



Volume 4

IMPLEMENTATION STRATEGY



IN THIS VOLUME

Every big idea has a small action that is needed to make it real. The implementation strategy is a series of actions large and small that are essential to realizing the goals and policies of this General Plan. In some cases, the action may simply be carrying on those things that the City is already doing, while for others a change in the regulation is needed. This volume includes a Work Plan that covers operations of the City and provides staff with standard conditions of approval as a starting point for project evaluation, and a Placemaking Toolkit that helps the City and landowners meet the land use and community character expectations.



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General Plan Work Plan



A WORK PLAN IS...

a guide for City staff, decision makers, developers and the public that lays out specific actions and steps required to achieve the goals set forth in this General Plan. It is also a flexible framework within which more precise measures are addressed. Many of the measures, such as an update to the Development Code, or revised engineering standards, affect codes that are already in use but need to be updated to realize the vision of this General Plan. In some cases, there are no existing implementing measures requiring new ones to be developed and included in this work plan.

In addition to the work plan, a Placemaking Toolkit has been designed to help City staff, developers, and property owners understand and participate in achieving the vision. The Placemaking Toolkit provides detailed information on a set of implementation strategies, or “tools,” along with potential applications and further resources to help ensure that Rancho Cucamonga grows well into the 21st century.

HEART OF THE MATTER

Because City resources are finite it is essential that a work plan be adopted that prioritizes how the City implements the General Plan. Not everything can be done at once, and some actions are dependent upon others having been completed. The intent of this work plan is to provide a general idea of which things should be done first. For many of the implementation actions, community input is essential, and it is likely that several drafts will be required before it is acceptable. A world class city is always evolving to respond to new challenges therefore this list is far from comprehensive. The list will be used regularly for budgeting and strategic planning purposes. It will be reviewed as part of the annual reporting on the progress of the General Plan. It is almost certain that through conversations between the people most affected by the implementation strategy and those working to complete the task that new methods of achieving the vision of General Plan will be developed. As such, this list supports the General Plan, but is expected to be amended regularly.



WORK PLAN

The General Plan work plan is only one part of the implementation strategy for the City. There are other essential strategies, such as the Climate Action Plan, updated Development Code, and the Placemaking Toolkit, that help implement, but are not included in, the General Plan so that they can be more flexible and easier to update than the overall General Plan.

The work plan is organized into the follow topics:

- + Funding
- + Improvements
- + Process & Information
- + Rules & Coordination
- + Focus Area Implementation
- + Standard Conditions of Approval

Each work plan topic includes an implementation matrix that contains individual measures, included in the **Action Item** column. Each measure includes a responsible department (**Work Group Lead**) as well as an estimated priority for timing. The availability of budget, the extent of public outreach, and changing priorities may affect the timing of adoption. The priorities, shown in the **Timing** column, are:

- Ongoing** Represents a constant attention to the issue.
- Short-Term** A measure that should be adopted within 1 – 3 years from adoption of the General Plan.
- Mid-Term** A measure that might be adopted 5 – 10 years after adoption of the General Plan.
- Late-Term** A measure that might be adopted more than 10 years after adoption of the General Plan.

The work plan will require the coordination of many skill sets, departments, and often other agencies. The **Work Group Lead** represents the department or department group most likely to take a leadership role in the measure. The leadership may shift to a new department depending on circumstances needed for the issue, and resources available at the time.

Just as the implementation may involve more than one department of the City, partnerships with other agencies in the region are also essential. The City will continue to work with existing partners and seek to develop new partnerships as appropriate to City’s leadership role in the region.

FUNDING

These measures are actions for the City to update fees or seek grants to implement policies in the General Plan.

TABLE WP-1 FUNDING

Action Item	Work Group Lead	Timing
Funding Opportunities Through Special Districts: Investigate the use of special districts for assistance in providing affordable housing, transportation improvements, parking, and shared amenities	Community Development	Short-Term
Transportation System Funding Opportunities: Monitor new methods, pilot, or test various solutions to the conventional gas tax and toll roads for more equitable system-wide approach to funding transportation improvements. Some examples include volume-based pricing, smart metering, congestion pricing, and curb pricing.	Community Development	Short-Term
Greenhouse Gas Reduction Funding Opportunities: In the short- and mid-term, explore and identify potential funding sources or incentives for the following greenhouse gas reduction activities:		
+ Evaluate the feasibility of a local or regional Vehicle Miles Traveled (VMT) impact fee program, bank, improvement program or exchange.	Community Development	Short-Term
+ Identify funding for and create an Urban Forestry Master Plan.	Community Development	Short-Term
+ Investigate including tree planting in the capital improvement program and development fee structure as an offset for new development impacts to greenhouse gases and on the environment in accordance with the urban forestry master plan.	Community Development	Short-Term
+ Investigate possible incentives for existing non-residential developments to install electric hook-ups for trucks in docks, bays, and parking areas to reduce heavy-duty truck idling on-site.	Community Development	Mid-Term
+ Investigate incentives for existing public and private developments to improve energy efficiency.	Community Development	Mid-Term
Hazard Retrofit Funding Opportunities: Investigate potential funding sources for risk reduction activities that may include:		
+ The creation of a Geologic Hazard Abatement District that can be used to generate funds to mitigate geologic hazards.	Community Development	Mid-Term
+ Potential funding opportunities for voluntary improvements/ retrofits on private properties.	Community Development	Ongoing
+ Possible incentive programs to encourage property owners to retrofit their homes/businesses against climate-related hazards such as extreme weather, flooding, wildfire, etc.	Community Development	Mid-Term
+ New funding sources for vegetation management activities for properties located within the WUIFA.	Public Safety	Ongoing

IMPROVEMENTS

These implementation measures are specific improvements necessary for achieving the vision of this General Plan

TABLE WP-2 IMPROVEMENTS

Action Item	Work Group Lead	Timing
Public Access Internet: Develop methods for accelerating the provision of municipal internet in disadvantaged communities.	Community Development	Short-Term
Railroad Crossings: Investigate the feasibility and funding of railroad quiet zones, improvements to current at-grade crossings, and grade separated crossing(s).	Community Development	Late-Term
Trail Network: Continue to expand and improve the trail network as feasible to:		
+ Build a well-connected, off-street trail system along the existing Pacific Electric Trail (PET), flood channels and utility corridors.	Community Development	Ongoing
+ Create north-south trail connections along the utility channels and easements to create a connected trail system, including Deer Creek channel, Day Creek/Southern California Edison easement, and other utility corridors connecting to Ontario.	Community Development	Mid-Term
Critical Facilities and Infrastructure: Periodically review and update the City critical facilities and infrastructure inventory used to support and implement the EOP, LHMP, and CIP. The inventory should be updated to include the following:		
+ Critical facilities/infrastructure located in high-risk areas where relocation may be a possible mitigation strategy.	Community Development	Short-Term
+ Potentially substandard structures/infrastructure for future retrofit and rehabilitation.	Community Development	Mid-Term
+ Future funding opportunities for critical facility/ infrastructure improvements, retrofits/relocations.	Community Development	Mid-Term
+ Roadways designated as key evacuation routes are prioritized during the CIP planning process	Community Development	Ongoing
+ Seismically vulnerable structures and infrastructure to integrate into the City's Capital Improvements Program	Community Development	Short-Term

PROCESS & INFORMATION

These measures are actions for the City to undertake to improve, amend, or expand its procedures or inform future actions.

TABLE WP-3 PROCESS & INFORMATION

Action Item	Work Group Lead	Timing
<p>Equity and Environmental Justice: The City will continue to maintain equitable civic engagement in the decision-making process and will continue to improve communication regarding new development projects and potential health impacts as follows:</p>		
<ul style="list-style-type: none"> + Review and update, as appropriate, procedures to provide translation and interpretation services at public meetings on issues affecting populations whose primary language is not English. 	Civic and Cultural Services	Ongoing
<ul style="list-style-type: none"> + Review and update, as appropriate, the variety of electronic and personal techniques for outreach. 	Civic and Cultural Services	Ongoing
<ul style="list-style-type: none"> + Continue to update the “Improve the Healthy Communities” program. 	Civic and Cultural Services	Ongoing
<ul style="list-style-type: none"> + Create a development checklist or disclosure tool to inform the public, especially low-income and minority populations, on the potential health impacts of new development. 	Civic and Cultural Services	Short-Term
<ul style="list-style-type: none"> + Identify resources for the existing sensitive receptors experiencing adverse air quality issues to incorporate measures to improve air quality, such as landscaping, barriers, ventilation systems, air filters/cleaners, and other measures. 	Community Development	Mid-Term
<ul style="list-style-type: none"> + Establish procedures and tools to consider the health needs of projects with sensitive receptors such as through a healthy needs assessment, the Healthy Development Measurement Tool (HDMT) or other tools. 	Community Development	Short-Term
<p>Healthy Development Checklist. Continue to update with current best practices and use the Healthy Development checklist, or similar assessment tool, to assess the overall health performance and supportiveness of new development projects.</p>	Community Development	Ongoing
<p>Mobility and Access Plans, Programs and Activities: The City currently maintains and updates a variety of plans, programs and activities to improve mobility and access in the community. These plans, programs and activities are regularly used and require ongoing management and/or periodic update to ensure compliance with local, State, and federal requirements, consistency amongst these efforts, and incorporation of the most up to date information as follows:</p>		
<ul style="list-style-type: none"> + Maintain a list of Transportation Demand Management (TDM) strategies for employers and new developments. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Develop a system to measure roadway segments, intersection traffic volumes, and measure vehicle level of service along key corridors. 	Community Development	Short-Term

Action Item	Work Group Lead	Timing
+ Include bicycle, pedestrian, and truck counts along with vehicle counts in the City's operations management system and make available to the public.	Community Development	Short-Term
+ Update routes in the Safe Routes to School (SRTS) program and develop a prioritization process for infrastructure enhancements.	Community Development	Short-Term
+ Update and implement the Trail Implementation Plan to improve equestrian access and crossings on the trails as appropriate.	Community Development	Ongoing
+ Develop a strategy or action plan that prioritizes systems-based approach to preventing traffic fatalities, focusing on the built environment, systems, and policies that influence behavior, as well as messaging that emphasizes that traffic losses are preventable.	Community Development	Short-Term
+ As new transportation technologies and mobility services, including autonomous vehicles, electric vehicles, electric bicycles and scooters, and transportation network companies (e.g., Uber and Lyft) are used by the public, review and update City policies and plans to maximize the benefit to the public of such technologies and services without adversely affecting the City's transportation network. Updates to the City's policies and plans may cover topics such as electric vehicle charging stations, curb space management, changes in parking supply requirements, shared parking, electric scooter use policies, etc.	Community Development	Ongoing
+ Coordinate with SBCTA and Omnitrans to review and consider alternatives to conventional bus systems, such as smaller shuttle buses (micro-transit), on-demand transit services, or transportation networking company services that connect neighborhood centers to local activity centers with greater cost efficiency.	Community Development	Short-Term
Cultural and Recreational Programming:		
+ Encourage non-exclusive, cross-generational cultural and recreational activities and programming that are accessible to people of all ages, backgrounds and abilities.	Civic and Cultural Services	Ongoing
+ Prepare and implement an Arts Master Plan.	Civic and Cultural Services	Short-Term
+ Prepare and implement a Park's Master Plan using walk time as one metric in placement of new parks.	Civic and Cultural Services	Short-Term
Animal Care Programs: Increase awareness of animal adoptions and raise funds for animal care and services, continue to host and participate in special events, promotions, and fairs.	Public Safety	Short-Term

Action Item	Work Group Lead	Timing
<p>Climate Change Vulnerability and Sustainability Activities and Programs: The City currently provides information for and conducts a variety of programs to address climate change and sustainability in the community. These programs and activities will be continued, and new programs developed including:</p>		
<ul style="list-style-type: none"> + Energy- or climate change-themed publications and workshops. 	Civic and Cultural Services	Mid-Term
<ul style="list-style-type: none"> + Energy audits for residents. 	Community Development	Mid-Term
<ul style="list-style-type: none"> + Urban Heat Island analysis that integrates into the Urban Forestry Master Plan and Parks Master Plan and identifies priority projects within the City that will mitigate the effects of future extreme heat events. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Information for the community regarding the benefits of solid waste diversion, recycling, and composting, and programs that make it easy for all people in Rancho Cucamonga to work toward and achieve City waste reduction objectives. 	Community Development	Ongoing
<p>Hazards-Related Plan Integration and Updates: The City currently maintains and updates a variety of plans, programs and activities that address the risks associated with natural and human-caused hazards throughout the City. These plans, programs and activities are regularly used and require ongoing maintenance and periodic update to ensure compliance with local, state, and Federal requirements. To ensure greater consistency amongst these plans and incorporate the most up to date information, future updates should accomplish the following:</p>		
<ul style="list-style-type: none"> + Updates to the EOP, Safety Element, and CWPP, should occur concurrent with the LHMP update every five years. 	Public Safety	Mid-Term
<ul style="list-style-type: none"> + Maintain consistency between the Safety Element, LHMP, EOP, CWPP, and Capital Improvements Program. 	Public Safety	Mid-Term
<ul style="list-style-type: none"> + Plan updates should incorporate climate change data and information documented by staff during subsequent hazard events that occur within the City. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Maintain an emergency evacuation plan that is proactive, integrates data-driven approach and core community values, and plans for all residents equitably. 	Public Safety	Ongoing
<p>Emergency Preparedness Programs: The City currently conducts trainings and educational awareness to staff, citizens, and businesses. To ensure increased preparedness and resilience future opportunities to expand these activities should:</p>		
<ul style="list-style-type: none"> + Continue to promote “Ready, Set, Go” and Firewise Community programs for existing and new developments within the WUIFA to educate residents about wildfire prevention and preparedness. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Implement a training program to improve staff understanding of how vulnerable community members, including senior citizens, low-income persons, and persons with disabilities, may be impacted by changing climatic conditions. 	Civic and Cultural Services	Ongoing

