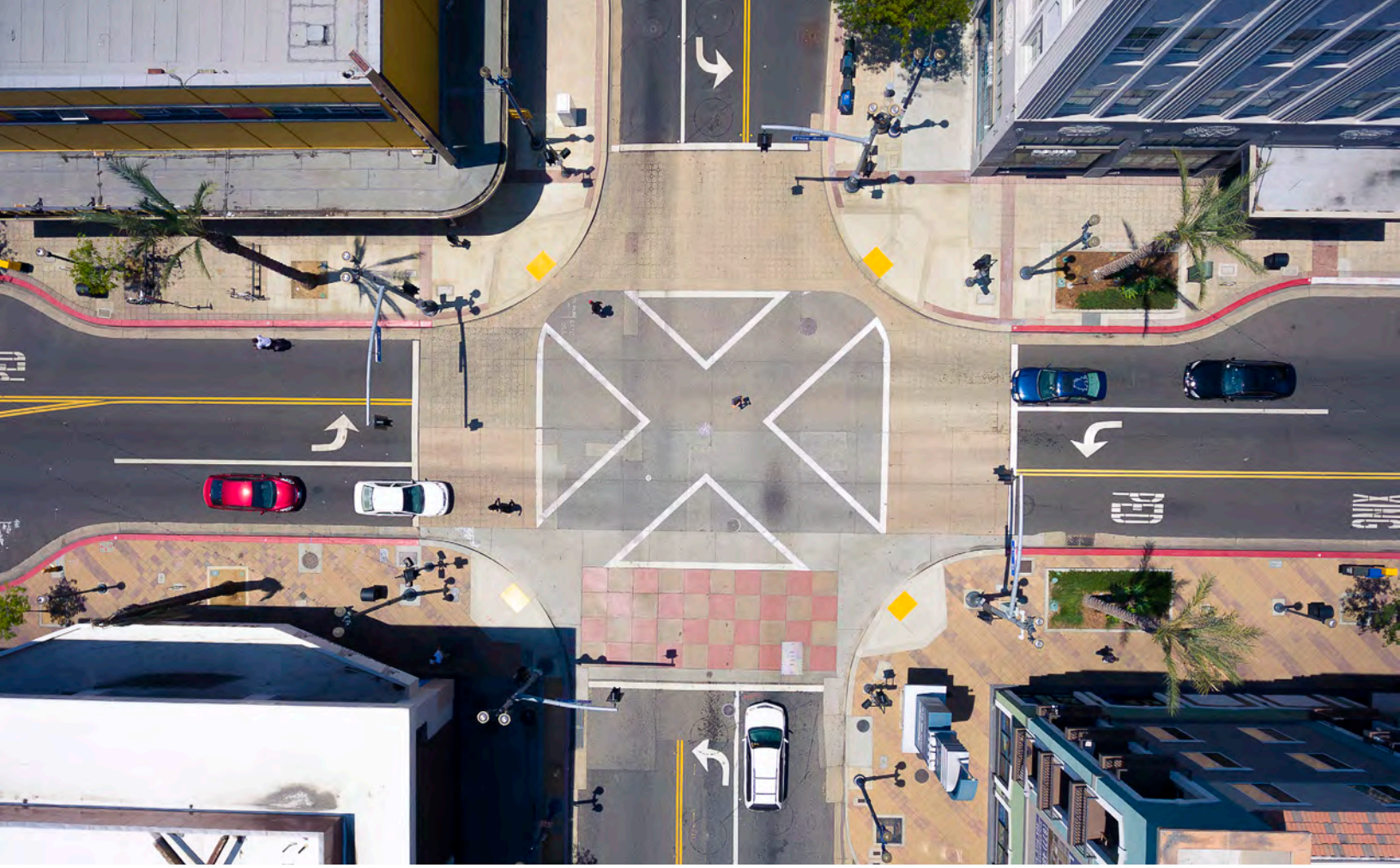
MOP IM 28

Actively support ciclovias [ie, bike festivals] and other “open street” activities in Long Beach.

LONG BEACH BEACH STREETS

Beach Streets is Long Beach's annual open streets event that started in 2015 in a partnership with Metro. The goal of this popular event is to showcase local neighborhoods, businesses and parks, as well as local transit, health and recreation options. Approximately 50,000 people participated in the most recent event, giving Long Beach residents a new perspective on how their streets can be utilized.

TOP
People at the 2016 Beach Streets Downtown event
PHOTO COURTESY OF BEACH STREETS



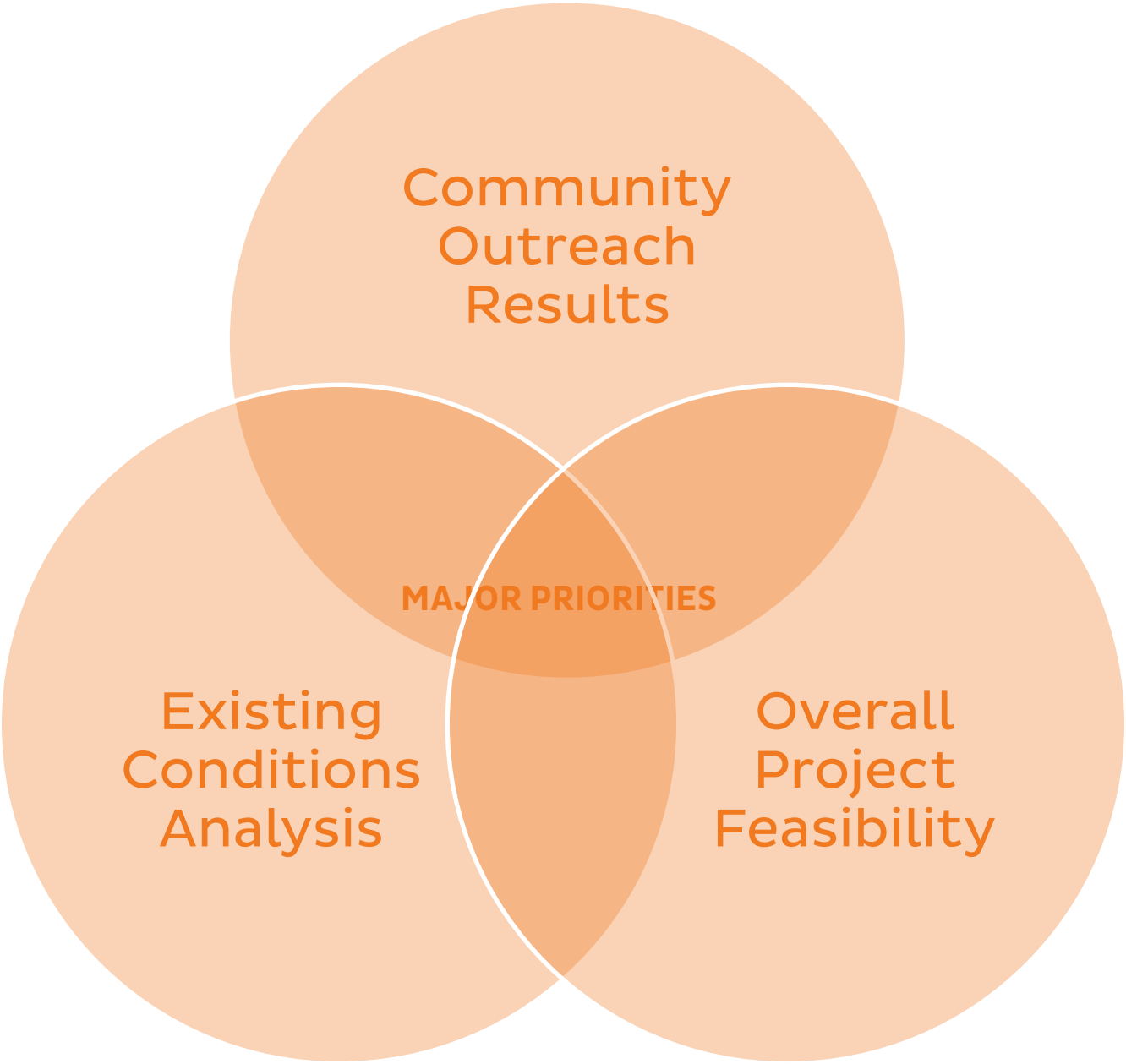
Priority Projects

Achieving the ambitious goals of the CX3 Pedestrian Plan requires a strategic approach to implementation. The Projects Matrix suggests short-, mid- and long-term projects that have been determined based on variety of factors highlighted in previous chapters as well as the city's Capital Improvement Program. Aligning the analysis of the area's existing conditions with community priorities, industry best practices and overlapping goals projects provides the basis for where to start.

Proposed short-term projects should have a greater ability to immediately improve safety and walkability in areas with crucial need. Projects that demonstrate effectiveness in improving walkability, but might take a longer time to design and implement, should be considered as either mid-term or long-term projects. The prioritization also takes into consideration geographic diversity and overall effectiveness in addressing the needs of multiple CX3 neighborhoods.

Support for priority projects can be captured in a variety of ways. Projects that are easier to implement can be integrated into current Capital Improvement Programming, such as a street resurfacing or a street restriping, which can prove to be cost-effective and timely. A project can be met with greater community and political support if it builds upon the success and momentum of existing or ongoing pedestrian planning efforts. Gaining the support of political or community leaders and having them champion, or lead, projects throughout its entire duration can greatly improve its feasibility. Engaging other city departments and government agencies as partners can also substantially affect project delivery and success.

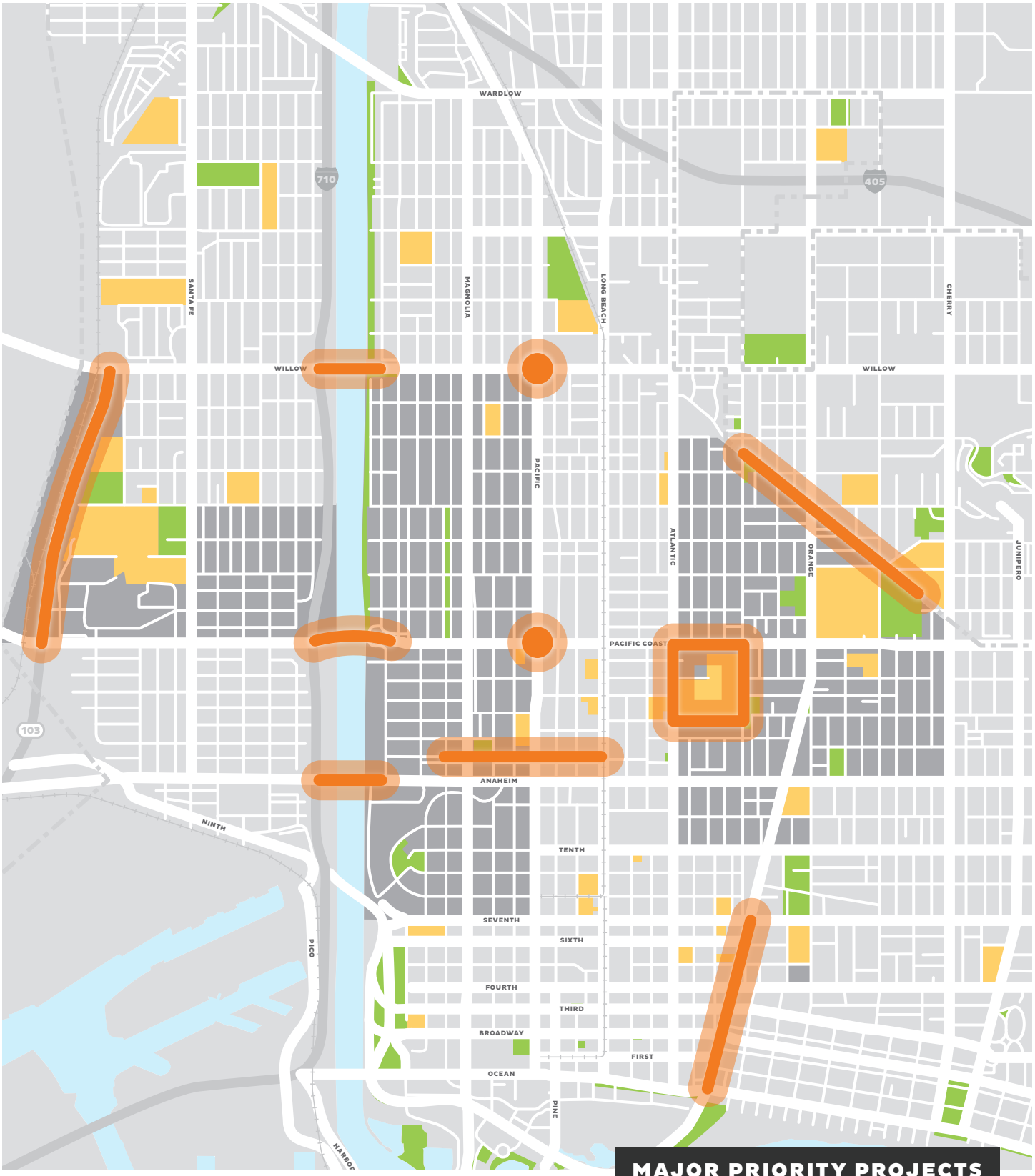
MAJOR PRIORITIES



In total, there were 11 short-term, nine mid-term, and ten long-term priority projects identified for implementation. Of these 30 projects, there are eight projects that were highlighted as major priorities. Three criteria were considered when determining these eight projects. The first consideration was the overall reception the project received during the second round of community workshops. As presented in the previous chapter, these workshops were conducted throughout the CX3 area and garnered hundreds of responses. The second consideration is based on the findings presented in the Existing Conditions chapter which analyzes the walkability of the CX3 neighborhoods. Lastly, each project's feasibility was considered, which includes the ability to obtain funding as well as whether or not the project is currently under study. The following pages present all of the 30 priority projects as well as the major priority priorities that are proposed.