Action Item	Work Group Lead	Timing
+ Disseminate information on dam inundation areas within the City that could be impacted by a dam breach event.	Civic and Cultural Services	Ongoing
+ Identify key locations within the City for community-oriented backup power locations to serve vulnerable populations disproportionately affected by hazard events that affect electrical infrastructure.	Civic and Cultural Services	Short-Term
+ Conduct annual staff trainings on the Emergency Operations Plan (EOP) and Annexes to ensure staff can effectively respond to emergency situations.	Public Safety	Ongoing
+ Develop or update strategic plans for public safety that identify strategies for staffing, training, service delivery, and critical infrastructure needs to enhance City services. These updates should identify potential improvements for professional standards and operational readiness	Public Safety	Ongoing
+ Expand and enhance the Ready RC program to better meet future community issues and challenges. Increase and expand the delivery of Ready RC programs and materials to the community to increase preparedness and resilience.	Public Safety	Short-Term
+ Expand and enhance the strategy for post-disaster recovery that focuses on community resilience and sustainability.	Public Safety	Short-Term
+ Develop a cooling and heating plan to offset the health effects of severe weather on lower income communities.	Administrative Services	Ongoing
Fiscal Impact Analyses. Establish additional procedures and tools to consider the financial benefits and impacts of development at the project approval level based on anticipated full life-cycle costs and value per acre.	Community Development	Ongoing
General Plan Maintenance. To ensure that the General Plan remains current the City will conduct regular reviews of the Plan and the standard conditions of approval.		
+ Review and update, as appropriate, the Standard Conditions of Approval.	Community Development	Ongoing
+ Provide an annual report of the implementation of the General Plan.	Community Development	Ongoing

RULES & COORDINATION

These are measures that would amend or update the City’s ordinances, codes, design guidelines, and other rules and requirements.

TABLE WP-4 RULES & COORDINATION

Action Item	Work Group Lead	Timing
<p>Municipal Code and Ordinance Updates: The following updates and amendments to the City’s Development Code, Subdivision Ordinance, and other sections of the Municipal Code will ensure compliance with local, state, and Federal requirements, consistency with the General Plan, and incorporation of the most up to date information as follows:</p>		
+ Update the Development Code to incorporate form-based standards for the focus areas of the General Plan.	Community Development	Short-Term
+ Develop design criteria and flexibility in standards to avoid impacts to cultural, geographic, and natural resources, and to provide a variety of development types.	Community Development	Short-Term
+ Update the Development Code to incorporate development standards for new development to be pedestrian-friendly, promote safety, have access to transit facilities where feasible, allow shared parking and encourage “park-once” strategies in mixed use environments.	Community Development	Short-Term
+ Develop standards to require all new developments and redevelopments provide at least two access roads that can be used for evacuation purposes.	Community Development	Short-Term
+ Implement site planning measures in conjunction with the designation of significant views to enhance the visual environment.	Community Development	Short-Term
+ Update the subdivision ordinance to incorporate standards to implement policies on wildfire safety, pedestrian access, preservation of natural grade, and allow for a variety of parcel sizes.	Community Development	Short-Term
+ Consider expanding the Transfer of Development Rights ordinance to reduce development in high risk hazard areas and to allow for the protection of historic buildings and landscape, cultural resources.	Community Development	Short-Term
+ Update requirements in the Municipal Code to mitigate impacts associated with high wind conditions.	Community Development	Short-Term
+ Modify the condominium conversion ordinance to address the potential for displacement of affordable housing during the conversion of existing multi-family rental properties to condominiums.	Community Development	Short-Term
+ Develop measures to preserve and enhance important public views along north-south roadways, open space corridors, and at other key locations where there are significant views of scenic resources.	Community Development	Short-Term

Action Item	Work Group Lead	Timing
<ul style="list-style-type: none"> + Allow outdoor dining spaces within existing parking areas to facilitate improved pedestrian connectivity, activate building fronts, and provide public gathering spaces. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Include large site standards to systematically, strategically and opportunistically reorganize the existing large block pattern into a fine grain network of streets and open spaces to create an urban fabric of accessible community gathering spaces and active building fronts. 	Community Development	Short-Term
<p>Transit-Related Regional Coordination: The City currently coordinates and works with regional partners to improve transit for the community and the region. The City will continue to work in concert with regional partners on the following:</p>		
<ul style="list-style-type: none"> + Development of High-Speed Rail to Las Vegas through Rancho Cucamonga 	Community Development	Short-Term
<ul style="list-style-type: none"> + Implementation of the Cucamonga Station Specific Plan. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Support a future transit study to connect Rancho Cucamonga with Ontario, Eastvale, and Corona. 	Community Development	Mid-Term
<ul style="list-style-type: none"> + Support a proposed Tunnel to LA/Ontario Airport. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Bus Rapid Transit Connection projects along Foothill Boulevard and Haven Avenue. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Consult with Caltrans, SCAG's Connect SoCal RTP/SCS, SBCTA's Nexus Study and Congestion Management Plan, Omnitrans, San Bernardino County, the South Coast Air Quality Management District, and neighboring cities in support of a consistent and comprehensive regional transportation system. 	Community Development	Ongoing
<p>Mobility and Access Standards and Regulations: Updates and amendments to transportation-related standards and requirements will ensure compliance with local, State, and federal requirements, consistency with the General Plan, and incorporation of the most up to date information as follows:</p>		
<ul style="list-style-type: none"> + Develop and maintain a list of locations within the City where LOS E or LOS F are acceptable on auto-priority streets where, due to right-of-way limitations or physical constraints, roadway improvements are not appropriate. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Revise Engineering Design standards to include Complete streets design elements. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Identify the major arterial streets along new mixed-use corridors and consider developing street sections that are unique to each corridor. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Continue to review and implement the City of Rancho Cucamonga VMT thresholds and screening criteria to reflect the updated VMT analysis and utilize transportation impact study guidelines for VMT analysis when analyzing proposed new projects in the City. 	Community Development	Short-Term

Action Item	Work Group Lead	Timing
<ul style="list-style-type: none"> + Complete and maintain the citywide Active Transportation Plan. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Maintain a current truck route map on the City's website, and a truck route signage system that identifies key goods movement corridors and ensures goods movement needs are adequately served while reducing impacts to other uses. 	Community Development	Ongoing
<ul style="list-style-type: none"> + Establish restrictions on vehicle weight limit near sensitive land uses such as schools and residential areas to discourage cut-through truck traffic. 	Community Development	Mid-Term
<ul style="list-style-type: none"> + Work with technological providers to ensure equitable treatment of all users by the ride hailing and Transportation Network Companies (TNC) services, easier options to use the services for all users, a diverse dataset in Audiovisual (AV) technology that correctly recognizes people of color, etc. 	Community Development	Mid-Term
<ul style="list-style-type: none"> + Modify the roadway design standards to include innovative and energy saving alternatives such as traffic circles, roundabouts, and similar designs. 	Community Development	Short-Term
<p>Shared Parking District: Investigate and consider a Shared Parking District to facilitate parking sharing arrangements to enable more and higher quality active uses without devoting excessive and important land areas and budgets to parking facilities.</p>		
<p>Climate Action Plan (CAP): Implement and update the Climate Action Plan (CAP) goals, strategies, and measures to reduce community-wide and municipal GHG emission reductions in the categories of zero emission and clean fuels, efficient and carbon free buildings, renewable energy and zero carbon electricity, carbon sequestration, local food supply, efficient water use, waste reductions, and sustainable transportation.</p>	Community Development	Ongoing
<p>Community Noise: Update the noise ordinance to recognize that a single noise standard is not appropriate in a city with compact urban spaces and rural neighborhoods. Adoption and operation of the revised noise ordinance should include:</p>		
<ul style="list-style-type: none"> + CEQA thresholds that consider lower noise levels in rural neighborhoods, as well as active urban areas where ambient noise levels may be allowed to be higher. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Adopt noise and vibration standards that differentiate between good noise associated with community and bad noise associated with sleep disturbance and unreasonable impacts to neighborhoods. 	Community Development	Short-Term

Action Item	Work Group Lead	Timing
<ul style="list-style-type: none"> + Construction noise thresholds and procedures to include adjacent neighborhoods in the discussion of noise attenuation for construction. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Regularly take community noise measurements and make the measurements available to the public. 	Community Development	Short-Term
<p>Air Quality-Related Measures and Regional Coordination: Improving air quality is a public health imperative as it affects all residents. Much of the air quality impact is associated with heavy trucks and industrial uses that are often located near lower income neighborhoods. This makes improving air quality both a public health and an equity issue. To address these issues the City will:</p>		
<ul style="list-style-type: none"> + Develop guidelines to avoid locating new development with sensitive receptors within 500 feet of a freeway or high volume roadway. If avoidance is not feasible, development with sensitive receptors may be located within 500 feet of a major roadway only if the applicant first prepares a project-specific health risk assessment (HRA) addressing potential health risks to sensitive receptors from exposure to toxic air contaminant (TAC) emissions. The HRA shall be conducted in accordance with guidance and approval from SCAQMD. Feasible measures shall be implemented to reduce health risks from TAC exposure to levels determined by the HRA. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Develop and maintain a standard list of development conditions that would reduce health risk impacts, such as toxic air contaminant (TAC) emissions, when siting new sensitive receptors within 1,000 feet of a major roadway. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Amend Municipal Code to require new development that exceeds applicable air quality thresholds to notify nearby residents and business of potential pollutants; consult with the air quality management district, incorporate feasible best management practices for substantially reducing or avoiding air pollutant emissions during construction and operational phases. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Update development code to require applicants to install air filters with a Minimum Efficiency Reporting Value (MERV) of 13, or greater (as defined by ASHRAE standard 52.2 or Newer) in all buildings proposed for sensitive uses (e.g., residences, schools, offices, medical facilities). 	Community Development	Short-Term
<ul style="list-style-type: none"> + Ensure dust control provisions in the City's Development Code meet SCAQMD standards as they are updated. 	Community Development	Short-Term

Action Item	Work Group Lead	Timing
<ul style="list-style-type: none"> + Coordinate air quality improvement activities with those of neighboring local governments and other agencies, including the Southern California Association of Governments (SCAG), San Bernardino Council of Governments (SBCOG), and SCAQMD to maximize the potential local and regional air quality benefits of City activities. 	Community Development	Ongoing
<ul style="list-style-type: none"> + Collaborate with SCAQMD to review and provide input on regional air quality plans and to identify and implement best management practices to meet and maintain State and Federal ambient air quality standards. 	Community Development	Ongoing
<ul style="list-style-type: none"> + Support programs and investments that increase ridesharing, reduce pollutants generated by vehicle use, and meet the transportation control measures recommended by SCAQMD in the adopted Clean Air Plan. 	Civic and Cultural Services	Ongoing
<p>Resiliency-Related Regional Coordination: The City currently coordinates with neighboring cities, special districts, and the County to address regional issues and collaborate on resilience, hazard mitigation, and disaster response strategies and programs. To ensure future coordination meets community needs, the City should expand the following activities:</p>		
<ul style="list-style-type: none"> + Periodically coordinate and review operations and response plans for any dams that have the potential to inundate portions of Rancho Cucamonga. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Promote the strengthening of infrastructure owned and operated by other agencies/entities within the City. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Partner with utility providers, water purveyors, and other public agencies to reduce wildland vegetation fuels. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Work with water purveyors to ensure adequate water supply, long term maintenance, anticipated future supplies, and fire flow is provided throughout the City. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Coordinate with Southern California Edison on electrical infrastructure that may be impacted by wildfires and/or Public Safety Power Shutoff events. 	Public Safety	Ongoing
<p>Hazards-Related Standards and Regulations: The following updates and amendments to risk reduction and hazards mitigation-related standards and requirements will ensure compliance with local, state, and Federal requirements, consistency with the General Plan, and incorporation of the most up to date information:</p>		
<ul style="list-style-type: none"> + Adopt design standards that ensure new development provides adequate public safety and blends with natural surroundings to protect development and open space areas from fire hazards. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Enact a geologic disaster recovery ordinance for use following severe storms that cause extensive landslide or erosion damage. 	Community Development	Short-Term

Action Item	Work Group Lead	Timing
<ul style="list-style-type: none"> + Determine the viability of requiring enhanced building standards for new developments, redevelopments, and major remodels to ensure building functionality after a seismic event. 	Community Development	Short-Term
<p>WUIFA Requirements: The City's WUIFA currently regulates all properties in compliance with California Fire Safe Regulations. To ensure continued compliance and reduce future vulnerabilities to wildfire, the City shall:</p>		
<ul style="list-style-type: none"> + Require brush clearance activities on private properties within the WUIFA prior to the start of the fire season. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Update the municipal code to require annual brush clearance and vegetation management on all public and private roadways within the WUIFA. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Periodically review and update WUIFA appropriate landscaping options and make available to the public. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Periodically review and adopt the latest codes adopted by the Building Standards Commission to address wildfire. 	Public Safety	Ongoing
<ul style="list-style-type: none"> + Develop an existing non-conforming uses risk reduction program that identifies compliance gaps within the WUIFA and ensures properties are brought up to code in a timely manner. 	Public Safety	Short-Term
<p>Urban Forestry Plan: Prepare an Urban Forestry Master Plan that achieves the following:</p>		
<ul style="list-style-type: none"> + Provides information on proper tree pruning practices to the public. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Incorporates the management and enhancement of native trees 	Community Development	Short-Term
<ul style="list-style-type: none"> + Minimizes damage associated with wind- and fire-related hazards and risks and address climate change and urban heat island effects 	Community Development	Short-Term
<ul style="list-style-type: none"> + Manages the removal and replacement of trees that are diseased, damaged, or considered vulnerable to high wind and/or wildfire conditions. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Provides landscaping recommendations and requirements for new developments, redevelopment, and major remodels. 	Community Development	Short-Term
<ul style="list-style-type: none"> + Reflects the results of the Urban Heat Island Analysis. 	Community Development	Short-Term

FOCUS AREA IMPLEMENTATION

These measures are actions to implement the policies and strategic recommendations of the Focus Areas. These actions should be coordinated with private investment for near-term improvement to help “jump-start” overall implementation of the General Plan.

TABLE WP-5 FOCUS AREA IMPLEMENTATION

Action Item	Work Group Lead	Timing
Street Connectivity: Facilitate new street connections and intersections for the following as development/redevelopment occurs.		
+ Extend Civic Center Drive to the west, bridging over the Deer Creek Channel and connecting north to Foothill Boulevard and west to Hermosa Avenue via Devon Street.	Community Development	Mid-Term
+ Create a new signalized crossing of Foothill to connect directly into Terra Vista Town Center, which may in the future also be updated to a mixed-use center environment.	Community Development	Short-Term
+ Realign Red Hill Country Club Drive to create a safer and more functional intersection with Foothill Boulevard. Extend Red Hill Country Club Drive southward to a small new park at San Bernardino Road.	Community Development	Short-Term
+ Extend Roberds Street—and possibly create a new north-south street parallel to and east of Amethyst Avenue—to provide improved connection between the historic retail businesses and the newer shopping centers and opportunities for infill housing in the Town Center.	Community Development	Short-Term
+ Facilitate the development of new and enhanced connections from the Southeast Area to other parts of the city to provide additional north-south and east-west capacity.	Community Development	Mid-Term
+ Complete the at-grade spur track crossing of 6th Street west of Etiwanda Avenue.	Community Development	Mid-Term
+ Complete Wilson Avenue and create a network of new neighborhood streets to improve and distribute traffic in the Etiwanda Town Center area.	Community Development	Mid-Term
+ Extend 7 th Street, 9 th Street, and Feron Boulevard to create a more complete street network that improves connectivity and access to and from the Cucamonga Town Center to neighboring destinations.	Community Development	Long-Term
Parks Master Plan: Prepare a Parks Master Plan to plan for new open space and trail network in the Focus Areas that considers opportunities as follows:		
+ Create a small neighborhood green on vacant land at the junction of the 8 th Street Trail and Archibald Avenue and allow it to be fronted by housing.	Community Development	Short-Term
+ Create a new neighborhood park at Roberds Street and Base Line Road to accommodate a variety of community activities.	Community Development	Short-Term

Action Item	Work Group Lead	Timing
+ Create a community park at the intersection of the Pacific Electric Trail and Amethyst Avenue.	Community Development	Short-Term
+ Provide new trailhead connections to the Deer Creek Corridor – both south and north of Foothill Boulevard – to provide trail access between the Civic Center area and neighborhoods to the north and south, and to connect to the Pacific Electric Trail.	Community Development	Short-Term
+ Expand the trail network by creating a new multipurpose trail in the historic 8 th Street right-of-way adjacent to the planned High Speed Rail line.	Community Development	Short-Term
+ Reconfigure the existing trailhead parking lot and access way to the Pacific Electric Trail to integrate it better into the gateway center environment, while ensuring adequate parking for visitors and trail users. Visually enhance the existing bridge to be a more appropriate “gateway statement” for the city.	Community Development	Short-Term
+ Coordinate with Southern California Edison and the San Bernardino County Flood Control district to improve the large open spaces along Day Creek Channel as a usable recreational open space and a multipurpose trail.	Community Development	Short-Term
+ Engage discussions with the school districts regarding the use of school grounds as public park space. See https://www.tpl.org/community-schoolyards .	Community Development	Mid-Term
Shopping Center Improvements and Infill: Facilitate improvements and infill to existing shopping centers to improve and activate the shopping centers with temporary tactical or permanent enhancements within existing parking lots and along existing building fronts.	Community Development	Ongoing
Public/Private Partnerships: Manage improvements in the Cucamonga Town Center area through a public/private partnership between the City and local businesses and property owners. Management priorities would include managing shared parking facilities, coordinating streetscape and site improvements, planning and promoting special events, and managing complete or partial street closures related to special events.	Community Development	Short-Term
Historic Preservation: Preserve historic Route 66 establishments, including the Sycamore Inn, Magic Lamp, and Red Hill Cafe, and enhance their street fronts with improvements to Foothill Boulevard.	Community Development	Mid-Term

STANDARD CONDITIONS OF APPROVAL

The following standard conditions of approval address environmental issues associated with development identified in the General Plan EIR. In some instances, the standard conditions will apply to a development application. In other cases, the City may incorporate the standard or requirement into an existing or new ordinance that would apply to all projects. While the conditions may not apply in all instances, or to all projects, the intent of this standardized list is to provide a starting point for project evaluation by the City Staff. This standardized list is organized and numbered (shown in **bold** text) consistent with the organization of the EIR. The City will regularly revise this list to stay current with industry practices.

Aesthetics

- + **5.1-1:** A detailed on-site lighting plan, including a photometric diagram, shall be submitted by project applicants and reviewed and approved by the Planning Director and Police Department prior to the issuance of building permits. Such plan shall indicate style, illumination, location, height, and method of shielding so as not to adversely affect adjacent properties.
- + **5.1-2:** Solar access easements shall be dedicated for the purpose of assuming that each lot or dwelling unit shall have the right to receive sunlight across adjacent lots or units for use of a solar energy system. The easements may be contained in a Declaration of Restrictions for the subdivision which shall be recorded concurrently with the recordation of the final map or issuance of permits, whichever comes first. The easements shall prohibit the casting of shadows by vegetation, structures, fixtures, or any other object, except for utility wires and similar objects, pursuant to Development Code Section 17.08.060-G-2.

Air Quality

- + **5.3-1:** The City shall ensure that discretionary development will incorporate best management practices (BMPs) to reduce emissions to be less than applicable thresholds. These BMPs include but are not limited to the most recent South Coast AQMD recommendations for construction BMPs (per South Coast AQMD's CEQA Air Quality Handbook, South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2016 AQMP, and SCAG's Mitigation Monitoring and Reporting Plan for the 2020-2045 RTP/SCS, or as otherwise identified by South Coast AQMD).
- + **5.3-2:** Applicants for future discretionary development projects that would generate construction-related emissions that exceed applicable thresholds, will include, but are not limited to, the mitigation measures recommended by South Coast AQMD (in its CEQA Air Quality

Handbook or otherwise), to the extent feasible and applicable to the project. The types of measures shall include but are not limited to: maintaining equipment per manufacturer specifications; lengthening construction duration to minimize number of vehicle and equipment operating at the same time; requiring use of construction equipment rated by the EPA as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emissions limits, applicable for engines between 50 and 750 horsepower; and using electric-powered or other alternative-fueled equipment in place of diesel-powered equipment (whenever feasible). Tier 3 equipment can achieve average emissions reductions of 57 percent for NO_x, 84 percent for VOC, and 50 percent for particulate matter compared to Tier 1 equipment. Tier 4 equipment can achieve average emissions reductions of 71 percent for NO_x, 86 percent for VOC, and 96 percent for particulate matter compared to Tier 1 equipment.

- + **5.3-3:** The City shall ensure that discretionary development that will generate fugitive dust emissions during construction activities will, to the extent feasible, incorporate BMPs that exceed South Coast AQMD's Rule 403 requirements to reduce emissions to be less than applicable thresholds.
- + **5.3-4:** Applicants for future discretionary development projects which will generate construction-related fugitive dust emissions that exceed applicable thresholds will include, but are not limited to, the mitigation measures recommended by South Coast AQMD's CEQA Air Quality Handbook, to the extent feasible and applicable:
 - The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excess amounts of dust.
 - Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of watering (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. This measure can achieve PM₁₀ reductions of 61 percent through application of water every three hours to disturbed areas.
 - Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - All trucks shall be required to cover their loads as required by California Vehicle Section 23114. Covering loads and maintaining a freeboard height of 12 inches can reduce PM₁₀ emissions by 91 percent.
 - All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment

shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible. Application of water every three hours to disturbed areas can reduce PM10 emissions by 61 percent.

- Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust. Replacement of ground cover in disturbed areas can reduce PM10 emissions by 5 percent.
- Signs shall be posted on-site limiting traffic to 15 miles per hour or less. This measure can reduce associated PM10 emissions by 57 percent.
- During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth-moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with South Coast AQMD when winds are excessive.
- Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

Biological Resources

- + **5.4-1:** Special status plant and wildlife species have the potential to occur within the proposed project Area. Any project that involves the removal of habitat must consider if any special status species (e.g., Threatened or Endangered species, CNPS List 1B and 2 plants, or species protected under Section 15380 of CEQA) are potentially present on the project site and if the project impacts could be considered significant by the City. If potential habitat is present in an area, focused

surveys shall be conducted prior to construction activities in order to document the presence or absence of a species on the project site. Botanical surveys shall be conducted during the appropriate blooming period for a species. If no special status species are found on the project site, no additional action is warranted. If special status species are found, appropriate mitigation would be required in coordination with the City, consistent with its performance criteria of mitigating lost habitat at a ratio no less than one to one (one acre restored for every acre impacted). However, mitigation shall be consistent with the requirements of any required resource agency permits. In the case of a discrepancy between resource agency permits and this condition, the more stringent of the two shall govern.

- + **5.4-2:** Any project that impacts a Federally listed species, based on a biological survey or other analysis of the project, shall be required to secure take authorization through Section 7 or Section 10 of the Federal Endangered Species Act (FESA) prior to project implementation. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). However, mitigation shall be consistent with the requirements of any required resource agency permits. In the case of a discrepancy between resource agency permits and this condition, the more stringent of the two shall govern. Project applicants shall be required to plan, implement, monitor, and maintain the mitigated habitat according to the requirements of the Biological Opinion (Section 7) or Habitat Conservation Plan (Section 10) for the project. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the USFWS, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- + **5.4-3:** Any project that impacts a State-listed Threatened or Endangered species shall be required to obtain take authorization (through an Incidental Take Permit) pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code. If the species is also listed under the FESA, a consistency finding per Section 2080.1 of CESA is issued when a project receives the USFWS Biological Opinion. Compensation for impacts to the listed species and their habitat shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). However, mitigation shall be consistent with the requirements of any required resource agency permits. In the case of a discrepancy between resource agency permits and this condition, the more stringent of the two shall govern. Project applicants shall be required to plan,

implement, monitor, and maintain the mitigated habitat according to the requirements of the 2080 CESA process. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the California Department of Fish and Wildlife and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) a maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- + **5.4-4:** To avoid conflicts with the Migratory Bird Treaty Act and Bald/Golden Eagle Protection Act, construction activities involving vegetation removal shall be conducted between September 16 and March 14. If construction occurs inside the peak nesting season (between March 15 and September 15), a preconstruction survey (or possibly multiple surveys) by a qualified biologist is required prior to construction activities to identify any active nesting locations. If the biologist does not find any active nests within the project site, the construction work shall be allowed to proceed. If the biologist finds an active nest within the project site and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest; the size of the buffer zone shall depend on the affected species and the type of construction activity. Any active nests observed during the survey shall be mapped on an aerial photograph. Only construction activities (if any) that have been approved by a biological monitor shall take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor when construction activities take place near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the preconstruction survey and any subsequent monitoring shall be provided to the California Department of Fish and Wildlife and the City.
- + **5.4-5:** A jurisdictional delineation shall be conducted if a project will impact jurisdictional resources. Permits from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) shall be required for impacts on areas within these agencies' jurisdiction. Acquisition and implementation of the permits may require mitigation. Compensation for impacts to jurisdictional resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). However, mitigation shall be consistent with the requirements of any required resource agency permits. In the case of a discrepancy between resource agency permits and this condition, the more stringent of the two shall govern. Project applicants shall be required to plan, implement, monitor, and maintain the mitigated jurisdictional resource according to the requirements of USACE and RWQCB. Prior to issuance of the first action and/or permit that would allow for site disturbance (e.g., grading permit), a detailed

mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and the appropriate resource agencies, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.