PROJECTS MATRIX

	PROJECT	CX3 NEIGHBORHOOD	PRINCIPLES
UNDERWAY	15th Street Neighborhood Connector	Poly, Washington, Whittier	
	Alamitos Avenue Road Diet	Franklin, Poly	
	Daisy Avenue Neighborhood Connector	Edison, Lafayette, Washington	
	Pacific Avenue Road Diet	Lafayette	
	Willow Street Improvements	Burnett, Lafayette	
	Villages at Cabrillo Transit Hub	Cabrillo	
SHORT TERM	14th Street Greenbelt Enhancements	Washington	
	20th Street Neighborhood Connector	Burnett, Lafayette, Mary Butler	
	Alamitos Avenue Complete Street	Franklin	
	West Anaheim Street Complete Street	Edison, St. Mary, Washington	
	East Anaheim Street Complete Street	Franklin, Poly, St. Mary, Whittier	
	ADA Curb Ramps	All Neighborhoods	
	Orange Avenue Road Diet	Mary Butler	
	Pacific Avenue Safe Intersections	Lafayette, Washington	
	Santa Fe Avenue Complete Steet	Cabrillo	
	West Long Beach Connectors	Cabrillo, Lafayette, Edison, Washington	
	Willmore City Court and Ways	Edison	
MID TERM	7th Street Complete Street	Burnett, Lafayette, Mary Butler	
	10th Street Complete Street	Edison, St. Mary, Washington	
	Burnett Street Neighborhood Connector	Lafayette, Edison, Washington	
	Drake Park/Cesar Chavez Park Connector	Edison	
	Green TI Implementation	Cabrillo	
	Hill Street Pedestrian/Bike Bridge	Cabrillo, Lafayette	
	Poly High School Walking Loop	Poly	
	Rosa Parks Shared Street	Whittier	
	Walnut Avenue Neighborhood Connector	Edison, St. Mary, Washington	
LONG TERM	8th Street Neighborhood Connector	Franklin	
	Atlantic Avenue Complete Street	Burnett, Poly, St. Mary	
	Cedar Avenue Safe Route	Lafayette	
	Cherry Avenue Pedestrian District	Whittier	
	Daisy Avenue Greenbelt Enhancements	Lafayette	
	West Hill Street Safe Route	Cabrillo	
	Magnolia Industrial Area Accessibility	Washington	
	Orange Avenue Safe Route	Franklin	
	Pacific Electric Greenbelt Connector	Mary Butler	
	Pacific Coast Highway Complete Street	All Neighborhoods	



MAJOR PRIORITY PROJECTS

Street Block
CX3 Project Site
Project Segment

0 0.5 mi 1 mi

ALAMITOS AVENUE ROAD DIET

The Alamitos Avenue Road Diet Project extends from 7th Street to Pacific Coast Highway and will strengthen north-south connections to Gumbiner Park, the Museum of Latin American Art and the Pacific Island Ethnic Art Museum. In total, the project will cost approximately $2 million and is financed by a combination of federal, state and local resources. As both a pedestrian priority area and a City-identified safe routes to school path, the sidewalks will be enhanced to focus on pedestrian safety. The project was also identified in the City's Mobility Element as a major link to the City's bicycle network and includes new bicycle lanes. The project was completed in March 2016 with new continental crosswalks and curb extensions.

TOP
Enhanced Alamitos Avenue Bicycle Lane shown in front of the Pacific Island Ethnic Art Museum.
PHOTO COURTESY OF CITY FABRICK

BOTTOM
Another view of the Alamitos Avenue Road Diet showing the driving, bicycle and parking lanes.
PHOTO COURTESY OF CITY FABRICK

PROJECTS UNDERWAY

A 15TH STREET NEIGHBORHOOD CONNECTOR

Design and construct new neighborhood connector, generally traversing 15th Street Corridor as well as 14th Street Park to the West. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.

B ALAMITOS AVENUE ROAD DIET

Street and sidewalk improvements to improve safety for pedestrians, bicyclists and motorists by removing one lane of traffic in each direction with enhancements to the existing bicycle lane.

C DAISY AVENUE NEIGHBORHOOD CONNECTOR

The five-mile long Martin Luther King Jr/California Avenue neighborhood connector will provide a North – South bike route between 3rd Street and the northern city boundary. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.

D PACIFIC AVENUE ROAD DIET

The class II bicycle facilities [bike lanes] on Pacific Avenue is to be extended south from Willow Street to Pacific Coast Highway utilizing surplus roadway.

E WILLOW STREET IMPROVEMENTS

This project enhances pedestrian amenities along Willow Street between Signal Hill and the Los Angeles River, including decorative paving and new landscape treatment.

F VILLAGES AT CABRILLO TRANSIT HUB

This project establishes a multi-modal transit center within the Villages at Cabrillo campus including multiple bus layover spaces, shelters and benches, secure bicycle parking and pedestrian infrastructure enhancements. The new transit facility will be located within a transit dependent residential population while providing amenities for bus drivers.

UNDERWAY

Street Block
CX3 Project Site
Project Segment

0 0.5 mi 1 mi

SHORT TERM PROJECTS [2-4 YEARS]

A 14TH STREET GREENBELT ENHANCEMENTS

Unify 14th Street Park and Seaside Park as single greenbelt by closing Cedar Avenue, Locust Avenue and Palmer Court through the 14th Street Park and acquiring and improving the 0.50 acre 14th Street parcel at Long Beach Boulevard. Additional improvements include road diets, traffic calming and decorative paving.

B 20TH STREET NEIGHBORHOOD CONNECTOR

Design and construct new 3-mile long neighborhood connector, generally traversing 20th Street, the Pacific Electric Greenbelt and the western boundary of Long Beach. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.

C ALAMITOS AVENUE COMPLETE STREET

As the second phase of the Alamitos Avenue Road Diet, this project continues the improvements for pedestrians, bicyclists and motorists south from 7th Street by removing one lane of traffic in each direction with enhancements to the existing bicycle lane.

D WEST ANAHEIM COMPLETE STREET

Provide both vehicular traffic calming and pedestrian crossing enhancements along Anaheim Street between San Francisco Avenue and Atlantic Avenue. This includes additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks & landscaped medians.

E EAST ANAHEIM COMPLETE STREET

Provide both vehicular traffic calming and pedestrian crossing enhancements along Anaheim Street between Junipero Avenue and Atlantic Avenue. This includes additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks & landscaped medians.

F ADA CURB RAMPS

Install ADA compliant curb ramps at all remaining intersections not currently equipped in the CX3 area.

G ORANGE AVENUE ROAD DIET

Reconfigure Orange Avenue between Pacific Coast Highway and Hill Street add bicycle facilities, expand sidewalks and add other public amenities; reconfiguration of the intersection of Orange Avenue and 20th Street.

H PACIFIC AVENUE SAFE INTERSECTIONS

Reconfigure the intersections and controls of Pacific Avenue at Willow Street and Pacific Coast Highway to improve safety, reduce conflicts and enhance visibility.

I SANTA FE AVENUE COMPLETE STREET

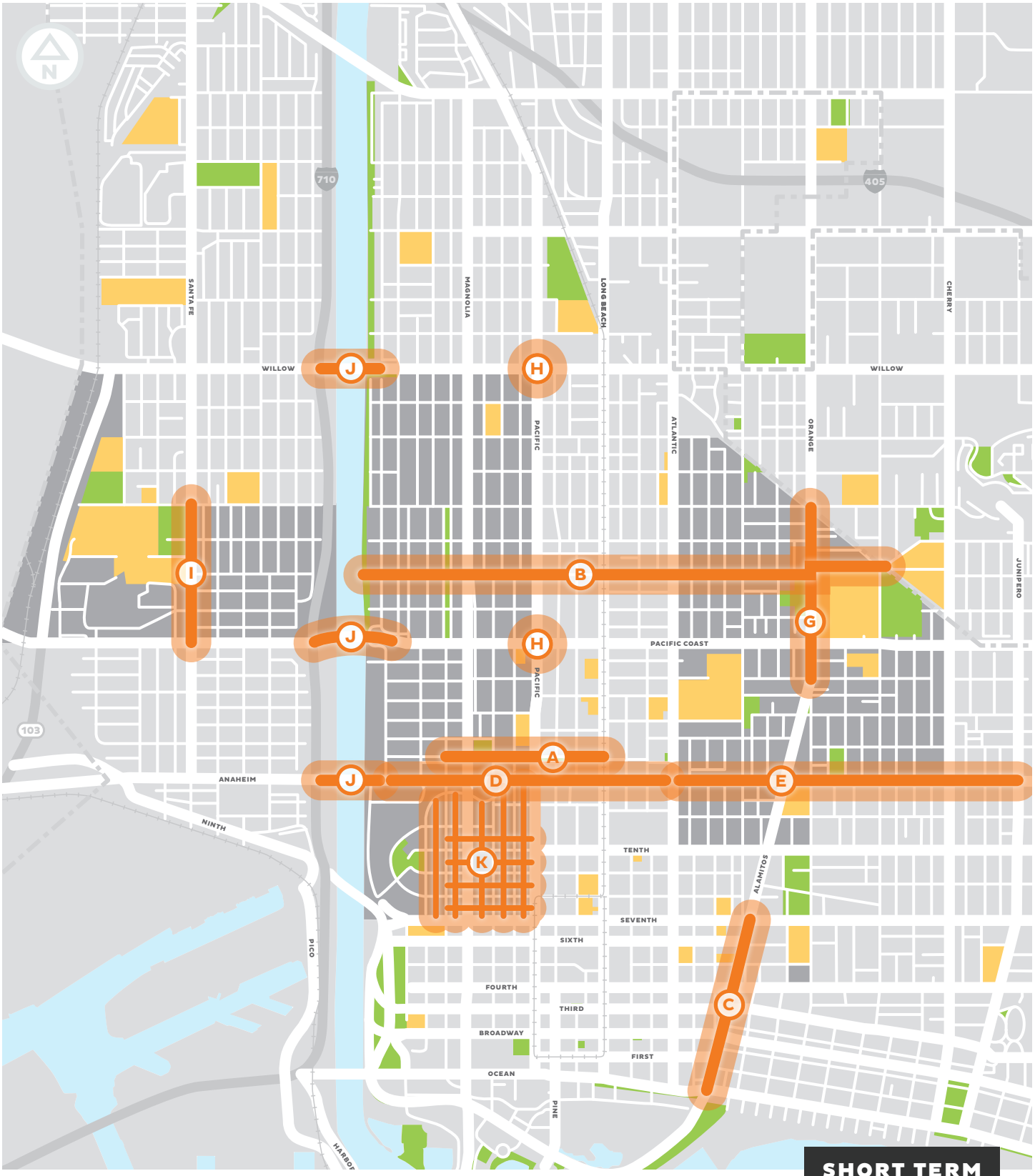
Using surplus roadway, Santa Fe Avenue would be reconfigured to add class II bicycle facilities [bike lanes] while maintaining current capacity; additional marked crosswalks and controlled intersections and additional landscaping.

J WEST LONG BEACH CONNECTORS

Provide suitable sidewalks along Anaheim Street, Pacific Coast Highway and Willow Street between Golden Avenue and Fashion Avenue and minimizes conflicts at the interchange with the I-710 Freeway.

K WILLMORE CITY COURTS AND WAYS

Design and implement pedestrian enhancements and sustainable practice for Willmore City Courts and Ways to improve pedestrian safety, livability and connectivity.

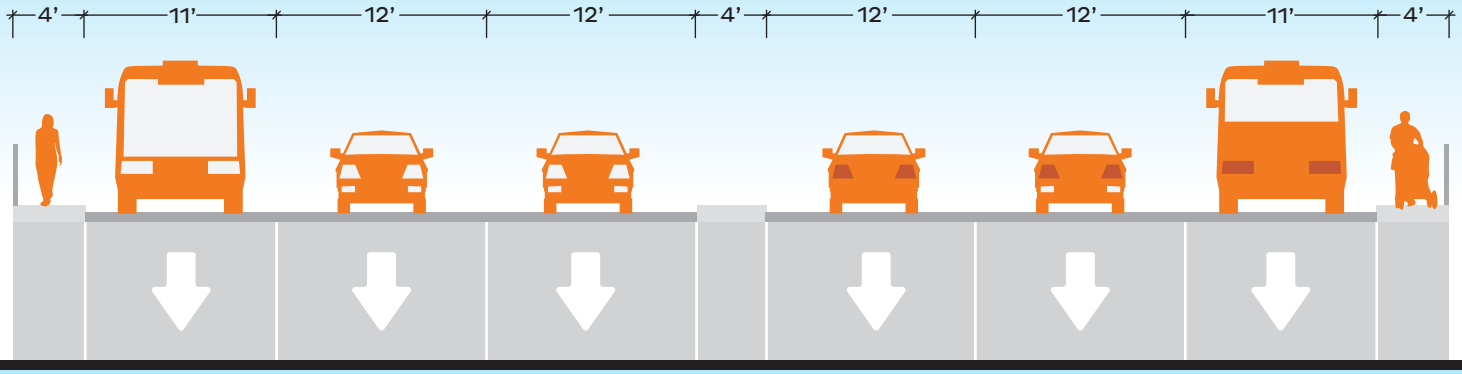


SHORT TERM

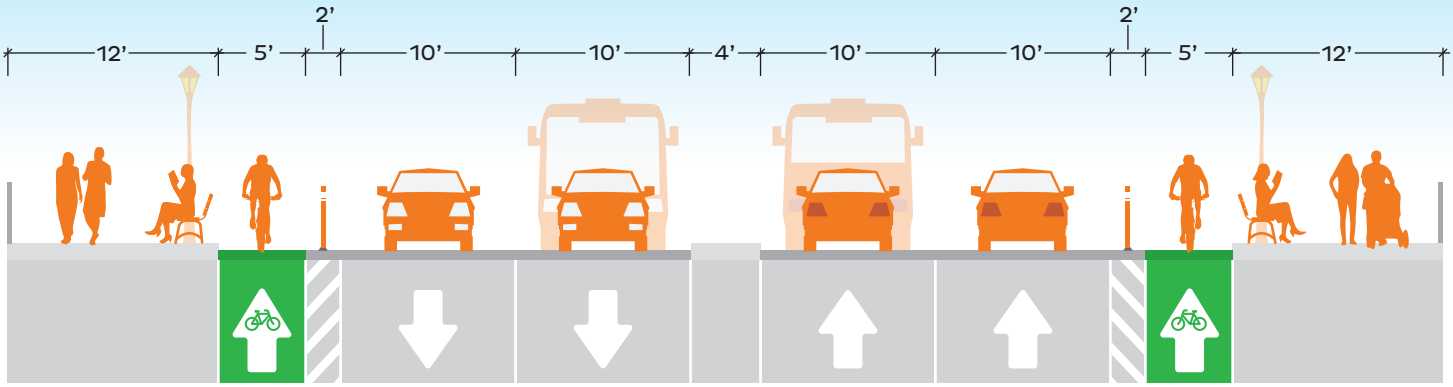
Street Block
CX3 Project Site
Project Segment