- + **5.4-6:** The Porter-Cologne Act and Sections 1600 to 1616 of the California Fish and Game Code protect “waters of the State.” Agreements (Streambed Alteration Agreements) from the California Department of Fish and Wildlife (CDFW) shall be required for impacts on areas in CDFW’s jurisdiction. Acquisition and implementation of the agreement may require mitigation. Compensation for impacts to CDFW resources shall be mitigated at a ratio no less than one to one (one acre restored for every acre impacted). However, mitigation shall be consistent with the requirements of any required resource agency permits. In the case of a discrepancy between resource agency permits and this condition, the more stringent of the two shall govern. Project applicants shall be required to plan, implement, monitor, and maintain the mitigation areas according to CDFW requirements. Prior to issuance of the first action and/or permit which would allow for site disturbance (e.g., grading permit), a detailed mitigation plan shall be prepared by a qualified biologist for approval by the City of Rancho Cucamonga and CDFW, and shall include: (1) the responsibilities and qualifications of the personnel to implement and supervise the plan; (2) site selection; (3) site preparation and planting implementation; (4) a schedule; (5) maintenance plan/guidelines; (6) a monitoring plan; and (7) long-term preservation requirements.
- + **5.4-7:** The City of Rancho Cucamonga requires a habitat connectivity/wildlife corridor evaluation for development projects that may impact existing connectivity areas and wildlife linkages identified in Figure 5.4-6, Wildlife Movement Linkages Map of the General Plan. The results of the evaluation shall be incorporated into the project’s biological report required under standard condition of approval 5.4-1. The evaluation shall also identify project design features that would reduce potential impacts and maintain habitat and wildlife movement. To this end, the City requires incorporation of the following measures, to the extent practicable, for projects impacting wildlife movement corridors: Adhere to low density zoning standards
 - Encourage clustering of development
 - Avoid known sensitive biological resources
 - Provide shielded lighting adjacent to sensitive habitat areas
 - Encourage development plans that maximize wildlife movement

- Provide buffers between development and wetland/riparian areas
- Protect wetland/riparian areas through regulatory agency permitting process
- Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries
- Encourage preservation of native habitat on the undeveloped remainder of developed parcels
- Minimize road/driveway development to help prevent loss of habitat due to roadkill and habitat loss
- Use native, drought-resistant plant species in landscape design
- Encourage participation in local/regional recreational trail design efforts

Cultural Resources

- + **5.5-1:** For projects that contain a designated Historical Landmark, the site shall be developed and maintained in accordance with the applicable Historic Landmark Alteration Permit. Any further modifications to the site including, but not limited to, exterior alterations and/or interior alterations which affect the exterior of the buildings or structures, removal of landmark trees, demolition, relocation, reconstruction of buildings or structures, or changes to the site require a modification to the Certificate of Appropriateness subject to Historic Preservation Commission review and approval.
- + **5.5-2:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.
- + **5.5-3:** If a building within the project area was constructed more than 50 years ago, the City will require a determination of whether the building, or site, could be considered historic. If the project is considered historic Chapter 17.18 Historic Preservation will apply.
- + **5.5-4:** Prior to any construction activities that may affect historical resources (i.e., structures 50 years or older), a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards in architectural history or history. This shall include a records search to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or designated in the National Register of Historic Places, California Register of Historic Resources, or a local register. Following the records search, the qualified architectural historian shall conduct a survey in

accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Pursuant to the definition of a historical resource under CEQA, potential historical resources shall be evaluated under a developed historic context.

- + **5.5-5:** To ensure that projects requiring the relocation, rehabilitation, or alternation of a historical resource do not impact the resource's significance, the Secretary of Interior's Standards for the Treatments of Historic Properties shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the Professionally Qualified Standards. Prior to any construction activities that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Rancho Cucamonga for review and approval.
- + **5.5-6:** If a proposed project would result in the demolition or significant alteration of historical resource, such demolition cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the resource to the greatest extent possible. Recordation shall take the form of Historic American Buildings Survey, Historic American Engineering Record, or Historic American Landscape Survey documentation, and shall be performed by an architectural historian or historian who meets the Professionally Qualified Standards. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information such as building plans and elevations, and/or historical photographs. Documentation shall be reproduced on archival paper and placed in appropriate local, State, or federal institutions. The specific scope and details of documentation are to be developed in coordination with the City of Rancho Cucamonga Planning Department.
- + **5.5-7:** If cultural resources that are eligible for listing to the National Register of Historic Places, California Register of Historic Resources, or a local register are identified within or adjacent to the proposed development, the construction limits shall be clearly flagged to ensure impacts to eligible cultural resources are avoided or minimized to the extent feasible. Prior to implementing construction activities, a qualified archaeologist shall verify that the flagging clearly delineates the construction limits and eligible resources to be avoided. Since the location of some eligible cultural resources is confidential, these resources shall be flagged as environmentally sensitive areas.

- + **5.5-8:** To determine the archaeological sensitivity for discretionary projects within the city, an archaeological resources assessment shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology. The assessments shall include a California Historical Resources Information System (CHRIS) records search and a search of the Sacred Lands File (SLF) maintained by the Native American Heritage Commission (NAHC). The records searches shall determine if the proposed project has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A Phase I pedestrian survey shall be undertaken in areas that are undeveloped to locate any surface cultural materials.
 - If potentially significant archaeological resources are identified through an archaeological resources assessment, and impacts to these resources cannot be avoided, a Phase II Testing and Evaluation investigation shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities to determine significance. If resources determined significant or unique through Phase II testing, and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include a Phase III data recovery program that would be implemented by a qualified archaeologist and shall be performed in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR): Recommended Contents and Format (1990) and Guidelines for Archaeological Research Designs (1991).
 - If the archaeological assessment did not identify potentially significant archaeological resources within the proposed project area but indicated the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel prior to construction activities of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial onsite safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the PQS. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.

- If the archaeological assessment did not identify potentially significant archaeological resources, but indicates the area to be of medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or education repository.

Geology and Soils

- + **5.7-1:** Development of projects shall comply with the City's modifications to the Alquist-Priolo Earthquake Fault Zone Act that call for geotechnical investigations for all proposed structures designed for human occupancy within the expanded AP Zones, including a zone along a splay of the Cucamonga Fault and another zone along the scarp at Red Hill. Also, geotechnical investigations are required for essential and critical facilities along the buried/uncertain segment of the Red Hill Fault, with a setback requirement of at least 50 feet
- + **5.7-2:** All future building pads shall be seeded and irrigated for erosion control. Detailed plans shall be included in the landscape and irrigation plans to be submitted for Planning Department approval prior to the issuance of building permits.
- + **5.7-3:** A geological report shall be prepared for an individual project by a qualified engineer or geologist and submitted at the time of application for grading plan check.
- + **5.7-4:** The final grading plan, appropriate certifications and compaction reports shall be completed, submitted, and approved by the Building Official prior to the issuance of building permits.
- + **5.7-5:** A separate grading plan check submittal is required for all new construction projects and for existing buildings where improvements being proposed will generate 50 cubic yards or more of combined cut and fill. The grading plan shall be prepared, stamped, and signed by a California registered Civil Engineer.
- + **5.7-6:** A geotechnical report shall be prepared by a qualified engineer licensed by the State of California to perform such work.
- + **5.7-7:** If any paleontological resource (i.e., plant or animal fossils) are encountered before or during grading, the developer shall retain a

qualified paleontologist to monitor construction activities, and take appropriate measures to protect or preserve them for study. The paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:

- Assign a paleontological monitor, trained, and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full-time during the interval of earth-disturbing activities.
- Should fossils be found within an area being cleared or graded, divert earth-disturbing activities elsewhere until the monitor has completed salvage. If construction personnel make the discovery, the grading contractor shall immediately divert construction and notify the monitor of the find.
- Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (i.e., San Bernardino County Museum).
- Submit summary report to City of Rancho Cucamonga. Transfer collected specimens with a copy to the report to San Bernardino County Museum.

Hazards and Hazardous Materials

- + **5.9-1:** A Fire Protection Plan shall be prepared and submitted to the City for review and approval that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Installation standards and maintenance requirements for incinerators, outdoor fireplaces, barbecues and grills, and firebreak fuel modification areas are imposed on new developments.
- + **5.9-2:** With respect to all open space, recreational, or parkland uses, the City will ensure through project design features and conditions of approval that Southern California Edison (SCE) has 24/7 downline access by SCE facilities and operations.
- + **5.9-3:** With respect to parkland proposed within utility corridors, anti-climbing sharks teeth style barriers, or their equivalent, shall be installed on all transmission towers. Anti-climbing devices shall conform to the California Public Utilities Commission guidance that is in effect at the time of parkland project implementation. The cost of anti-climbing guards and installation shall be borne by the project proponent.

- + **5.9-4:** Any proposed trees within utility corridors should be maintained at a height not to exceed 15 feet.
- + **5.9-5:** With the exception of utility infrastructure and other public improvements that do not interfere with such infrastructure, permanent structures are not allowed within utility corridors.
- + **5.9-6:** Southern California Edison (SCE) shall be notified in writing of any proposal to locate parkland or recreational uses within a utility corridor. If the use is located on SCE property or if otherwise required by law or the terms of a utility easement, SCE's written approval of such uses shall be obtained prior to the issuance of any CEQA approval or permit or other ministerial or discretionary City approval.

Hydrology and Water Quality

- + **5.10-1:** A final drainage study shall be submitted to and approved by the City Engineer prior to final map approval or the issuance of grading permits, whichever occurs first. All drainage facilities shall be installed as required by the City Engineer.
- + **5.10-2:** Adequate provisions shall be made for acceptance and disposal of surface drainage entering the property from adjacent areas.

Noise

- + **5.13-1:** For construction activities that do not involve pile driving occurring within 580 feet residential, schools, churches, or similar uses or within 330 feet of commercial/industrial uses or for construction activities involving pile driving occurring within 1,000 feet of residential, schools, churches, or similar uses, or within 330 feet of commercial/industrial uses, or nighttime construction activities, as defined in Development Code Section 17.66.050), the City shall require that project applicants prepare a site-specific construction noise analysis demonstrating compliance with the noise standards of Development Code Section 17.66.050, as determined by the City. The analysis shall be completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, restrictions on construction timing to avoid nighttime hours, restrictions on the location of equipment and vehicle use within the construction site, installing noise mufflers on construction equipment, use of electric-powered vehicles and equipment, use of sound blankets on construction equipment, and the use of temporary walls or noise barriers to block and deflect noise.
- + **5.13-2:** To avoid or substantially lessen exposure to substantial permanent increases in traffic noise, the City shall, at the time of development application submittal, require the preparation of a traffic noise study that includes (1) the evaluation of potential traffic

noise impacts of new noise sources (e.g., project-generated traffic noise increases) on nearby existing noise sensitive receptors (such as residential neighborhoods) and (2) require noise reduction measures (e.g., sound walls, rubberized asphalt) to prevent exposure of noise sensitive receptors to substantial noise increases, consistent with Table N-1 and incremental increase standards of no greater than 3 dB where existing levels are below 65 dBA CNEL, 1 dB where existing levels are between 70 dBA CNEL and 75 dBA and any increase where existing levels are above 75 dBA CNEL, as determined by the City.

- + **5.13-3:** The City shall require that project applicants analyze and mitigate potential noise impacts from new stationary noise sources (e.g., loading docks at commercial and industrial uses, mechanical equipment associated with all building types), to, as determined by the City, comply with the City's daytime (7:00 a.m. to 10:00 p.m.) standards of 65 dBA Leq/50 dBA Leq (exterior/interior) and nighttime (10:00 p.m.-7:00 a.m.) standards of 60 dBA Leq/45 dBA Leq (exterior/interior), described in Development Code Section 17.66.050(F). The analysis shall be prepared by a qualified acoustical engineer or noise specialist and completed prior to project approval and can be completed as part of the environmental review process for projects subject to CEQA. Potential project-specific actions that can feasibly achieve compliance include, but are not limited to, the use of enclosures or screening materials (e.g., landscape buffers, parapets, masonry walls) around stationary noise sources (e.g., heating, ventilation, and air conditioning systems, generators, heating boilers, loading docks) or of noise suppression devices (e.g., acoustic louvers, mufflers).
- + **5.13-4a:** The City shall, at the time of development project application submittal, evaluate the compatibility of proposed noise sensitive uses (e.g., residences, lodging, schools, parks) with the noise environment to ensure noise compatibility standards (Table N-1) are met.
- + **5.13-4b:** Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, prioritize site planning that reduces noise exposure over other attenuation measures, particularly the location of parking, ingress/egress/loading, and refuse collection areas relative to surrounding residential development and other noise-sensitive land uses.
- + **5.13-4c:** Applicants for development projects shall, at the time of application submittal, evaluate noise impacts for compliance with noise compatibility standards (Table N-1), and when noise attenuation measures are required, incorporate building orientation, design, and interior layout into the project to achieve compatible noise levels. For example, noise insulation materials (e.g., double-glazed windows and well-sealed doors) substantially lessen interior noise levels. In addition,

interior building layouts that place active rooms, such as kitchens, between noise-sensitive rooms, such as bedrooms, and exterior noise sources, such as roadways, substantially lessen interior noise levels within the noise-sensitive rooms.

- + **5.13-4d:** The City shall require that mixed-use development be designed to minimize exposure of noise-sensitive uses from adjacent noise sources and require full disclosure of the potential noise impacts of living in a mixed-use development by requiring residential disclosure notices within deeds and lease agreements as a condition of project approval.
- + **5.13-4e:** The City shall review and comment on transportation capital projects and operations sponsored by Caltrans and other agencies to minimize exposure of noise-sensitive uses within the city to adverse levels of transportation-related noise, including noise associated with freeways, major arterials, bus transit, and rail lines.
- + **5.13-5a:** For development involving construction activities within 500 feet of existing sensitive land uses (places where people sleep or buildings containing vibration-sensitive uses), the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analysis that identifies vibration-reducing measures to ensure the project construction does not exceed applicable vibration criteria (e.g., FTA, Caltrans) for the purpose of preventing disturbance to sensitive land uses and structural damage. The analysis shall include, but is not limited to, the following requirements:
 - Ground vibration-producing activities, such as pile driving, shall be limited to the daytime hours between 7:00 a.m. to 8:00 p.m. on weekdays and prohibited on Sundays and holidays.
 - If pile driving is used, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile.
 - Maximize the distance between construction equipment and vibration-sensitive land uses.
 - Earthmoving, blasting and ground-impacting activities shall be prohibited from occurring at the same time if simultaneous activity would result in exceedance of vibration criteria.
 - Where pile driving is proposed, alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, nondisplacement piles, pile cushioning, torque or hydraulic piles) shall be implemented when the project cannot otherwise demonstrate vibration levels in compliance with the structural damage threshold.
 - Minimum setback requirements for different types of ground vibration-producing activities (e.g., pile driving) for the purpose

of preventing damage to nearby structures shall be established.

Factors to be considered include the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the fragility/resiliency of the nearby structures.

Established setback requirements (100 feet for pile driving, 25 feet for other construction activity) can be revised only if a project-specific analysis is conducted by a qualified geotechnical engineer or ground vibration specialist that demonstrates, as determined by the City, that the structural damage vibration threshold would not be exceeded.

- Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving) for the purpose of preventing negative human response shall be established based on the specific nature of the vibration producing activity (e.g., type and duration of pile driving), soil conditions, and the type of sensitive receptor. Established setback requirements (500 for pile driving, 80 for other construction) can be revised only if a project-specific ground vibration study demonstrates, as determined by the City, that receptors would not be exposed to ground vibration levels in excess of negative human response vibration threshold levels, depending on the frequency of the event and receiver type.
- All vibration-inducing activity within the established setback distances for preventing structural damage and negative human response shall be monitored and documented to compare recorded ground vibration noise and vibration noise levels at affected sensitive land uses to the applicable vibration threshold values. The results included recorded vibration data shall be submitted to the City.
- + **5.13-5b:** For projects proposed within 600 feet of commuter rail/high-speed rail/freight rail, or rail with combined services, the City shall require applicants, at the time of application submittal, to prepare a project-specific vibration analyses to evaluate vibration exposure from nearby transit sources. The vibration assessment shall be prepared by a qualified acoustical engineer or noise specialist in accordance with Federal Transit Administration (FTA) vibration impact criteria, or other applicable City policy in place at the time of project application submittal. The assessment shall determine vibration levels at specific building locations and identify structural mitigation measures (e.g., isolation strip foundations, insulated windows and walls, sound walls or barriers, distance setbacks, or other construction or design measures) that would reduce vibration to acceptable levels for the receptor and source type.
- + **5.13-5c:** The City shall evaluate new transportation capital projects and

operations sponsored by other agencies for structural vibration impacts and vibration annoyance impacts, consistent with City-approved methodologies (e.g., Caltrans, FTA guidance).

Transportation

- + **5.17-1:** Future development applications in the City shall be required to provide traffic impact analyses for review and approval by the City during the permit process to identify the traffic impacts of the project and the needed roadway and intersection improvements. Any identified on-site improvements and improvements to abutting roadways would need to be made part of the development. Coupled with the payment of DIF for the improvement of off-site roadways and intersections, traffic impacts would be mitigated on a project-by-project basis.
- + **5.17-2:** Future developments with 250 employees or more shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 2202, which requires the implementation of trip reduction measures as a means of reducing pollutant emission in the air basin. An employer subject to this Rule shall annually register with the SCAQMD to implement an emission reduction program, in accordance with this Rule.
- + **5.17-3:** Individual projects shall provide the following, as determined applicable by City staff:
 - Provide car-sharing, bike sharing, and ride-sharing programs;
 - Improve or increase access to transit;
 - Incorporate neighborhood electric vehicle networks into the project;
 - Include project measures to reduce transportation requirements such as work from home and flexible work schedules;
 - Link to existing pedestrian or bicycle networks, or transit service; and/or
 - Provide traffic calming.

Tribal Cultural Resources

- + **5.18-1:** Inadvertent Archaeological Find. If during ground disturbance activities, cultural resources are discovered that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to project approval, the following procedures shall be followed. Cultural resources are defined as being multiple artifacts in close association with each other, but also include fewer artifacts if the area of the find is determined to be of significance due to its sacred or cultural importance as determined in consultation with the Native American Tribe(s).

- All ground disturbance activities within 100 feet of the discovered cultural resources shall be halted until a meeting is convened between the developer, the archaeologist, the tribal representative(s) and the Planning Director to discuss the significance of the find.
 - At the meeting, the significance of the discoveries shall be discussed and after consultation with the tribal representative(s) and the archaeologist, a decision shall be made, with the concurrence of the Planning Director, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resources.
 - Grading or further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the 100-foot buffer area and will be monitored by additional Tribal monitors if needed.
 - Treatment and avoidance of the newly discovered resources shall be consistent with the Cultural Resources Management Plan and Monitoring Agreements entered into with the appropriate tribes. This may include avoidance of the cultural resources through project design, in-place preservation of cultural resources located in native soils and/or re-burial on the Project property so they are not subject to further disturbance in perpetuity as identified in Non-Disclosure of Reburial Locations Condition.
 - If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the project archaeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.
 - Pursuant to California Public Resources Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources and tribal cultural resources. If the landowner and the Tribe(s) cannot agree on the significance or the mitigation for the archaeological or tribal cultural resources, these issues will be presented to the Planning Director for decision. The City's Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological and tribal cultural resources, recommendations of the project archaeologist, and shall take into account the cultural and religious principles and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the City Planning Director is appealable.
- + **5.18-2:** Cultural Resources Disposition. In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be

carried out for final disposition of the discoveries:

- One or more of the following treatments, in order of preference, shall be employed as required by the tribes subject to appeal to the Planning Director. Evidence of the approved treatment shall be provided to the City of Rancho Cucamonga Planning Department:
 - Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.
 - Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recording has been completed, with an exception that sacred items, burial goods, and Native American human remains are excluded. Any reburial process shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV report. The Phase IV Report shall be filed with the City under a confidential cover and not subject to Public Records Request.
 - If preservation in place or reburial is not feasible then the resources shall be curated in a culturally appropriate manner at a San Bernardino County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees by the Applicant necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the City. There shall be no destructive or invasive testing on sacred items, burial goods, and Native American human remains, as defined by the cultural and religious practices of the Most Likely Descendant. Results concerning finds of any inadvertent discoveries shall be included in the Phase IV monitoring report.
- + **5.18-3: Archaeologist Retained.** Prior to issuance of a grading permit the project applicant shall retain a qualified Registered Professional Archaeologist (RPA), to monitor all ground disturbing activities in an effort to identify any unknown archaeological resources. The Registered Professional Archaeologist and the Tribal monitor(s) shall manage and oversee monitoring for all initial ground disturbing activities and excavation of each portion of the project site including clearing,

grubbing, tree removals, mass or rough grading, trenching, stockpiling of materials, rock crushing, structure demolition and etc. The Registered Professional Archaeologist and the Tribal monitor(s), shall independently have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources in coordination with any required special interest or tribal monitors. The developer/permit holder shall submit a fully executed copy of the contract to the Planning Department to ensure compliance with this condition of approval. Upon verification, the Planning Department shall clear this condition. In addition, the Registered Professional Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a Cultural Resources Management Plan (CRMP) in consultation pursuant to the definition in AB 52 to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting tribe is defined as a tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in California Public Resources Code Section 21080.3.2(b)(1) of AB 52. Details in the Plan shall include:

- Project grading and development scheduling;
 - The Project archaeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors, and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;
 - The protocols and stipulations that the contractor, City, Consulting Tribe(s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.
- + **5.18-4:** Native American Monitoring. Tribal monitor(s) shall be required on-site during all ground-disturbing activities, including grading,

stockpiling of materials, engineered fill, rock crushing, etc. The land divider/permit holder shall retain a qualified tribal monitor(s) from the requesting Tribe. Prior to issuance of a grading permit, the developer shall submit a copy of a signed contract between the Tribe and the land divider/permit holder for the monitoring of the project to the Planning Department and to the Engineering Services Department. The Tribal Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground-disturbance activities to allow recovery of cultural resources, in coordination with the Project Archaeologist.

- + **5.18-5:** Archeology Report - Phase III and IV. Prior to final inspection, the developer/permit holder shall prompt the Project Archaeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Planning Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Planning Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Planning Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).
- + **5.18-6:** Human Remains. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Bernardino County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resource Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the San Bernardino County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "most likely descendant." The most likely descendant shall then make recommendations and engage in consultation concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.
- + **5.18-7:** Non-Disclosure of Reburial Locations. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government

Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

Wildfire

- + **5.9-1:** Future development shall prepare a Fire Protection Plan that includes measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed development site. The Plan must also address water supply, access, building ignition fire resistance, fire protection systems and equipment, defensible space, and vegetation management. Maintenance requirements for incinerators, outdoor fireplaces, permanent barbecues and grills, and firebreak fuel modification areas are imposed on new developments.



Placemaking Toolkit



“Every increment of construction must be made in such a way as to heal the city.”

*- Christopher Alexander
A New Theory of Urban
Design, 1987*

A PLACEMAKING TOOLKIT IS...

a set of implementation tools intended as a guide for the City, property owners, and developers, to help ensure that each new increment of private and public investment in Rancho Cucamonga contributes to the making of great places of strong and enduring value. The intention of this Toolkit is to clearly describe, diagram and illustrate the types of development patterns, forms and strategies that will result in human-scale, pedestrian-oriented places that achieve the community’s vision as presented in this General Plan.

Through the extensive PlanRC community engagement process of 2020, thousands of residents shared their hopes and dreams for the future of our City. While there were many diverse points of view, it was very clear that the one thing most people want is “more nice places to go and more ways to get there.” This requires that public and private improvements work together to “make places, not just projects” and focuses attention on the streets and other public spaces of our City—the “public realm”—which is the network of spaces through which one gets around town, and in which one meets and interacts with others. The public realm is the glue that holds all the projects together and makes them into a great city.

HEART OF THE MATTER

Throughout the second half of the 20th century, conventional city planning practice was based on separating dissimilar land uses by distance and by discontinuous street networks, which required an automobile trip for every change of activity throughout the day. Public realm design valued the convenience of motorists over the safety and comfort of pedestrians and bicyclists, relegating all modes of travel other than the private automobile to the indeterminate status of “alternative modes.” Cities that were established and grew rapidly during this time period are characterized by patterns of low-density isolated housing, commercial centers with large parking lots, employment centers built as “business parks,” and wide, high-speed arterial streets. This conventional pattern of development severs neighborhood from neighborhood and commercial centers from employment districts as they prioritize long-distance vehicular throughput and results in a number of other environmental, economic, and social impacts. Such planning and mobility practices coincided with the growth of Rancho Cucamonga since its incorporation in 1978, leaving us with a range of challenging physical characteristics to address.

This Toolkit, in addition to the updated General Plan, describes a more balanced approach with tools and strategies for all-mode mobility and placemaking that ensures the vitality of the community. In planning and designing the future of Rancho Cucamonga, we must ensure that areas within the city that will be developing or redeveloping over the next several decades, are developed with urban patterns and forms that deliver more equitable and valuable results—regardless of preferred travel mode—and that they enable significant benefits for the well-being of the community, the environment, and the economy.