0 0.5 mi 1 mi

Existing Section at Willow Street



Proposed Section at Willow Street



West Long Beach Connectors

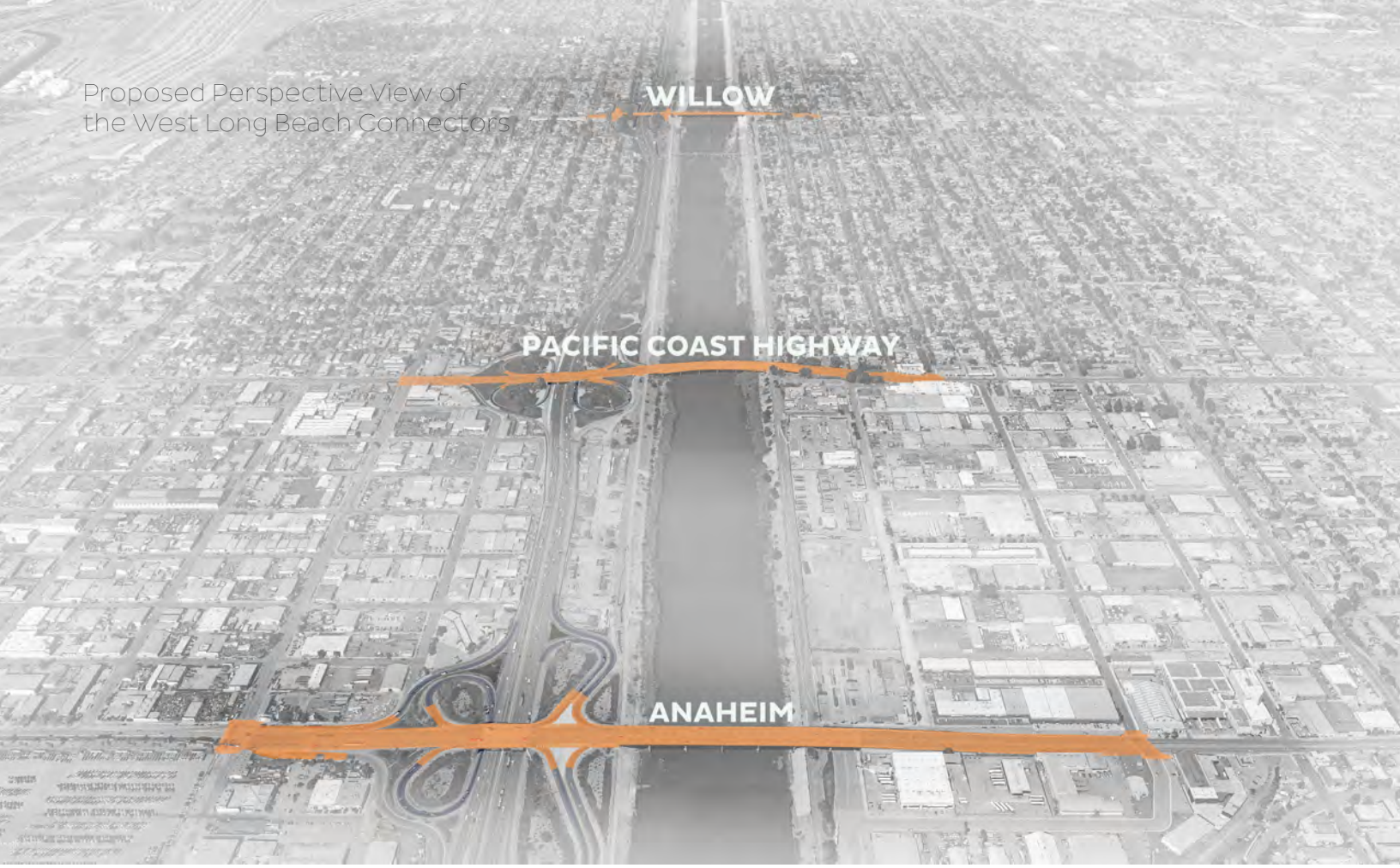
CX3 Neighborhood

Cabrillo, Lafayette, Edison, Washington

Principles

Project Summary

It is often perceived that the Los Angeles River and the 710 Freeway divide the City into two halves. In the CX3 area, Willow Avenue, the Pacific Coast Highway and Anaheim Street are the only east-west streets that connect the two sides together. However, the walking conditions of these bridges can be feel unsafe at times given the narrow sidewalks, unenhanced intersections, fast-moving vehicles and lack of appropriately scaled lighting at night. This project intends to strengthen east-west connections by proposing enhancements to the roadway configuration that better accommodates the needs of pedestrians and bicyclists. This would involve performing a road diet and reallocating that space to widen the sidewalk and create a protected bike lane. This would also help to calm fast-moving traffic, especially vehicles that are driving fast due to the freeway transition. For pedestrians, the additional right-of-way space will allow for elements such as benches and pedestrian lighting that make sidewalks feel comfortable to walk on.



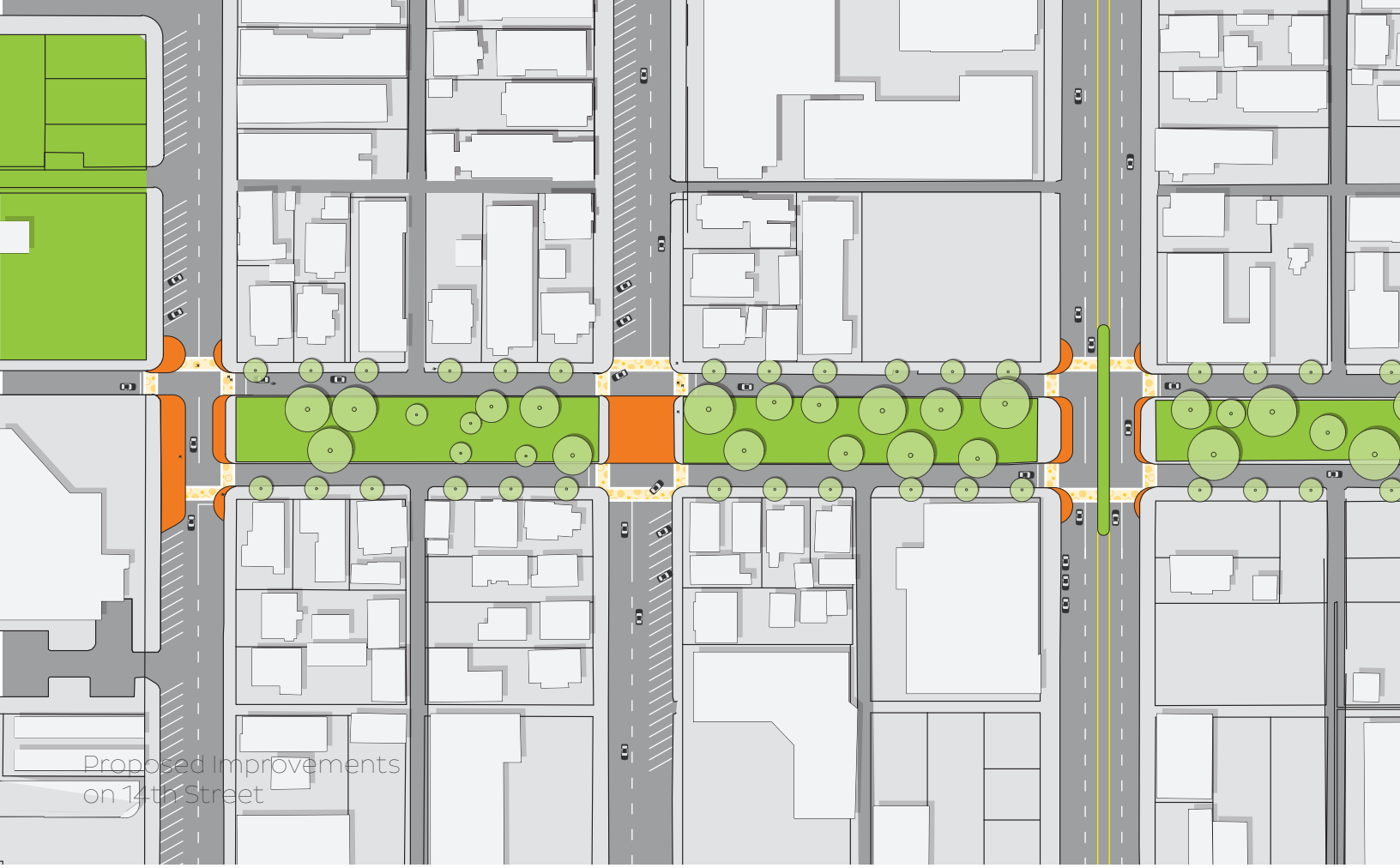
Proposed Perspective View of the West Long Beach Connectors

Urban Design Elements

The existing roadway configuration of the three bridges prioritizes vehicles over other modes of transportation. By reclaiming one traffic lane in each direction, there is room that can be dedicated for pedestrians and bicyclists.

Crossing the Los Angeles River feel dangerous given the small width of the sidewalk and proximity to fast-moving vehicles. If the sidewalk were to be extended, this would greatly improve walkability and east-west connections.

The intersections of Willow Avenue, Pacific Coast Highway and Anaheim Street and the 710 Freeway on- and off-ramps can be enhanced for safety with the addition of continental crosswalks.



14th Street Greenbelt Enhancements

CX3 Neighborhood

Washington

Principles

Project Summary

The City of Long Beach is studying the potential to transform 14th Street from Daisy Avenue to Long Beach Boulevard into an enhanced greenbelt. A greenbelt is the conversion or improvement of undeveloped land for recreational use or environmental protection. This project would close Cedar Avenue and Locust Avenue through the 14th Street Park and acquire and improve the 0.50 acre 14th Street parcel at Long Beach Boulevard, unifying 14th Street Park and Seaside Park into a single greenbelt. Improvements would also include a road diet, traffic calming and decorative paving along the span of the project. Additional benefits to converting 14th Street into a greenbelt include:

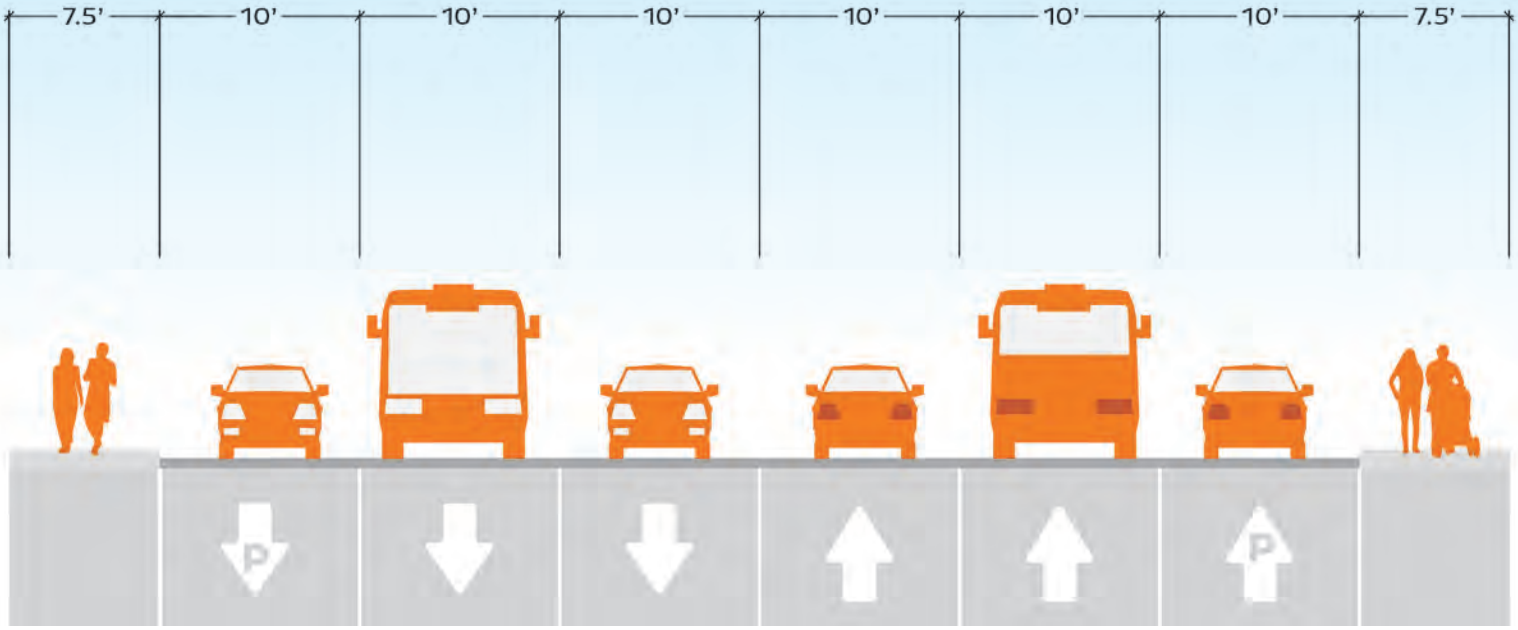
- providing public open space to the Washington neighborhood, an area with a limited amount of parks and playgrounds
- enhance east-west connectivity for pedestrians
- increase safety for students of George Washington Middle School
- the potential to redevelop the parcel on 14th Street and Long Beach Boulevard into a community health asset

Relevant Case Study

South Park Blocks (Portland, OR)

The South Park Blocks is a half-mile long greenbelt located in downtown Southwest Portland. This twelve-block greenspace connects to the center of Portland State University and is visited by thousands of people each year. The park contains several notable statues, pieces of public art, and over 300 trees. The primary Portland Farmers Market is also hosted here every Saturday from March to December as well as many other cultural events and student activities. Although smaller in size, the 14th Street Greenbelt can offer similar public benefits and a greater quality of life.