This General Plan is intended to define a sustainable path forward, both preserving those characteristics of the city that residents know and love, while also enabling a bright future for the generations to come. To that end, this Placemaking Toolkit provides the City, property owners, and developers with a set of tools and strategies to guide them in their mutual pursuit of that vision.



HOW TO USE THIS TOOLKIT

This Toolkit is not a regulatory document. Rather, the tools, strategies and recommendations provided herein are intended as a guide to the City, and to property owners and developers, for implementing the placemaking policies set forth in the General Plan. To do so, the Toolkit focuses on three high-priority topics related to the built environment, as described in the following sections:

- + Part 1 | Activating the Public Realm.** Part 1 addresses the many factors that contribute to an active, comfortable, and safe network of human-scale streets and other public spaces—the “public realm”—that invite and support active mobility and the economic and social life of our community. The public realm of our City is envisioned to evolve and expand into a network of “outdoor living rooms of our community,” beyond streets simply managing automobile traffic. The appearance and function of these spaces are defined by the design of the streets and other open spaces, and by the ways in which the front yards and ground floors of buildings define, connect to, and activate, those spaces.
- + Part 2 | Rebalancing Streets & Public Spaces.** Part 2 focuses on the design and management of streets, to equitably balance facilities to accommodate all users, regardless of travel mode, age, income, and physical capabilities. The City’s current street network strongly favors motorists, most often at the expense of pedestrians and bicyclists. This particularly and inequitably disadvantages the young, old, and poor. Rebalancing the network and creating activatable frontages requires systematic improvements, including adding on-street parking and medians, providing wider, more comfortable sidewalk, improving street tree plantings for shade/wind protection and spatial enclosure, and adding high-quality bus lanes and safe bike lanes on select streets to transform them into much safer and more pleasant spaces for our community.
- + Part 3 | Completing the Community Fabric.** Part 3 describes and illustrates how a human scale network of multi-modal streets and other public spaces with active frontages may be systematically extended into large vacant or underutilized sites. The intended outcome is that each such site be configured and designed as an integral part of the community fabric that connects to surrounding properties and is accessible by foot, bike, transit and car—rather than just “big development projects” between which one must drive back and forth. The key to providing a network of human-scale, walkable, welcoming and active frontages is a network of balanced, complete streets and open spaces that form walkable blocks, well-connected to and integrated with the surrounding community fabric.



Part 1 of the Toolkit provides tools and strategies for making an active, safe, and equitable Public Realm throughout our City.



Part 2 of the Toolkit provides tools and strategies for systematically rebalancing our street and public spaces toward and in favor of non-motorists.



Part 3 of the Toolkit provides tools and strategies for completing unbuilt (or changing) parts of our City.

Topics and Applicability

While the Toolkit provides a comprehensive set of tools and strategies that cover a range of high-priority topics, not all topics are relevant to all users or contexts. The Matrix below provides an overview of the topics and information covered, along with a quick guide as to which topics are most relevant to public and private improvements.

○ Overview & Intent

● Design Tools & Strategies

Most Relevant To:

Page #	Toolkit Topics	Public Improvements	Private Development
308	Part 1 Activating the Public Realm	○	○
310	1A: Creating Active Frontages	○	○
312	1B: Public & Private Frontages	○	○
314	1C: Frontages: Context, Design & Calibration	○	○
314	I. Frontage Types & Contexts	○	○
315	II. Frontage Design & Calibration	○	○
316	A. Retail & Commercial Frontages	●	●
320	B. Office & Industrial Frontages	●	●
322	C. Residential Frontages	●	●
324	Part 2 Rebalancing Streets & Public Spaces	○	
326	2A: Applying Active Frontages	○	○
326	I. Retrofit Strategies	○	○
328	A. Bulb-Out Type	●	
330	B. Bulb-In Type	●	●
332	C. Frontage Lane Type	●	●
334	D. Adding On-Street Parking	●	●
336	2B: Applying Additional Improvements	○	
336	I. Adding Signalized Intersections and Crosswalks	●	
338	II. Neighborhood Street Retrofit Strategies	●	
340	III. Traffic Calming & Placemaking Strategies	●	
340	A. Adding Street Trees	●	
344	B. Adding Street Lighting	●	
344	C. Adding Safe Pedestrian Crossings	●	
345	D. Adding Chicanes	●	
345	E. Adding Mini-Roundabouts	●	
346	2C: Applying Transit & Bike Improvements	○	
346	I. Transit Priority Street Retrofits	●	
352	II. Bike Priority Street Retrofits	●	
356	2D: Creating New Streets & Public Spaces	○	○
356	I. Designing New Streets	●	●
358	II. Designing New Public Spaces	●	●
360	Part 3 Completing the Community Fabric	○	○
362	3A: General Guidelines for Large Site Development	○	○
363	Case Study 1: Large Site Development	●	●
377	Case Study 2: Redevelopment of Shopping Centers	●	●
388	Case Study 3: Retrofitting Shopping Centers	●	●



PART 1. ACTIVATING THE PUBLIC REALM

To ensure an increasingly active, attractive, equitable, pedestrian-oriented environment that is comfortable and safe to navigate by foot, bicycle, or any vehicular mode, careful attention must be given to the design and connectivity of the public realm. Generally defined, the public realm is all the publicly accessible open spaces between all the buildings within the city. This begins with the truly public spaces such as public streets and public parks, but as residents experience the City day to day it also includes a great deal of publicly accessible but privately owned spaces (semi-public spaces), including but not limited to the access drives and parking lots of commercial and industrial buildings, the internal streets within many of our neighborhoods, and community parks owned and maintained by home-owners' associations. It is within this extensive network of public and semi-public shared common open spaces that our social and economic life as a community occurs.

In many communities, like Rancho Cucamonga, that have developed with predominantly suburban patterns where access to and between almost every daily activity is provided by automobile, these spaces have been designed and engineered almost exclusively to accommodate and facilitate driving and parking. The result is that most of our public and private streets, and the approaches to most of our buildings are dominated by asphalt pavement and not designed with the comfort and safety of pedestrians and bicyclists in mind. As such, they are not spaces within which people walk for enjoyment, for shopping, for dining, or for meeting friends and neighbors and socializing as a community. Through the 2020 PlanRC public engagement process it was heard loud and clear that many residents hope that in the future these spaces will be more welcoming, safe and comfortable for people, not just cars.

Accordingly, Part 1 of this Toolkit provides a set of tools for leveraging the value of our public realm, recognizing that this space (our streets alone comprising over 6,000 acres of land!) is a very significant community resource. It is intended that with these tools, over time, the value of the public realm is systematically increased through incremental enhancements that deliver a well-connected, healthy, active, safe, comfortable, equitable, and economically-viable environment that is calibrated to each unique part of our City. Specific topics in Part 1 include:

- + **1A. Creating Active Frontages**
- + **1B. Public & Private Frontages**
- + **1C. Frontages: Context, Design & Calibration**

Part 2 provides strategies and directions for applying these active frontages to our existing streets and spaces (in addition to strategies for improving the modal balance of such streets), and Part 3 provides strategies for extending this active public network into the parts of our city that are expected to change or have not yet developed.



The “Public Realm” is all of the publicly owned and publicly accessible land in a city and is traditionally where most of the social, economic and civic life of a community occurs.



A large majority of our existing streets and approaches to buildings are dominated by asphalt pavement that are not designed with the comfort, safety, or access of pedestrians and bicyclists in mind.

CREATING “LOCATION”

A common real estate aphorism states that the most important factors that determine property value are “location, location, and location.”

Location is defined fundamentally by two things. One is simply geographic—what area of what City the property is located in. Rancho Cucamonga is blessed with a good and well-deserved reputation as a community where people want to live, work, and shop, so property in our City is generally more valuable than comparable property in many other nearby cities.

The second factor defining “location” is how the area around the subject property looks, feels, and functions. If those qualities make it a place that people find attractive, pleasant, comfortable, and useful, it becomes a place where people simply want to be, because it’s nice to be there, which generates an additional premium in property value. And unlike the simple geographic factor of where the property is located—which one clearly cannot do anything to change—“type of place” qualities are subject to change, by the design of the streets and the design of buildings and site improvements.

So, in an important sense, it is possible to simply “build location”. An empty field can become the nicest new neighborhood or the most interesting shopping district in town simply by how it is designed. That is what this Toolkit is for.

1A. CREATING ACTIVE FRONTAGES



Common multi-family residential frontage in Rancho Cucamonga.



Many of our commercial frontages, while attractive, are disconnected from the public realm network by large parking lots.

Frontages are the spaces along the edges of streets and along the fronts of buildings, where the public and private realms overlap - often seamlessly - to define the look and feel and character of our community. These are the spaces in which we walk, and where we encounter and interact with family, friends and neighbors

Within our single-family neighborhoods, frontages typically include the sidewalks, street trees, front yards, and the fronts of homes. The current frontages of many of our existing large streets that provide access to our neighborhoods are generally limited to landscaping, concrete block sound walls, and the walls of homes.

In most of our multi-family communities also, apartment buildings typically back up to public streets, with resident and visitor access oriented to internal or perimeter parking lots. In both cases, the development pattern and street design does not encourage or support human activity along our main public streets, just traffic.

In most commercial and industrial development in Rancho Cucamonga, frontages are limited to sidewalks, landscaping, and parking lots. Buildings typically face parking lots, which are generally not designed to facilitate or encourage pedestrians to enter or leave each project on foot or by bicycle. In some cases, buildings are placed near the street, but where this occurs the building “fronts” typically face the parking lots, generating little human activity within the public streets.

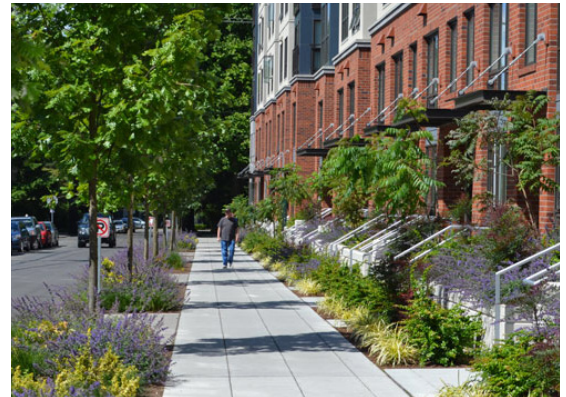


Well designed frontages can enable and cause the activation of the public realm. This activation leverages the value of our public streets and spaces, creating

Whenever one walks to visit neighbors, visit a park or school, or patronize a shop or restaurant, one is walking within and along frontages. And when one walks from a parked car into shops or restaurants or offices or public buildings, one is once again moving within and along frontages. It is the experience of being within these spaces—more than any one factor—that defines the look, the feel, and the experience of being in Rancho Cucamonga.

Accordingly, this section focuses on defining a broad and flexible palette of “**Active Frontage Types**” described further in **Section 1B - Frontages: Context, Design, & Calibration**, provides direction for making new ones, and provides tools and strategies for retrofitting existing frontages that better encourage and support activity throughout the public realm of our City and that better reflect our identity and aspirations as a community. Active frontages in each neighborhood, corridor, center and district must be designed, calibrated, and coordinated to encourage and enable active habitation of our public spaces and the buildings that front them, as well as to:

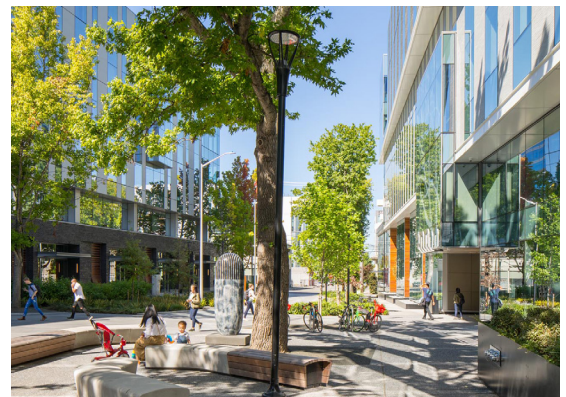
- + **Contribute to the place-making and urban design goals** for each part of town as described in this General Plan;
- + **Spatially define comfortable, safe and inviting pedestrian spaces** that offer physical and psychological buffers between pedestrians and traffic, sun, wind and other environmental factors, and provide safety through “eyes on the street” during daytime and evening hours;
- + **Enhance the appearance of the public realm** and reinforce the unique character of the city and each of its unique areas;
- + **Offer appropriate design flexibility** while promoting public realm designs that are complementary to the intended context, function, and use of the street and adjacent development.



Example of active residential frontages along an urban neighborhood street.



Example of active commercial frontages along a downtown street.



Example of active office frontages on a carless (pedestrian) street.

1B. PUBLIC & PRIVATE FRONTAGES



Courtyard as semi-public common open space for residents



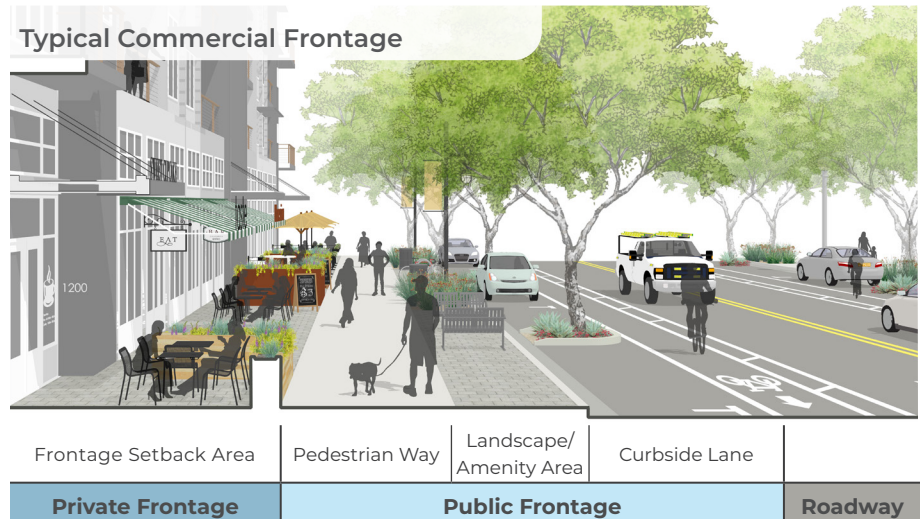
A residential stoop provides a semi-private direct-entry into a ground-floor residential unit.

Frontages are generally organized into two areas - “Public-” and “Private-” Frontages. Public Frontage refers to the publicly-owned space between the private property and the nearest travel lane (or bike lane, where present). It typically includes a sidewalk, street trees and other landscaping, street lighting, signage and other furnishings and often on-street parking and/or passenger loading areas. The primary function of public frontages is to enable pedestrians to safely and comfortably walk along the street and access each building or property, and to allow motorists to safely park, become pedestrians and access the buildings. The City will play a key role in determining appropriate Public Frontage elements for each segment of each street, and for coordinating the phasing and management of the public frontage, while developers will typically be responsible for financing and/or constructing such improvements.

Private Frontage refers to the privately-owned space between the Public Frontage and the building façade - also known as the “Front Setback Area.” This space is typically in the form of a semi-private landscaped “yard” or semi-public hardscape area, such as a forecourt or extension of the sidewalk, that may include furnishings. The two primary functions of this space are 1) to welcome and provide access to the pedestrian; and 2) to provide either an appropriate degree of privacy for ground floor residential or office uses, or to provide an appropriate degree of exposure to ground floor retail shops, restaurants and other commercial businesses.

The careful design and calibration of this entire frontage “assembly”—including the design of building façades and their entries—is essential to ensure that building occupants will be comfortable keeping window coverings open much of time, and in doing so, provide the “eyes on the street” that help keep our streets and other public spaces safe and comfortable places for pedestrians and bicyclists to be throughout the day and evening.

FIGURE PT-1 TYPICAL FRONTAGE ANATOMY



Frontage Assembly/Anatomy

Frontages are organized by a number of components, which can be thought of as “layers” or “bands” of the public realm, each with a specific role/function. It is important to understand the role that each of these components plays to ensure that frontages are properly designed and calibrated to their public and private context (as described further in *Section 1B - Frontage Design & Calibration*). They include:

- + **Frontage Setback Area** is the space in front of buildings that “modulates” the degree of privacy for the ground floor building occupants. Residential uses are set back, along with wall elements, landscaping and sometimes grade elevation to provide enough privacy for residents. Office and industrial frontages generally do as well for similar reasons but with different design configurations. Commercial and retail frontages may have little or no space in front of the building to expose businesses to passers-by, or conversely, may have additional space to accommodate outdoor dining.
- + **Pedestrian Way** is the clear path for pedestrian activity. The width of this space is calibrated to anticipated pedestrian volumes, generally in the range of 6 feet in neighborhoods to allow for comfortable walking side-by-side and up to 10 or 12 feet in urban corridor environments (free of any landscaping, furnishings, and dining) to allow for a combination of walking aimed at a destination and interaction with the features of the corridor.
- + **Landscape/Amenity Area** is for landscaping and furnishings adjacent to the curb. It almost always includes planter areas for street trees and other public landscape, along with streetlights and traffic signal poles. It may also include parking meters, benches and other seating, outdoor dining, and bike racks.
- + **Curbside Lane** is a flexible space that can include parallel or angled parking, biofiltration planters, tree planters, bus stops, loading areas (passengers and goods), and permanent or temporary parklets. In all cases this space, together with the Landscape/Amenity Area, provide a vitally important buffer from moving traffic to significantly enhance pedestrian safety and comfort.



Example of semi-private yards and porches within the Front Setback Zone on a neighborhood street.



Example street furnishing in the Landscape/Amenity Area, and a clearly defined Pedestrian Way.



The Curbside Zone can be flexibly programmed based on the needs of the adjacent property. Pictured here, a “parklet” replaces a single curbside parking space to provide additional outdoor dining space to the merchant.

1C. FRONTAGES: CONTEXT, DESIGN & CALIBRATION

I. FRONTAGE TYPES & CONTEXTS

The following is a high-level summary of the frontage types and contexts for which specific tools and strategies are described in the sections to follow:

Retail & Commercial Frontages

Retail businesses thrive when passing motorists, bicyclists and pedestrians can see their signage, display windows, and people shopping and dining inside. Unlike most other frontage types the overall design intent is exposure—not privacy—to blur the line between the interior space of the business and the public environment of the sidewalk and street.

Office & Industrial Frontages

Ground floor office uses typically require some privacy for occupants that can be provided by a combination of landscape design and elevation of the ground floor. Industrial buildings tend to have fewer windows and openings and more areas of blank wall than office buildings, due to the nature of business operations inside. While both uses tend to be “less-active,” attention to the design of their frontages will help ensure that these buildings can still do their part to activate the public realm.

Residential Frontages

Ground floor residential uses require a reasonable degree of privacy so that passersby aren't perceived to be visually intruding into the home. This is typically accomplished by elevating the entry and/or providing some fencing and landscaping between the building and the Pedestrian Way. To ensure frontages are active, it is critically important that the main building entries are oriented to the street, not to side or rear parking areas or parking structures, such that the front door at which visitors generally arrive is oriented to and accessible from the street/sidewalk.

Non-Street Frontages

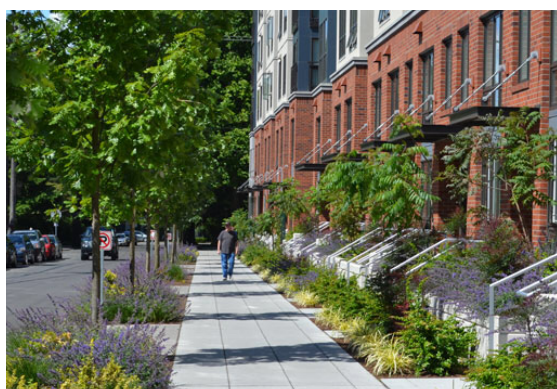
All frontage types may in some circumstances face public or common open spaces other than streets or parking lots. Retail centers and shopping districts may include pedestrian squares, courts or malls, such as in Victoria Gardens. Residential developments may include buildings that face courts and greens, as may office/industrial complexes. In most cases, such open spaces should be designed and integrated into the overall public realm as “carless streets” and gathering spaces that are interconnected with the street network so that pedestrians may move freely through and between these spaces.



Example of retail frontage with outdoor seating, shade umbrellas, and planters.



Modern office buildings arranged around a common courtyard accessible from the street.



Multifamily residential with direct-access to ground floor units from the sidewalk via stoops. Building setback includes a high-quality, unified landscape design, and ground floor units are elevated above the sidewalk for added privacy.

II. FRONTAGE DESIGN & CALIBRATION

This section provides a Toolkit of design metrics and guidelines for properly designing and calibrating frontages to their “context,” to ensure that the public realm network in our city is beautiful, active and safe, and a reflection of our community identity and values.

For the purposes of this Toolkit, frontages are organized into three high-level categories or “types,” based on the predominant ground floor use of the building that is providing the frontage. These include Retail & Commercial Ground Floors, Office & Industrial Ground Floors, and Residential Ground Floors.

To ensure that all frontages contribute (in appropriate measure) to the type of public realm environment envisioned within each part of our city, each of these three types must be further calibrated to their “context”—based on considerations such as the size and type of street or space the property is fronting, the scale and intensity of development providing the frontage, and the Place Type or Focus Area in which it is located.

As such, this section—in the pages to follow—provides tools and instructions for designing and calibrating frontages within/to the following contexts:

A. Retail & Commercial Ground Floors

- + Facing Streets in Corridors, Centers and Districts
- + Along the Edges of Residential Neighborhoods
- + Facing Non-Vehicular Open Spaces or Parking Lots

B. Office & Industrial Ground Floors

- + Facing Streets in Corridors, Centers and Districts
- + Facing Non-Vehicular Open Spaces or Parking Lots

C. Residential Ground Floors

- + Facing Streets in Corridors, Centers and Districts
- + Facing Streets in Neighborhoods
- + Facing Pedestrian Open Spaces



Example of an amenity-rich commercial/retail frontage in a mixed-use district.



Clearly defined primary (common) building entry directly accessible from the street/sidewalk.



Multifamily residential building with ground floor units oriented toward a shared courtyard directly accessible from the street/sidewalk.

A. RETAIL & COMMERCIAL FRONTAGES



Example of retail frontages in Victoria Gardens, with street trees and awnings shading the street;

Within mixed-use Corridors, Centers, and Districts, frontages are intended to make commercial activity visible to and accessible by passing pedestrians and motorists. They are characterized by commercial businesses (typically shopfronts) located at or very near the back of amply wide sidewalks, generating amenity-rich pedestrian environments that accommodate and encourage high levels of foot-traffic, and a wide range of activities. The essential characteristics of all retail and commercial frontages in this context include:

- + Ground floor façades of buildings are in the form of retail shopfronts that are at or close to the sidewalk edge directly facing streets, and accessed directly from the sidewalk with little to no elevation difference to the private entry;
- + Designed and sized to accommodate a flexible range of activities and facilities in support of adjacent businesses and create a vibrant commercial environment;
- + Provide a safe, comfortable, shaded environment for pedestrians to walk and shop, buffered from traffic by street trees, street furnishings, and parked cars;
- + Provide convenient, safe, on-street customer parking in front of (or very close to) the adjacent businesses;
- + Provide regularly spaced street tree species that help define the space and shade pedestrians while maintaining good visibility for the buildings and signage due to a relatively high and/or open canopy.