Existing Alamitos Avenue Section



Alamitos Avenue Complete Street

CX3 Neighborhood

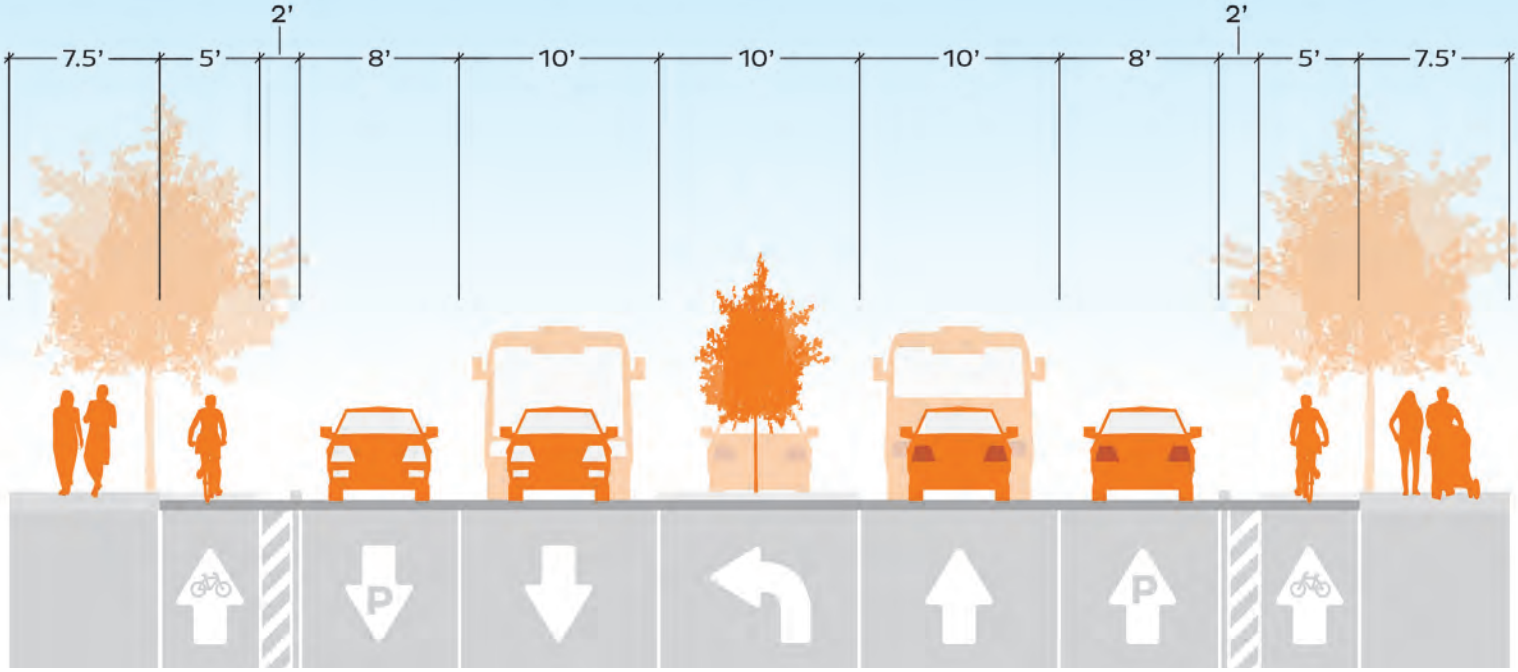
Washington

Principles

Project Summary

Identified as a pedestrian-priority area in the City's Mobility Element, Alamitos Avenue, from 7th Street to Ocean Boulevard, has the potential to be a strong north-south connection for pedestrians, bicyclists, and motorists alike. With this project, students of Long Beach City College as well as seven other local schools would have a safer and more comfortable way walk or bike to the Ocean and Downtown. Currently, the roadway is typically designed with six driving lanes, including two parking lanes, and 7.5' feet of sidewalk space on each side for pedestrians. This project would continue the road diet configuration that has been implemented from 7th Street to Pacific Coast Highway by removing one lane of traffic in each direction with enhancements to the existing bicycle lane. In addition a protected bicycle lane, improvements would include a landscaped median in conjunction with the center turn lane as well as regular street trees and curb extensions. Reconfiguration of the roadway should be coordinated with a road resurfacing and sidewalk repairs, such as what was done in the first phase, so that the project can be done more efficiently and economically.

Proposed Alamitos Avenue Section



Relevant Case Study

Alamitos Avenue Road Diet

The Alamitos Avenue Road Diet Project extends from 7th Street to Pacific Coast Highway and will strengthen north-south connections to Gumbiner Park, the Museum of Latin American Art and the Pacific Island Ethnic Art Museum. In total, the project will cost approximately $2 million and is financed by a combination of federal, state and local resources. As both a pedestrian priority area and a City-identified safe routes to school path, the sidewalks will be enhanced to focus on pedestrian safety. The project was also identified in the City's Mobility Element as a major link to the City's bicycle network and includes new bicycle lanes. The project was completed in March 2016 with new continental crosswalks and curb extensions.

ADA Curb Ramps

CX3 Neighborhood

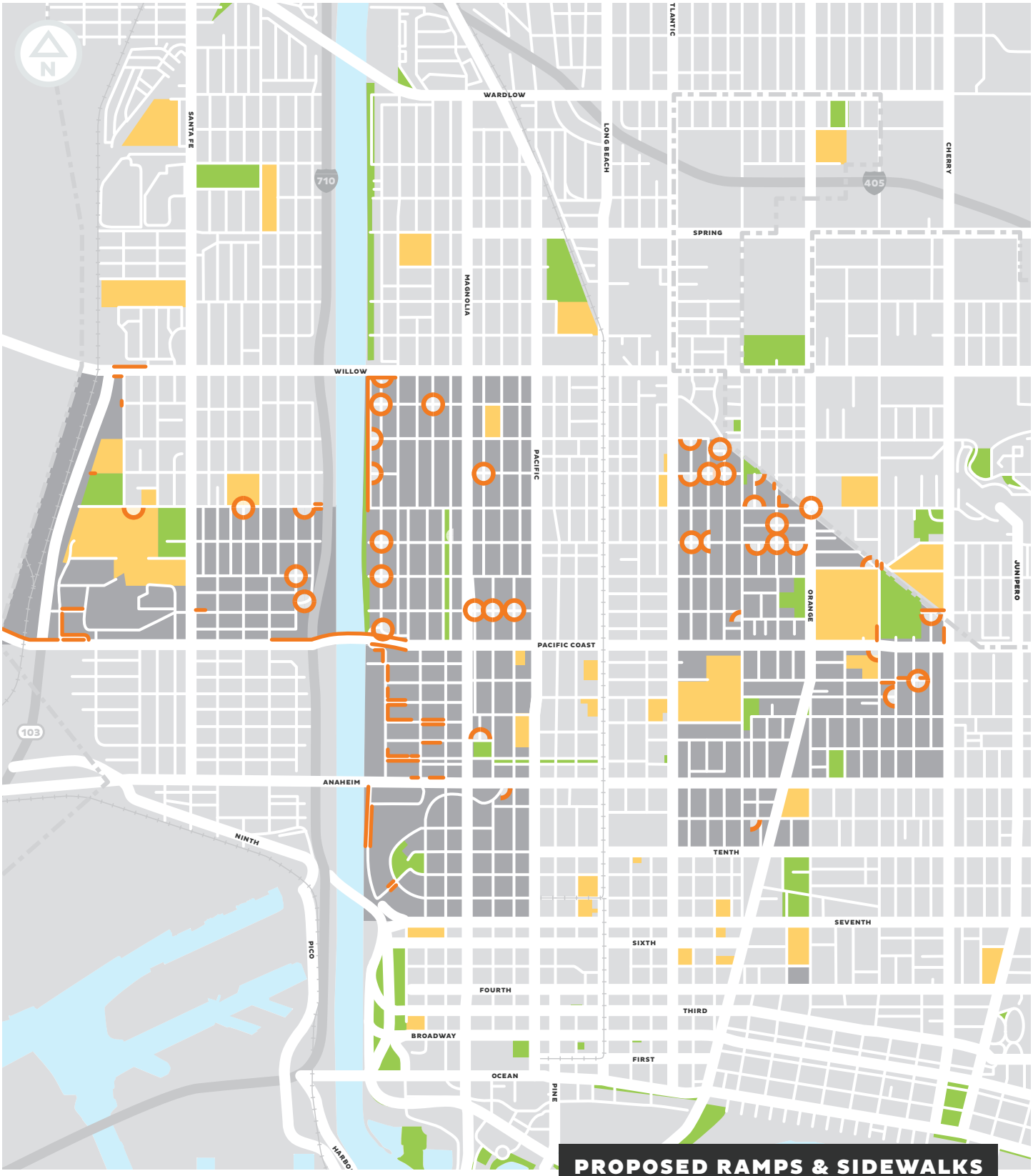
All Neighborhoods

Principles

Project Summary

This project involves installing curb ramps at the intersections identified in Exisiting Conditions chapter [see map to the right] that are not currently equipped in the CX3 area. There have been several recent instances where people with limited mobility could not cross the street and were forced to use driveways, which led to collisions with vehicles; the addition of curb ramps will help to ensure people with different mobility needs will be able to cross the street safely. Curb ramps need to meet ADA requirements, such as having a maximum rise of 6 inches with a minimum clear width of 36 inches and should have truncated domes, or other tactile surfaces. In addition, curb ramps should be bidirectional, or two perpendicular curb ramps, where applicable, as to allow pedestrians to be aligned with the crossing direction while waiting to cross the street. Benefits to ADA compliant curb ramps include:

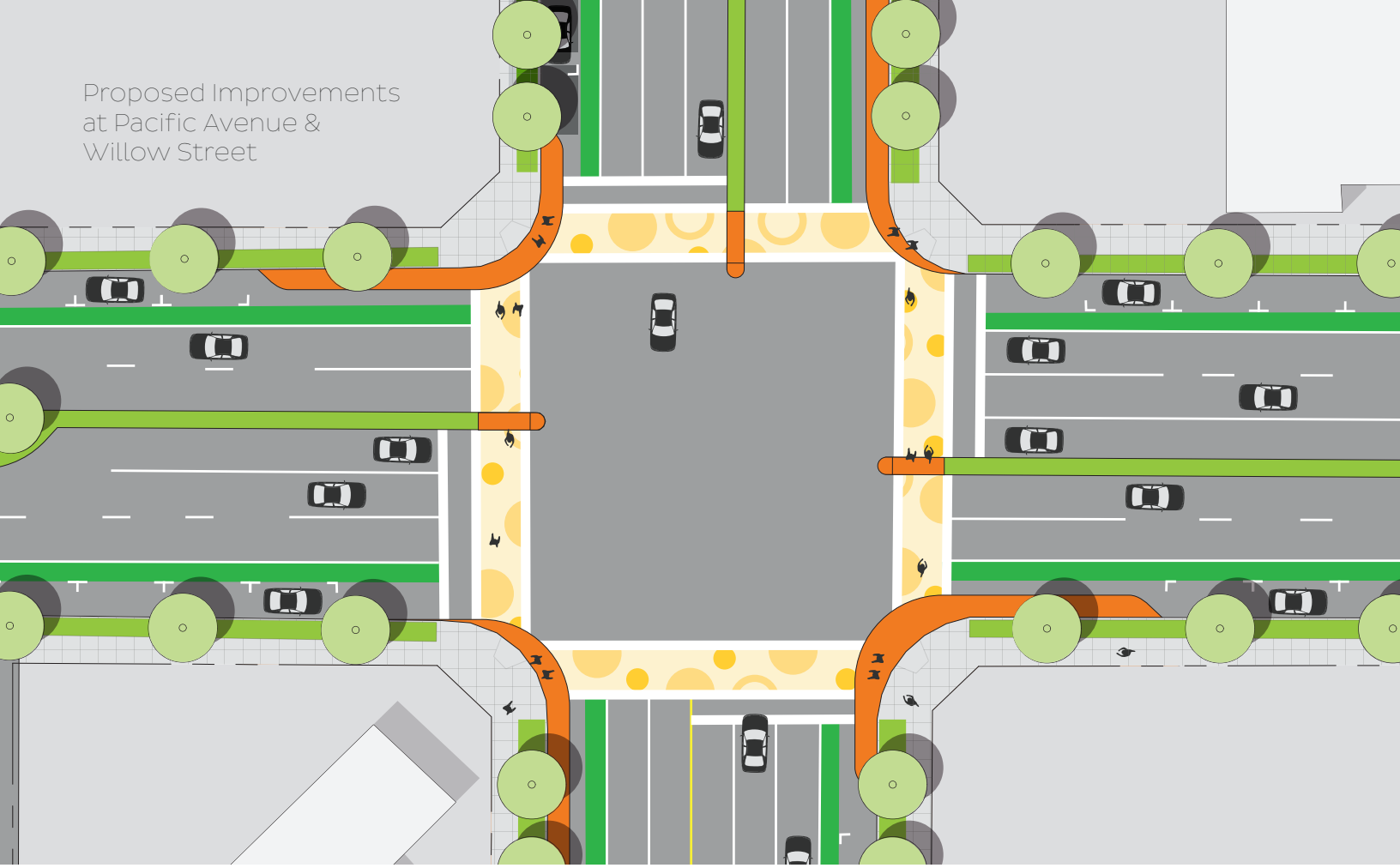
- providing pedestrian access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, bicycles and pedestrians who have trouble stepping up and down high curbs
- meeting the government's ADA requirement of states and local governments to install curb ramps at pedestrian intersections which they are responsible when they construct or alter streets, roads, highways and pedestrian walkways where those intersections are located



PROPOSED RAMPS & SIDEWALKS

- Street Block
- CX3 Project Site
- Proposed Curb Ramp
- Proposed Sidewalk

0 0.5 mi 1 mi



Pacific Avenue Safe Intersections

CX3 Neighborhood

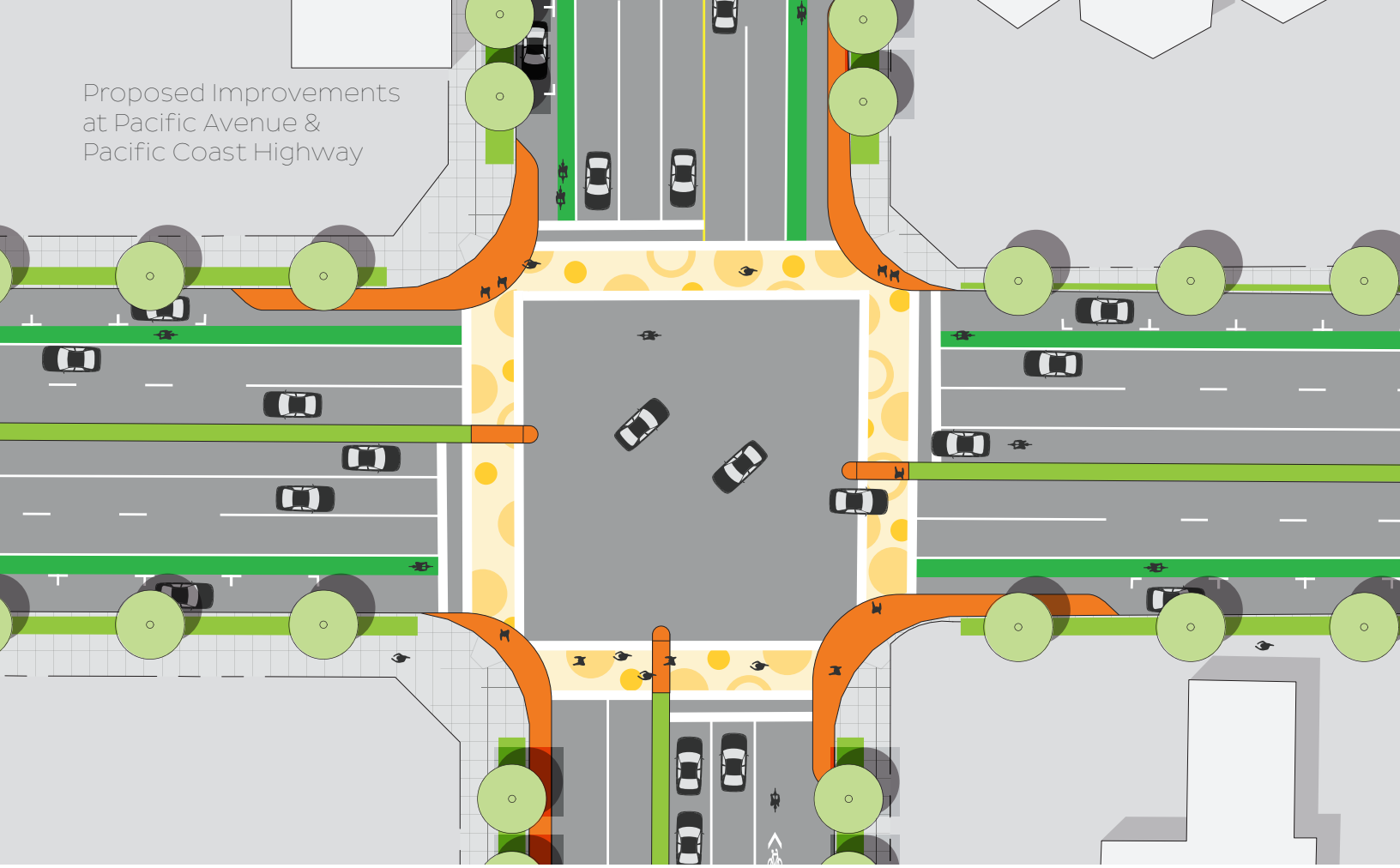
Lafayette , Washington

Principles

Project Summary

This project intends to reconfigure the intersections and the traffic controls at two intersections: Pacific Avenue and Willow Street and Pacific Avenue and the Pacific Coast Highway. As presented in the Existing Conditions chapter, these two intersections have the highest level of severe pedestrian collisions from 2004-2014. Currently, Pacific Avenue is considered a major vehicular thoroughfare into Downtown Long Beach and both Willow Street and the Pacific Coast Highway have significant pedestrian activity. A combination of fast-moving vehicles, increased trips, distractions from mobile devices, long crossing distances and lack of mid-block crossing locations have resulted in these dangerous hotspots. Improvements can include installing advance stop lines, enhanced crosswalks, enhanced intersections, corner curb extensions, driveway consolidation, crossing islands and phasing out pedestrian actuators to always provide dedicated signal phases for pedestrian movement. Benefits to this project include:

- increased safety for both pedestrians and motorists at two the locations with the highest level of pedestrian-involved collsions in the CX3 area.
- a case study to pilot intersection improvements.



Urban Design Elements

On Pacific Avenue, the distance to cross Willow Street is approximately 80 feet and the distance to cross Pacific Coast Highway is approximately 74 feet. Curb extensions can help to reduce this distance and can also serve as a landing platform for buses.

The existing roadway configuration of Pacific Avenue prioritizes vehicles over other modes of transportation. By reclaiming one traffic lane in each direction, there is room that can be dedicated for pedestrians and bicyclists.

In addition to installing curb extensions at the intersection, refuge islands allow pedestrians who cannot cross the street on time to safely wait until they can complete their crossing.

MID TERM PROJECTS [5-8 YEARS]

A 7TH COMPLETE STREET

Include traffic calming and pedestrian crossing enhancements along 7th Street between Cherry Avenue and the Los Angeles River. This includes additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks and landscaped medians. Traffic signals should be synchronized to modulate traffic speeds to within the allowed limits.

B 10TH COMPLETE STREET

Include traffic calming and pedestrian crossing enhancements along 10th Street between Cherry Avenue and Pacific Avenue. This include additional marked crosswalks with traffic signals, enhanced crosswalks and landscaped medians. Traffic signals should be synchronized to modulate traffic speeds to within the allowed limits.

C BURNETT STREET NEIGHBORHOOD CONNECTOR

Design and construct new 2-mile long neighborhood connector, generally traversing Burnett Street the Pacific Electric Greenbelt and the western boundary of Long Beach. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.

D DRAKE /CESAR CHAVEZ PARK CONNECTOR

Integrate programing, landscape design and circulation network of the existing and proposed Cesar Chavez Park expansion and the new Drake Park Greenbelt. The pedestrian and bicycle path network would extend from Ocean Boulevard to Anaheim Street between the residential neighborhoods and the east bank of the Los Angeles River.

E GREEN TI IMPLEMENTATION

Create new public open space as well as dedicated pedestrian and bicycle facilities between Pacific Coast Highway and Willow Street along the Terminal Island Freeway corridor utilizing surplus public right-of-way created through the freeway's transformation to a local road.

F HILL STREET PEDESTRIAN/BIKE BRIDGE

Develop a pedestrian and bicycle bridge along Hill Street, connecting the east bank of the Los Angeles River and West of the Interstate 710 Freeway. To avoid effecting flood control hydrology, the existing utility causeway would be removed and incorporated into the new bridge.

G POLY HIGH SCHOOL WALKING LOOP

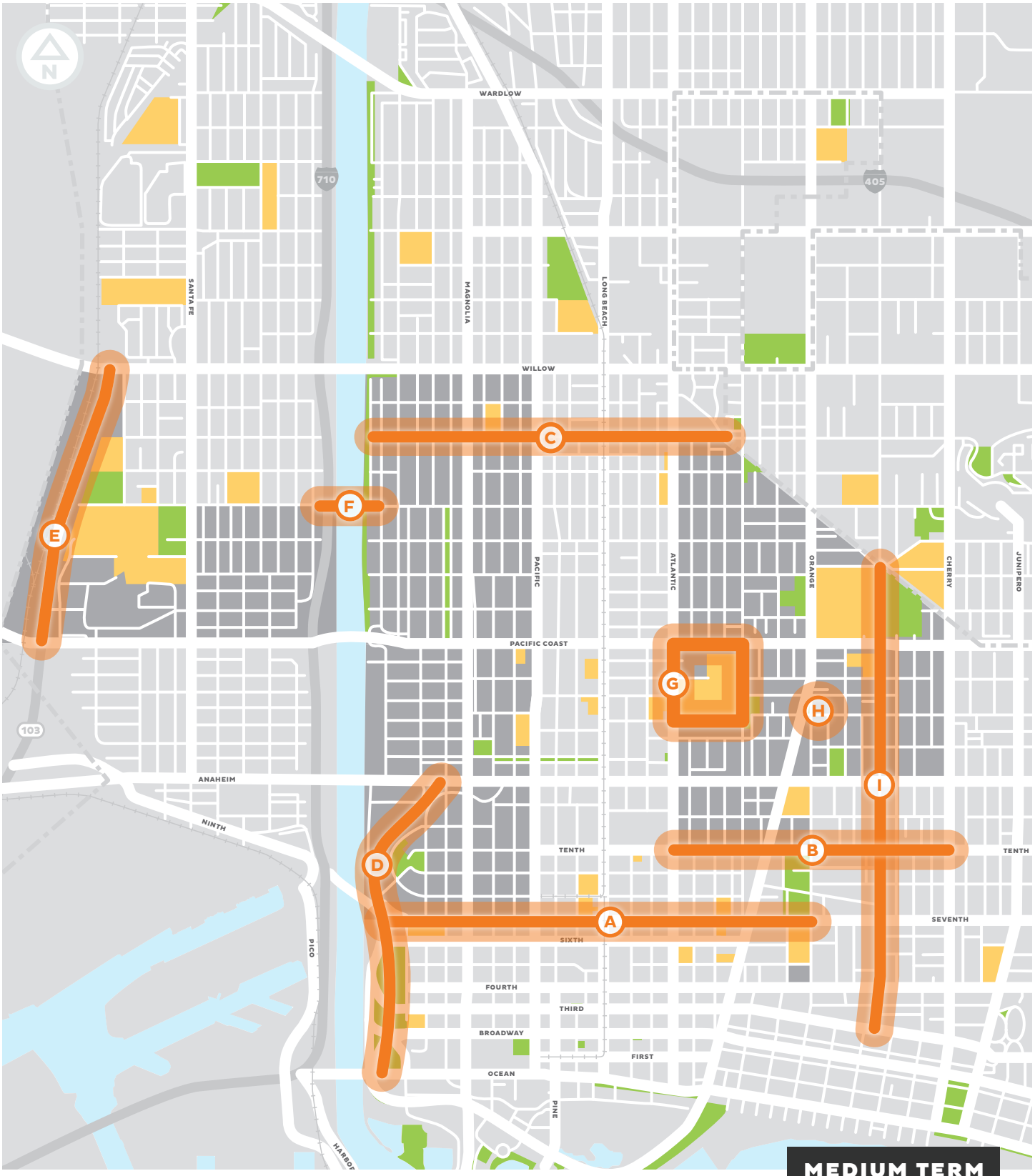
Establish a mile long walking loop around the Poly High School campus using adjacent sidewalks on Atlantic Avenue, Pacific Coast Highway, Martin Luther King Jr. Avenue and 15th Street. The project includes driveway improvements, curb extensions and stabilized decomposed granite trail utilizing adjacent setbacks.

H ROSA PARKS SHARED STREET

Expand Rosa Parks Park by narrowing Alamitos Avenue and Orange Avenue between 15th Street and 16th Street. It also includes traffic management and calming as well as decorative, raised pavement to the remaining roadway of Orange Avenue adjacent to the park.

I WALNUT AVENUE NEIGHBORHOOD CONNECTOR [PHASE I]

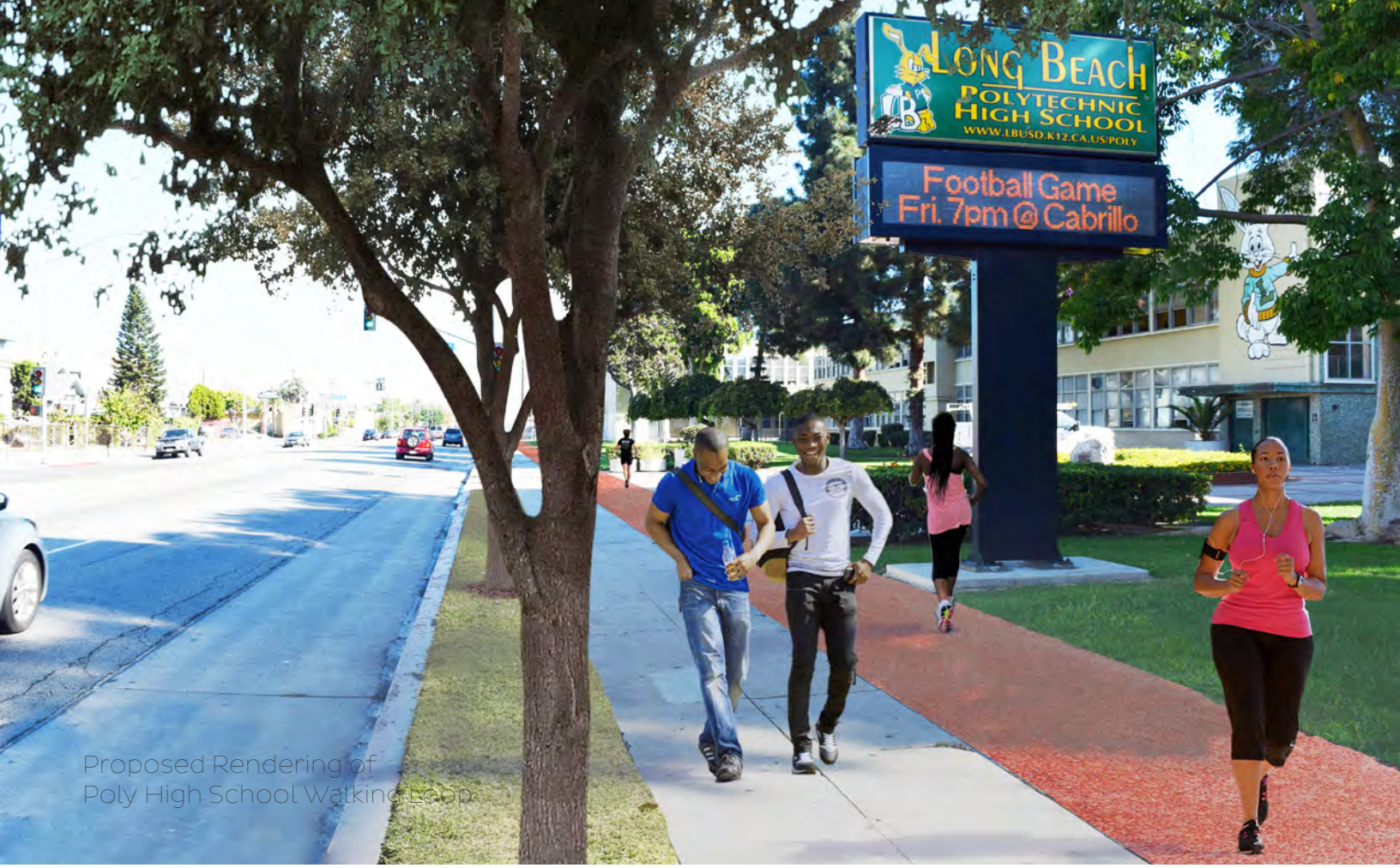
Design and construct new neighborhood connector, generally traversing Walnut Avenue between 3rd Street and 20th Street [Phase II extends to 52nd Street]. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.



MEDIUM TERM

Street Block
CX3 Project Site
Project Segment

0 0.5 mi 1 mi



Proposed Rendering of
Poly High School Walking Loop

Poly High School Walking Loop

CX3 Neighborhood

Poly

Principles

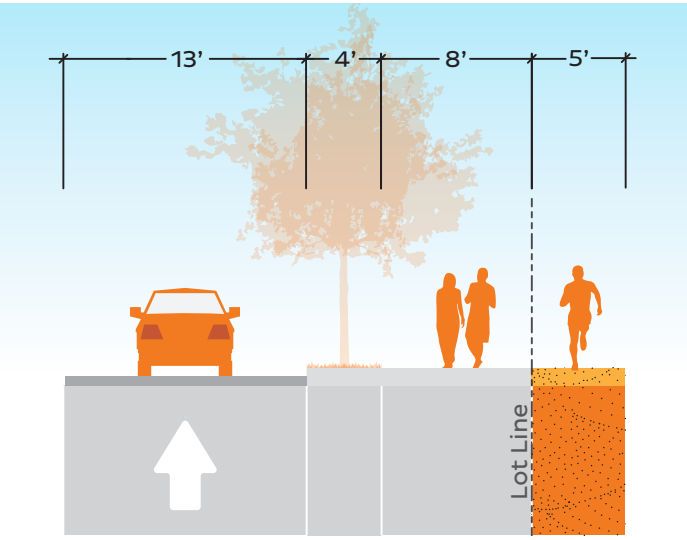
Project Summary

This project involves creating a mile long walking loop around the Poly High School campus using adjacent sidewalks on Atlantic Avenue, Pacific Coast Highway, Martin Luther King Jr. Avenue and 15th Street. The project includes driveway improvements, curb extensions and stabilized decomposed granite trail utilizing adjacent setbacks. Primarily designed for recreational use, the walking loop can also have the added benefits of improving the area's beauty, livability and social activity of the area.

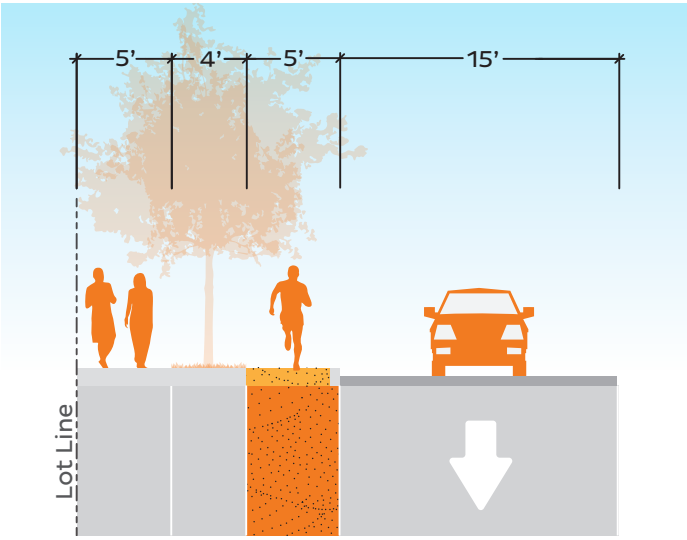
Following a series of public outreach events, the Poly High School Walking Loop received the highest amount of votes out of all of the CX3 projects to prioritize [Community Voice Chapter]. Many of the community members also expressed that they enjoy walking around the neighborhood recreationally, but find walking across Pacific Coast Highway as challenging and unpleasant. Currently, the Poly High School track is not open to the public, and installing a walking loop around the perimeter can help to improve the walkability of the neighborhood. Similar efforts have been done in the Los Angeles neighborhood of Boyle heights around the Evergreen Cemetery, which has resulted in the formation of community walking groups.

Proposed Perspective View of
Poly High School Walking Loop

Typical Sections



Atlantic Avenue and Pacific Coast Highway
For Atlantic Avenue and Pacific Coast Highway, the track can be built on a 5' set back from the lot line.



Martin Luther King Jr. Avenue and 15th Street
For Martin Luther King Jr. Avenue and 15th Street, the track can be built as a 5' curb extension.

Proposed Perspective of Green TI

Green TI Implementation

CX3 Neighborhood

Cabrillo

Principles

Project Summary

This project involves implementing the 2015 plan to transform the Terminal Island Freeway [State Route 103] from Willow Street to 20th Street into a local-serving road with an associated greenbelt, while increasing open space and buffering the West Long Beach neighborhood from air, noise, light and visual pollution. Orginally built in 1947 by the US Navy to upgrade access to the Ports and naval shipyard, the freeway now carries on average 11,200 vehicles per day, which based on a traffic study would not significantly impact surround traffic if converted. Green TI could potentially benefit the surrounding Cabrillo community by increasing opportunities for active transportation, traffic calming, pedestrian conectivity, public health and open space.

The Green TI Plan was funded by the California Department of Transportation [Caltrans] in 2013. Following an existing conditions analysis, the project team conducted a series of community and stakeholder outreach workshops throughout the project process. Hundreds of people participated in developing the goals, programming elements and the conceptual design of Green TI. The Plan also identifies the next steps to implementation, which include City Council adoption, coorperation with neighboring jurisdictions as well as community members and stakeholders, the environmental review process, obtaining funding and implementation.

Relevant Case Study

Harbor Drive – Portland

Harbor Drive was originally built in 1943 and was the first freeway to be completed in Portland. However, by 1966, the I-5 Freeway would be completed, making Harbor Drive obsolete as a north-south freeway. Governor Ton McCall created a task force to study options to replace Harbor Drive as a public open space. Harbor Drive was permanently closed on May 23, 1974 and construction soon began on the Waterfront Park, which opened in 1978. In 1984, it was renamed Tom McCall Waterfront Park in honor of the former governor.

LONG TERM PROJECTS [8-15 YEARS]

A 8TH STREET NEIGHBORHOOD CONNECTOR

Design and construct new 2-mile long neighborhood connector, generally traversing 8th Street between the Pacific Electric Greenbelt and Walnut Avenue and Hellman Street between Walnut Avenue and Alamitos Avenue. Improvements include traffic calming, safe route enhancements, improved crossings at thoroughfares and street tree planting.

B ATLANTIC AVENUE COMPLETE STREET

Execute traffic calming and pedestrian crossing enhancements along Atlantic Avenue between 7th Street and Willow Street. This include additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks, landscaped medians and transit improvements.

C CEDAR AVENUE SAFE ROUTE

Provide Chestnut Avenue between Pacific Coast Highway & Willow Street includes traffic calming and management, traffic controls & pedestrian safety enhancements at thoroughfares. Serves Lafayette Elementary.

D CHERRY AVENUE PEDESTRIAN DISTRICT

Enhance pedestrian amenities along Cherry Avenue between Anaheim Street and 15th Street, including marked crosswalks with traffic signals, street trees, pedestrian streetlights, benches, trash and recycle receptacles, intersection bulb-outs, outdoor dining, enhanced crosswalks and landscaped planters.

E DAISY AVENUE GREENBELT ENHANCEMENTS

Narrow the roadway of 18th Street, 19th Street and 20th Street as they cross through the Daisy Avenue greenbelt and closes Daisy Avenue at Pacific Coast Highway. The remaining roadway is resurfaced with decorative, raised pavement to calm traffic flow and create continuity with the greenbelt.

F WEST HILL STREET SAFE ROUTE

Provide West Hill Street between the Los Angeles River and Webster Street with traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. Serves Garfield Elementary, Hudson K-8, Reid High School, Cabrillo High School, Hudson Park and Admiral Kidd Park.

G MAGNOLIA INDUSTRIAL AREA ACCESSIBILITY

Install sidewalks and accessible curb ramps at appropriate locations throughout the Magnolia Industrial Area as defined by Magnolia Avenue, Pacific Coast Highway, Drake Park Greenbelt and Los Angeles River. The project also includes driveway improvements to maintain appropriate slopes along the pedestrian paths of travel.

H ORANGE AVENUE SAFE ROUTE

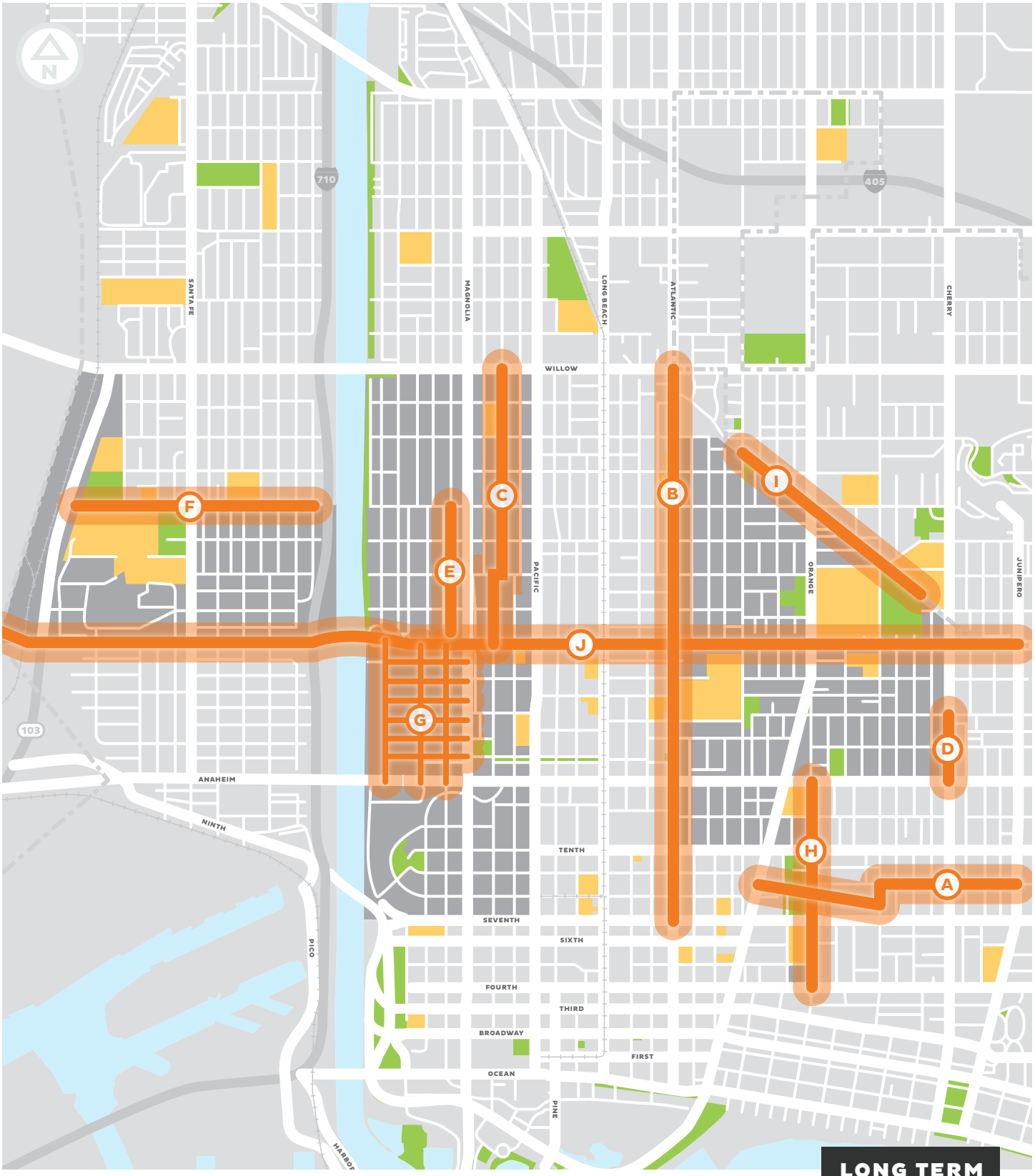
Along Orange Avenue between 4th Street and Anaheim Street provide traffic calming and management, traffic controls and pedestrian safety enhancements at thoroughfares. Serves Lincoln Elementary, Franklin Middle School and Craftsman Village Park.

I PACIFIC ELECTRIC GREENBELT CONNECTOR

Complete the mile long bike and pedestrian path along the Pacific Electric Greenbelt between Walnut Avenue and Martin Luther King Jr Avenue. This includes acquiring and improving a 1.55 acre parcel along the former rail right-of-way between NAACP Freedom Park and Jenni Rivera Park.

J PACIFIC COAST HIGHWAY COMPLETE STREET

Enhance the pedestrian environment utilizing traffic calming and pedestrian crossing enhancements along Pacific Coast Highway through Long Beach. This includes a road diet, additional marked crosswalks with traffic signals, intersection bulb-outs, crossing islands, enhanced crosswalks, landscaped medians and transit improvements.



LONG TERM

Street Block
CX3 Project Site
Project Segment

0 0.5 mi 1 mi

Pacific Electric Greenbelt Connector

CX3 Neighborhood

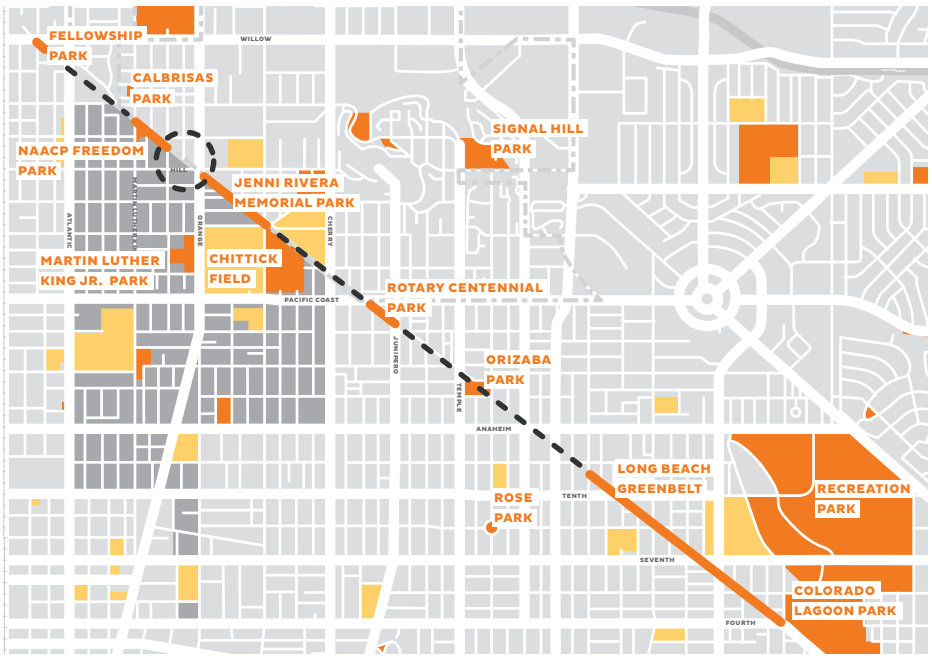
Mary Butler

Principles

Project Summary

This project proposes the development of a linear park in between two existing parks along the Pacific Electric greenbelt in the Mary Butler neighborhood of CX3. The park space will complete the one-mile long bicycle and pedestrian path between Walnut Avenue and Martin Luther King Jr Avenue. The process to develop this project would involve acquiring and improving a 1.55 acre parcel along the former rail right-of-way between NAACP Freedom Park and Jenny Rivera Memorial Park. In addition to providing a new recreational opportunity for the community, this project can help to improve pedestrian safety, the environment, and the livability of a neighborhood. The image above is a photo rendering of the open space potential for the park, and includes various elements such as a curvilinear pathway, thoughtfully chosen locations for trees and landscaping, pedestrian lighting, and seating areas for respite and socialization. In the larger context, creating this connection between Walnut Avenue and Martin Luther King Jr Avenue will provide a safe route for students of Bobbie Smith Elementary, Alvarado Elementary, Renaissance High, Signal Hill Headstart and Jessie Elwin Nelson Academy to walk and bike to school. Throughout the nation, there have been several conversions of underutilized or decommissioned railways being transformed into greenbelts and this project should draw upon the best practices of these conversions.

Conceptual Diagram



The conceptual diagram pictured to the right illustrates the larger potential of the Pacific Electric Greenbelt. Areas identified as orange are areas where existing public open space is located, while the dashed black outline represents the gaps that can be filled in between them. With several schools located within half a mile of the study area, there is potential to use the green belt as a safe walking and bicycling route to and from school.

- Public Open Space
- Schools
- Potential Linkages

Appendix

Walking Pledge A

Walk Audit B

Community Survey (Spanish, Khmer, English) C

Walk LB Walking Loops in CX3 D

Monopoly Card E

How Far/Know Your F

LONG BEACH TRANSIT
Cerritos College
Start Summer Classes Early
Session I: May 23 & Session II: July 5
www.cerritos.edu

MY NAME IS _____ , AND I WILL MAKE MY COMMUNITY MORE WALKABLE BY:

- ☐ Driving a little slower to make streets safer
- ☐ Volunteering for your local school's Safe Routes program
- ☐ I will not use a mobile device while walking, driving and bicycling
- ☐ Joining or start a walking club
- ☐ Walking to more for errands closer to home and work
- ☐ Helping a neighbor cross the street
- ☐ Hosting a block party and street closure
- ☐ Planting a tree on your street to create shade
- ☐ Attending public meetings related to walking/biking
- ☐ Walking one more block for car parking
- ☐ Keep the sidewalk in front of my house clean and clear
- ☐ ? _____

TURN PAGE OVER

APPENDIX A
CX3 WALKING PLEDGE

DESCRIBE IN A SHORT SENTENCE OR TWO YOUR EXPERIENCE WALKING IN LONG BEACH:

For CalFresh information, call 1-877-847-3663. Funded by USDA SNAP-Ed, an equal opportunity provider and employer. Visit www.CaChampionsForChange.net for healthy tips.

WALK AUDIT CHECKLIST

STREET	
BLOCK	FROM TO
SIDE OF STREET	N S E W

Walk audits study the conditions of a community to identify challenges or opportunities to improve pedestrian safety and comfort. Below are characteristics to consider when walking through the community. Consider others in your community including the elderly, children and those of limited mobility. Use one sheet [front and back] per block per side of the street.

COMMENTS Please be specific. **RATE ON SCALE OF** ❶ to ❺ [Bad to Great]

Q1. SIDEWALK

A. Is the sidewalk wide enough to comfortably walk with others? ① ② ③ ④ ⑤

COMMENTS

B. What is the sidewalk condition [broken, trip hazards, etc.]? ① ② ③ ④ ⑤

COMMENTS

C. Do intersections have ramps for wheelchairs, strollers & carts? ① ② ③ ④ ⑤

COMMENTS

D. Is the sidewalk often interrupted for cars [driveways, loading, etc.]? ① ② ③ ④ ⑤

COMMENTS

Q2. STREET

A. Are there safe places to cross the street [how far between them]? ① ② ③ ④ ⑤

COMMENTS

B. Are sidewalks separated from traffic [parkways, parking, trees, etc.]? ① ② ③ ④ ⑤

COMMENTS

C. Do drivers yield to people crossing the street at crosswalks? ① ② ③ ④ ⑤

COMMENTS

D. Does traffic move at a speed that feels safe when walking by or crossing? ① ② ③ ④ ⑤

COMMENTS

Q3. SAFETY

A. What is the condition of the area [trash, graffiti, loitering, etc.]? ① ② ③ ④ ⑤

COMMENTS

Q4. EXPERIENCE

A. Is there shade provided by trees, canopies or building awnings? ① ② ③ ④ ⑤

COMMENTS

B. Are there exhaust fumes or bad odors [chemicals, urine, trash]? ① ② ③ ④ ⑤

COMMENTS

C. Do buildings face the sidewalk [doors/windows or blank walls, etc.]? ① ② ③ ④ ⑤

COMMENTS

TOTAL SCORE RATING Out of 65 possible points =

WALK AUDIT KEY MAP

NORTH ARROW
WHICH DIRECTION IS NORTH?

EXISTING TREE

EMPTY TREE GRATE OR PARKWAY

DRIVEWAY

NO CORNER RAMPS

TRAVEL PATH OBSTRUCTION

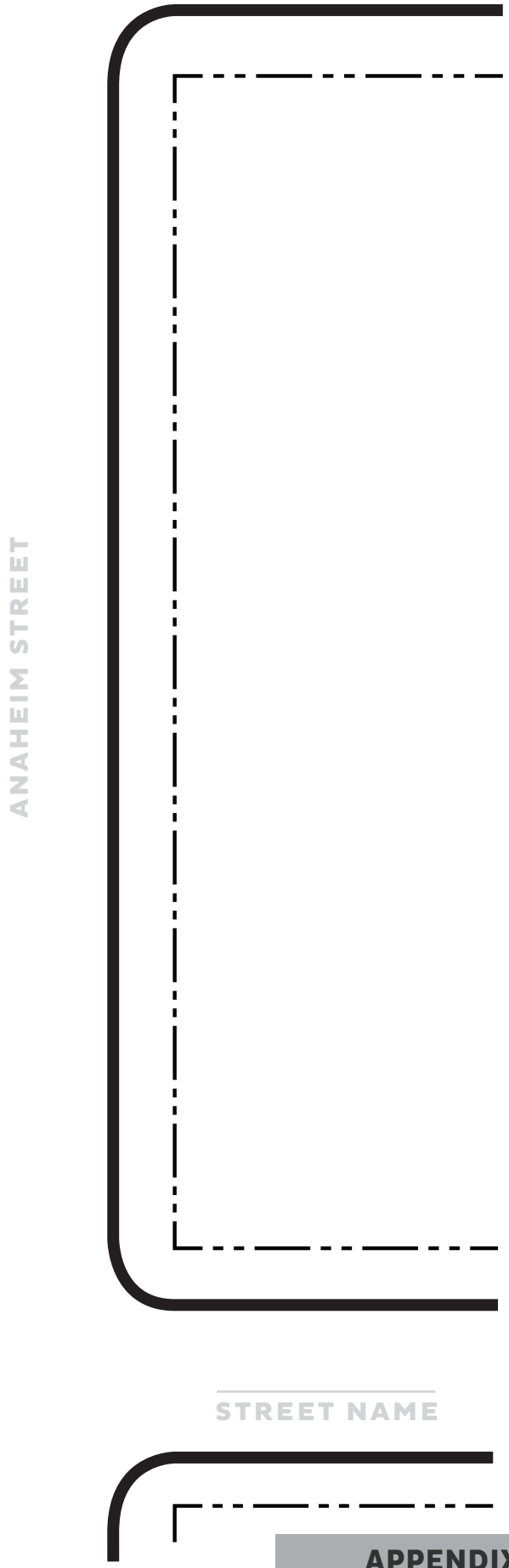
BROKEN OR UNEVEN PAVEMENT
SAFETY ISSUE

CROSSWALK

STOP SIGN

TRAFFIC SIGNAL

UNSAFE CONDITION
COMMENT BELOW

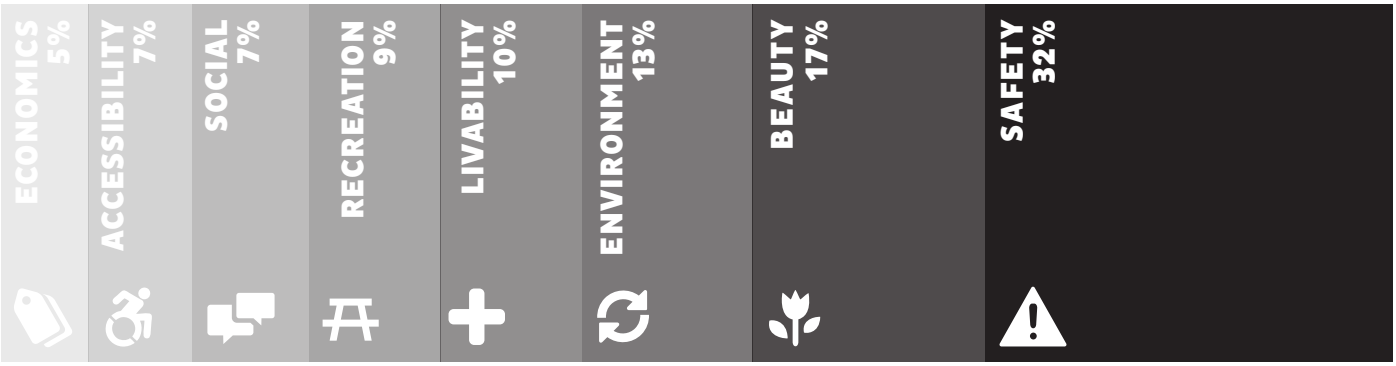


CX3 COMMUNITY SURVEY

NEIGHBORHOOD / NEAREST SCHOOL

RESIDENT FEEDBACK

Residents were asked, "What are the most important characteristics of a walkable community?" they responded with the following:



What is the best ways to make our neighborhoods more walkable? (Pick three)

- ☐ **VISION ZERO** Eliminate all vehicular traffic deaths in Long Beach by 2025.
- ☐ **SAFE ROUTES** Create safe bike and walking routes to neighborhood schools and parks.
- ☐ **UNIVERSAL CITY** Make neighborhoods accessible for all residents.
- ☐ **FIRST/LAST BLOCK** Connect pedestrians to public transit.
- ☐ **NEIGHBORHOOD CONNECTORS** Connect pedestrians to neighborhoods.
- ☐ **PEDESTRIAN PRIORITY AREAS** Make business districts walkable.
- ☐ **WALK LONG BEACH** Promote walking in Long Beach as a healthy activity.
- ☐ **STREET CHARACTER CHANGE** Transform extra street area for walking.
- ☐ **PAVEMENT TO PLACES** Transform extra street area into plazas.

What streets/sidewalks in your community are not walkable and why?

STREET NAME(S)	NO SIDE WALK	BAD SIDE WALKS	NO CURB RAMPS	TOO MANY OBSTACLES	NO CROSS WALKS	STREET TOO CLOSE	UN SAFE DRIVERS	FAST CARS	TRASH/ GRAFFITI	NO SHADE	BAD AIR	CRIME
_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
_____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

What is the best ways to make our neighborhoods more walkable?

- ☐ Neighborhood streets that serve local residents
- ☐ Major Streets that serve many people

What are you willing to do to make your neighborhood more walkable?

- ☐ Drive a little slower to make streets safer
- ☐ Host a block party and street closure
- ☐ Volunteer for your local school's Safe Routes program
- ☐ Plant a tree on your street to create shade
- ☐ Join or start a walking club
- ☐ Attend public meetings related to walking/biking
- ☐ Walk more for errands closer to home and work
- ☐ Walk one more block for car parking

Other comments?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

CHAMPIONS for CHANGE Network for a Healthy California

CX3

HEALTHY ACTIVE LONG BEACH

CITY OF LONG BEACH INCORPORATED 1897

health happens here

CF CITY FABRICK

For CalFresh information, call 1-877-847-3663. Funded by USDA SNAP-Ed, an equal oppo
provider and employer. Visit www.CaChampionsForChange.net for healthy tips.

CX3 ENCUESTA SOBRE LA COMUNIDAD

VECINDARIO/ ESCUELA MÁS CERCANA

REACCIÓN DEL RESIDENTE

Se preguntoó a los residentes, "¿Cuáles son las características más importantes de una comunidad peatonal?" contestaron lo siguiente:

¿Cuál es la mejor forma de hacer que nuestros vecindarios más caminable? (Elija tres)

- ☐ **VISIÓN CERO** Eliminar todas las muertes causadas por accidents vehiculares en Long Beach en 2025.
- ☐ **RUTAS SEGURAS** Crea rutas seguras para bicicletas y peatones para caminar a las escuelas del vecindario y parques.
- ☐ **CIUDAD UNIVERSAL** Hace que el vecindario sea accesible para todos los residentes.
- ☐ **PRIMER / ULTIMO BLOQUE** Conecta A los peatones con el transporte público.
- ☐ **CONECTORES DEL VECINDARIO** Conecta a los peatones en el vecindario.
- ☐ **PRIORIDAD A ZONAS PEATONAL** Hacer que los distritos de comeciales sean caminables
- ☐ **WALK LONG BEACH** Promueve el caminar en Long Beach como una actividad saludable.
- ☐ **CAMBIALAS CARACTERIZTICAS DE LA CALLES** Utiliza el excedente de las calles en areas peatonales.
- ☐ **ZONAS PAVIMENTADAS** Utiliza el espacio de las calles al maximo para crear plazas publicas.

¿Qué calles / aceras en su comunidad no son caminables y por qué?

NOMBRE DE LA CALLE (S)	NO HAY ACERA	ACERAS EN MAL ESTADO	NO HAY RAMPAS EN LAS ACERAS	DEMASIADOS OBSTÁCULOS	NO HAY PASOS PEATONALES	CALLE MUY CERCA	CONDUCTORES IMPRUDENTES	VEHICULOS A ALTA VELOCIDAD	BASURA / GRAFFITI	SIN SOMBRA	AIRE MUY CONTAMINADO	DELITOS
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			☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

¿Cuál es la mejor forma de hacer que nuestro vecindario sea más caminable?

- ☐ Las calles del vecindario sirven a los residentes locales
- ☐ Las calles principales sirven a muchas personas

¿Qué estás dispuesto a hacer para que su vecindario más caminable?

- ☐ Conducir un más lento para hacer las calles más seguras
- ☐ Cerrar mi calle y organizar una fiesta en mi bloque.
- ☐ Ofrecerme como voluntario en el programa de tutas seguras de mi escuela local
- ☐ Sembrare un árbol en mi calle para crear sombra
- ☐ Iniciare o me unire a un club para caminar
- ☐ Asistir a las reuniones públicas relacionadas con caminar/ ciclismo
- ☐ Caminare más para hacer las diligencias cerca de casa y el trabajo
- ☐ Estacionare mi automobile a una cuadra de distancia para caminar.

¿Otros comentarios?

_____

_____

_____

_____

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_____

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_____

_____

_____

Para CalFresh información, llame al 1-877- 847-3663. Financiado por USDA SNAP-Ed, un p
de oportunidades y el empleador. Visita www.CaChampionsForChange. net para consejo

ការស្ទង់មតិអំពីការដើរ
នៅក្នុងតំបន់ជិតខាងផ្ទះ

ជ្រើសរើសលក្ខណៈនៃផ្លូវដ៏សំខាន់ជាងគេសម្រាប់ដើរ ឲ្យបានចំនួនបីប្រភេទ:

- ☐ **សុវត្ថិភាព** ផ្លូវដែលមានលឿនចរាចរយឺត មានកន្លែងសម្រាប់ដើរឆ្លងផ្លូវ និងមានភ្លើងពន្លឺល្អនៅពេលយប់
- ☐ **ងាយនឹងប្រើប្រាស់បាន** ផ្លូវដែលមានចិញ្ចើមផ្ទាល់ធំទូលាយ ស្មើស្អាត ហើយនិងមានផ្លូវសម្រាប់កៅអីមានកង់ជនពិការ
- ☐ **អាចរស់នៅបាន** ផ្លូវដែលស្អាត ស្ងាត់ ហើយមានម្លប់។
- ☐ **បរិស្ថាន** ផ្លូវដែលកាត់បន្ថយជាតិបំពុលបរិស្ថាន ត្រង់ទឹងភ្ញៀងសម្រាប់ប្រើប្រាស់ និងចម្រាញ់សំអាតប្រើឡើងវិញ។
- ☐ **សេដ្ឋកិច្ច** ផ្លូវដែលគាំទ្រនិងតភ្ជាប់មនុស្សទៅនឹងពាណិជ្ជកម្មផ្សេងៗក្នុងតំបន់។
- ☐ **សង្គម** ផ្លូវដែលខ្ញុំអាចជួបមនុស្សនិងឃើញអ្នកជិតខាងរបស់ខ្ញុំ។
- ☐ **កន្លែងកំសាន្ត** ផ្លូវដែលមានកន្លែងលេងកំសាន្តនិងហាត់ប្រាណ។
- ☐ **សោភ័ណភាព** ផ្លូវដែលស្អាតល្អ មានដើមឈើ មានកៅអីអង្គុយលេង និងមានវត្ថុសិល្ប:លំអរតុបតែង។

តើសព្វថ្ងៃនេះលោកអ្នកដើរនៅកន្លែងណា? តើលោកអ្នកចូលចិត្តកន្លែងនោះទេ? ហេតុអ្វី? សូមគូសកន្លែងទាំងអស់ដែលលោកអ្នកដើរ

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តើកន្លែងណាដែលលោកអ្នកចង់ដើរ ប៉ុន្តែមិនដើរ? ហេតុអ្វីបានជាមិនដើរ? សូមគូសកន្លែងទាំងអស់ដែលលោកអ្នកមិនដើរ។

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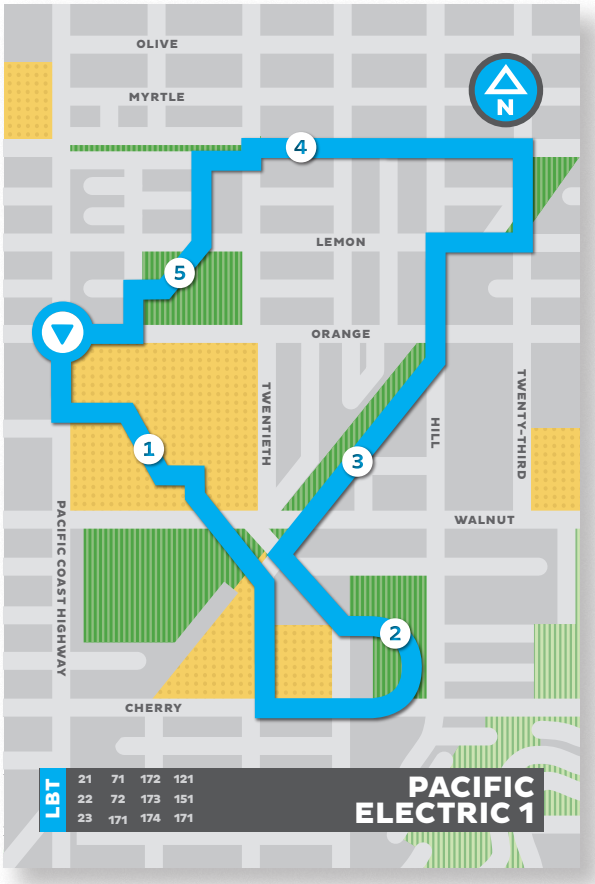
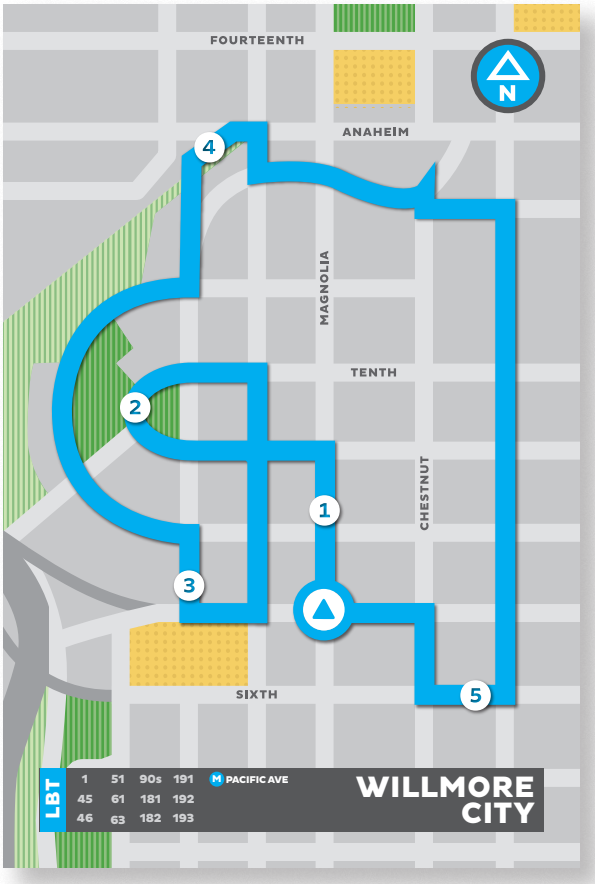
តើកន្លែងណាដែលលោកអ្នកចូលចិត្តដើរនៅក្នុងឡងប៊ីចឬនៅក្រៅឡងប៊ីច? ហេតុអ្វីបានជាលោកអ្នកចូលចិត្តដើរនៅទីនោះ?

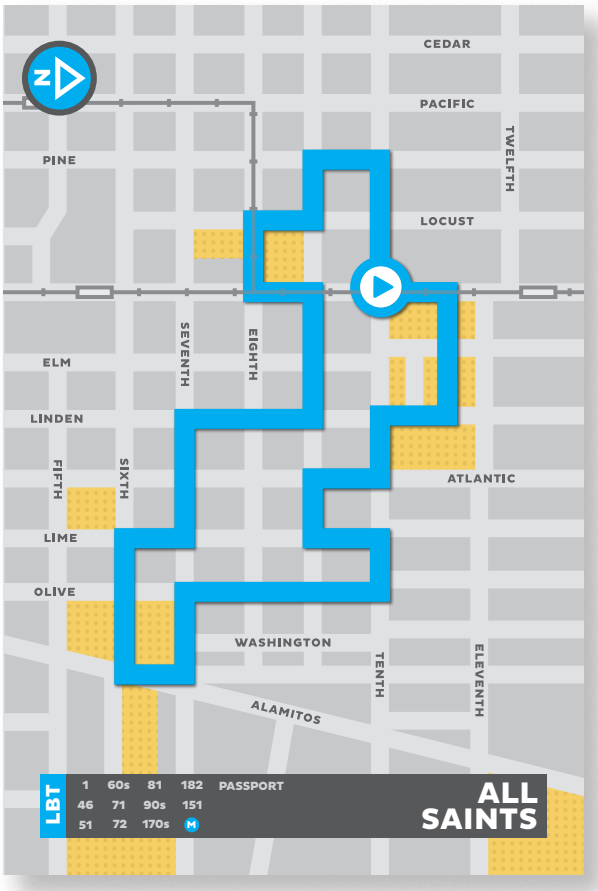
តើលោកអ្នកមានយោបល់អ្វីផ្សេងទៀតទេ?

ដើម្បីព័ត៌មានអំពី CalFresh សូមទូរស័ព្ទ 1-877-847-3663 ។ ឧបត្ថម្ភដោយ USDA SNAP-Ed អ្នកផ្គត់ផ្គង់ដោយស្មើភាពនិងនិយោជិក។
ដើម្បីព័ត៌មានសំខាន់ពីសុខភាព ចូលទៅវិបសាយ www.CaChampionsForchange.net ។

APPENDIX B
COMMUNITY SURVEY (KHMER)







APPENDIX C
WALK LB WALKING CARDS IN CX3

APPENDIX C
WALK LB WALKING CARDS IN CX3

THERE ARE SEVERAL THINGS YOU CAN DO TO KEEP SAFE WHEN CROSSING A ROADWAY

AS A PEDESTRIAN

USE CROSSWALKS WHEN POSSIBLE

When crossing the road at any point other than within a marked crosswalk, yield the right-of-way to all nearby vehicles to aovoid an immediate hazard.

USE DUE CARE IN CROSSWALKS

Do not suddenly leave a curb or other place of safety and walk or run into the path of a vehicle that is close enough to constitute an immediate hazard

BE VISIBLE AT NIGHT

Wear retro-reflective clothing or carry a flashlight when walking at night.

WATCH FOR SIGNS OR SIGNALS

Do not cross street if you are between intersections controlled by traffic control signal devices, use the crosswalk at the controlled intersection.

FOLLOW THE RULES OF THE

RIGHT-OF-WAY

FOR MORE INFORMATION, REFER TO 21950(A) CVC AND 21951 CVC OR VISIT LONGBEACH.GOV/POLICE

Chance

GET OUT OF LONG BEACH JAIL, FREE

ALWAYS FOLLOW THE RULES OF THE RIGHT-OF-WAY

A FRIENDLY REMINDER FROM WALK LONG BEACH + THE LONG BEACH POLICE DEPARTMENT

APPENDIX D
MONOPOLY CARDS

AS A DRIVER OF A VEHICLE, THERE ARE MANY THINGS TO REMEMBER REGARDING PEDESTRIANS

REMEMBER SOME PEDESTRIANS NEED A LITTLE EXTRA TIME

Allow older pedestrians, disabled pedestrians and pedestrians with young children enough time to cross the street.

RESPECT THE RIGHT-OF-WAY

Always stop for any pedestrian crossing at corners or other crosswalks, even if the crosswalk is in the middle of the block, at corners with or without traffic lights, whether or not the crosswalks are marked by painted lines.

DO NOT STOP IN A CROSSWALK

You will place pedestrians in danger.

DO NOT PASS STOPPED CARS AT CROSSWALKS

A pedestrian you cannot see may be crossing the street. Stop, and wait until all pedestrians have crossed the street.

FOLLOW THE RULES OF THE

RIGHT-OF-WAY

FOR MORE INFORMATION, REFER TO 21950(A) CVC AND 21951 CVC OR VISIT LONGBEACH.GOV/POLICE

Chance

GET OUT OF LONG BEACH JAIL, FREE

ALWAYS FOLLOW THE RULES OF THE RIGHT-OF-WAY

A FRIENDLY REMINDER FROM WALK LONG BEACH + THE LONG BEACH POLICE DEPARTMENT

HOW FAR ARE YOU WALKING?

The World Health Organization recommends daily physical activity equivalent to walking 10,000 steps. One mile is equal to 5,280 feet. A person's stride is usually 2-3 feet in length. On average most people take 1,800-2,600 steps to walk each mile. Everyone's pace is different so walk the next 50 feet, counting your steps as you go. Use the chart below to determine how many of your paces are in a mile and how many miles you should walk a day for your recommended daily exercise.

STEPS FOR 50'	STEPS FOR MILE	10,000 STEPS (IN MILES)
15	1,584	6.3
16	1,690	5.9
17	1,795	5.6
18	1,901	5.3
19	2,006	5.0
20	2,112	4.7
21	2,218	4.5
22	2,323	4.3
23	2,429	4.1
24	2,534	3.9
25	2,640	3.8
26	2,746	3.6
27	2,851	3.5
28	2,957	3.4
29	3,062	3.3
30	3,168	3.2

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IS YOUR NEIGHBORHOOD WALKABLE?

Walk audits analyze the conditions of a community to identify challenges or opportunities for improving pedestrian safety and comfort for all people, including the elderly, children and those with limited mobility. Below are some characteristics to consider when walking through your community.

SIDEWALK

- ☐ Sidewalk width [Able to walk with others?]
- ☐ Sidewalk condition [Broken, trip hazards, etc]
- ☐ Path obstructions [Utility poles, furniture, etc]
- ☐ Ramps at intersections for wheelchairs, strollers & carts

STREET

- ☐ Safe places to cross [Distance between them?]
- ☐ Traffic speed [Feel safe walking along or crossing?]
- ☐ Separation of sidewalk from traffic [Parking, parkways,etc]
- ☐ Sidewalk interruptions [Driveways, loading,etc.]

EXPERIENCE

- ☐ Shade [Trees, canopies, building awnings]
- ☐ Activation [Storefronts and windows facing street?]
- ☐ Lighting [Adequate at night and provides feeling of safety?]
- ☐ Condition [Trash, graffiti, blight,etc.]

WALK LONG BEACH

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