FIGURE PT-2 RETAIL & COMMERCIAL FRONTAGE

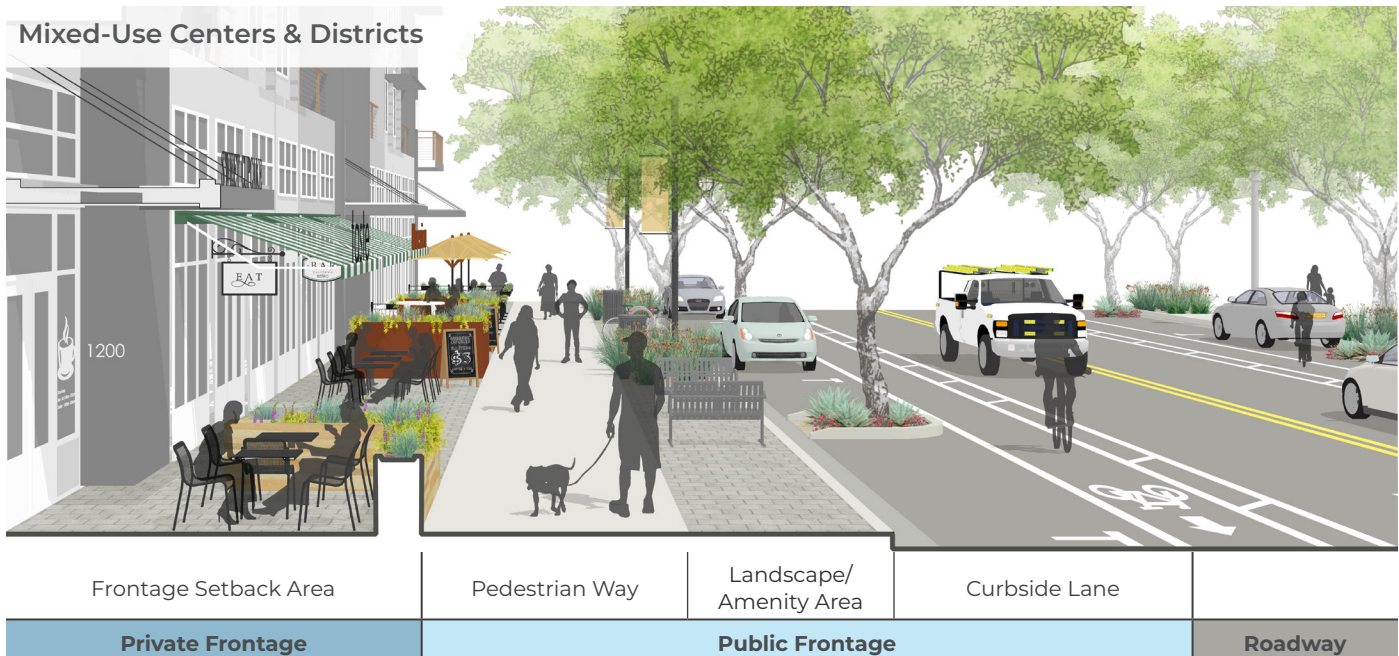


TABLE PT-1 RETAIL & COMMERCIAL FRONTAGES

FRONTAGE	DIMENSIONS*	NOTES
<p>Frontage Setback Area <i>(the space from the building façade to the pedestrian way)</i></p>	<p>Typical Depth: <i>15 ft max;</i> <i>6 ft min. for outdoor dining</i></p> <p>Ground Floor Ceiling Height: <i>12 to 15 ft</i></p> <p>Regularity of Entrances: <i>Every 25 to 50 ft in active Districts & Corridors</i></p>	<ul style="list-style-type: none"> • Ground floor ceilings are high to provide a generous sense of space inside and allow natural light deep into the space. • Frequent entrances, and large, clear glass shopfront windows, with some degree of sun-shading, are provided so that approaching customers see into the store rather than their own reflection and street glare. • Along mixed-use Corridors, “Retail-Ready” or “Flex Frontages”—frontages that are designed ultimately to accommodate retail/commercial businesses, but in advance of the market supporting such uses at a given location—may be utilized for residential or office use for an indefinite period of time. <i>See following page.</i> • Where there is space between the Pedestrian Way and the building façade (whether within the public right-of-way or within the private property), this area may offer space for better pedestrian access and/or outdoor dining. • Any landscaping in this space does not interfere with pedestrian access to or views of the shopfronts.
<p>Pedestrian Way <i>(the clear path for pedestrian activity)</i></p>	<p>Typical Width: <i>6 to 8 ft</i> <i>8 to 10 ft for highly-active Districts/Corridors</i></p>	<ul style="list-style-type: none"> • This is a clear path for pedestrian access and is not interrupted by fixed objects (street lights, power poles, driveway ramps, street furnishings) or objects associated with adjacent uses (dining furniture, signage, etc...). • Width of this space allows pairs of pedestrians walking side by side to pass comfortably, and pedestrians to stop and look in shopfront windows without feeling they are blocking the walk. • In some contexts, the pathway may be covered / enclosed by an arcade or gallery, providing additional enclosure and protection from the elements.
<p>Landscape/ Amenity Area <i>(the space between the curb and the pedestrian way)</i></p>	<p>Typical Depth: <i>6 to 10 ft</i></p> <p>Tree Spacing: <i>Every 25 to 50 ft</i></p> <p>Canopy Height: <i>10 to 15 ft</i></p> <p>Planter Size: <i>6 ft x8 ft min.</i></p>	<ul style="list-style-type: none"> • This area is sized and programmed based on the needs of the business or district, and typically provides: street furniture, transit stops, street trees and landscaping, pedestrian-scale lighting fixtures, district branding and wayfinding signage, and short-term bike parking. • Street trees are provided in generously-sized landscaped planters and spaced to provide a well-shaded pedestrian environment, with relatively tall/open canopies that maintain good visibility of the building and its signage. • Planters and landscaping that provide stormwater management are recommended, per NACTO’s Urban Street Stormwater Guide.
<p>Curbside Lane <i>(the space between travel lanes and the curb)</i></p>	<p>Typical Width: <i>7 to 18 ft</i></p>	<ul style="list-style-type: none"> • This space can be flexibly programmed based on the needs of the business or district, and may include parking, passenger and commercial loading zones, transit stops, parklets, and street trees. • Where appropriate, parklets and/or bike corrals are provided in lieu of a parking space, based on the needs of the business or district. • In some cases street trees are provided within the Curbside Lane in “parking-lane planters” instead of, or in addition to providing such in the Landscape/Amenity Area.

*Dimensions provided in this table are typical ranges for this frontage type and are provided herein as reference only. See the Municipal Development Code for applicable required standards.



Neighborhood-serving commercial that could fit seamlessly with the scale and character of a residential neighborhood.

Retail & Commercial Frontage Variations (By Context)

Other common contexts in our city within which variations of the retail/commercial frontage are necessary include:

Along the edges of residential Neighborhoods

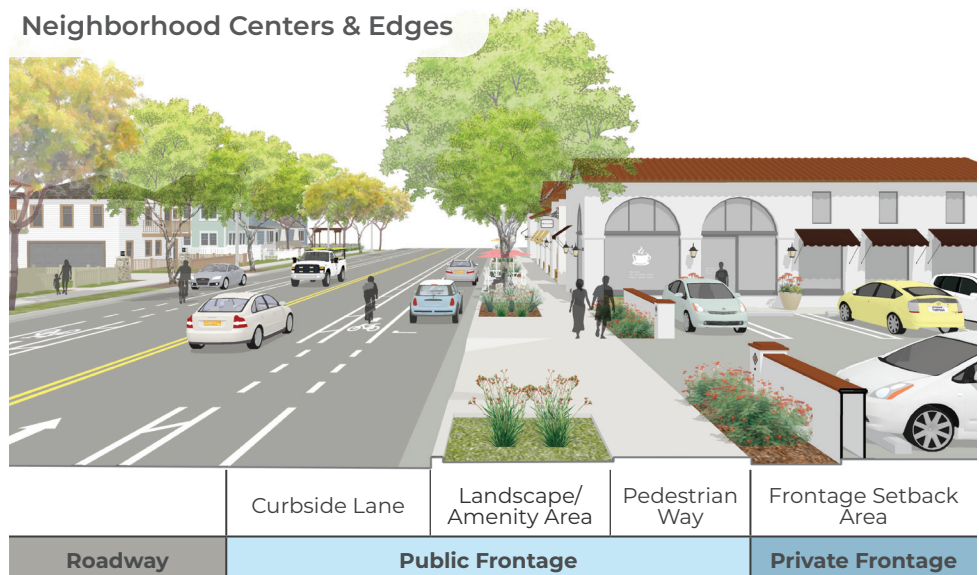
Along the edges of our residential Neighborhoods—typically at intersections of less-intense/secondary residential corridors—nodes of neighborhood-serving retail and commercial uses may be appropriate. All of the same characteristics of retail and commercial frontages in more intense Districts and Corridors generally apply, however, these elements occur at the scale of the neighborhood the node is serving.

Along more “suburban” Corridors

Along some of our more “suburban” Corridors, the priority of commercial frontages is to make commercial activity visible to and accessible by passing pedestrians, bicyclist and motorists. These environments tend to have lower development intensities and higher parking ratios than urban commercial environments, so more of the frontages are devoted to customer parking. Commercial shopfronts—some built at or near the back of the sidewalk and others visible through well-designed parking areas—are served by a mix of convenient on-site and on-street customer parking. High priorities include defining the street edge with comfortable sidewalks, steady rows of street trees and plantings buffering pedestrians from higher-volume/speed traffic. The spatial boundary of the public realm—or “streetwall”— can be maintained in such environments by placing pad or liner buildings at or near the back of the sidewalk, bringing commercial activity to the street. Where there is no building lining the public realm, low walls and landscape walls can screen the parking and maintain the urban “streetwall.”

FIGURE PT-3 RETAIL & COMMERCIAL FRONTAGE

Neighborhood Centers & Edges



“Retail-Ready” Frontages

“Retail Ready Frontages” are ground floor spaces that are constructed with design characteristics to provide flexibility with regard to ground-floor use. Specifically, in locations/along streets where a highly-active (commercial) ground-floor environment is a desired long-term outcome, but the market is not yet ready to provide such, the ground floors of these buildings may be occupied with residential or office space until the market is ready to accommodate retail uses. The important design characteristics that make this possible are the traditional rhythm of shopfront bays, ADA compliance, and ground-floor height. Elevated entries, low-fencing, and landscaping may be provided for necessary privacy in the short-term. The illustrations below show how these frontages can transform with relatively simple retrofits to the public and private frontage.

FIGURE PT-4 RETAIL READY FRONTAGES





Modern office buildings with generous, well-designed public frontage assembly.

B. OFFICE & INDUSTRIAL FRONTAGES

Within mixed-use Corridors, Centers & Districts, office and industrial frontages must provide a safe, comfortable, and attractive public realm environment despite the “less-active” nature of these uses. Office and industrial buildings typically provide off-street parking for visitors and customers, however some on-street parking and the formal front entry are necessary for such buildings to contribute to the active public realm of each employment district; such front entries encourage employees and others to walk out to the street and walk to lunch or dinner nearby (assuming such amenities are present within walking distance), rather than simply exiting to the parking lot, getting in their car and driving to lunch. And if arriving to work by transit, one simply enters the lobby via the front door, rather than walking around through the parking lot. Similarly, locating and orienting the most active spaces (conference rooms, employee break rooms, entry lobbies, courtyards, etc.) toward the street can help activate the public realm. Common characteristics of office and industrial frontages in this context include:

- + Buildings are typically set back (modestly) from the sidewalk to provide adequate privacy to ground-floor spaces, and designed so that the most active and public spaces are oriented toward the street frontage;
- + Primary entries are oriented to and accessible from the street/sidewalk;
- + Sidewalk and ground-floor spaces are buffered from the street by a generous landscaped Landscape/Amenity Area (including regularly-spaced canopy trees that shade the sidewalk and building) and curbside parking;
- + Convenient on-street visitor/customer parking, is provided near the primary entry.

FIGURE PT-4 OFFICE & INDUSTRIAL FRONTAGES

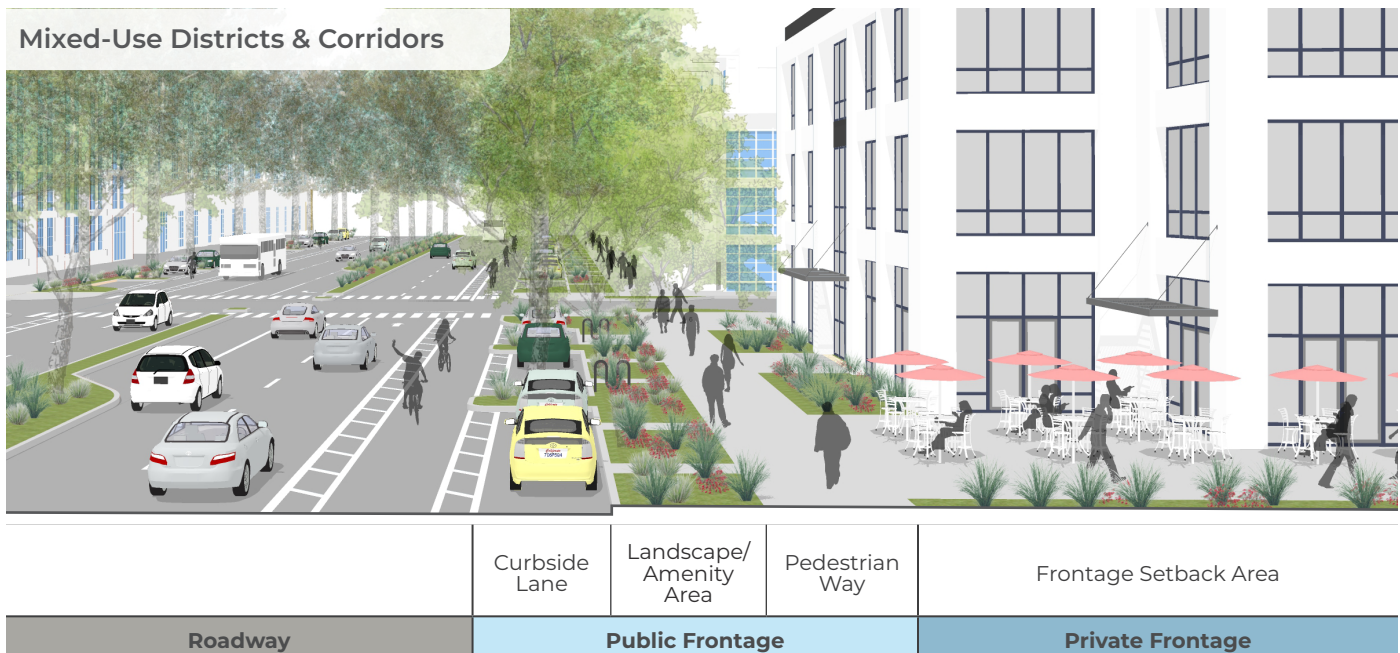


TABLE PT-2 OFFICE & INDUSTRIAL FRONTAGES

FRONTAGE	DIMENSIONS*	NOTES
<p>Frontage Setback Area <i>(the space from the building façade to the pedestrian way)</i></p>	<p>Typical Width: <i>10 to 20 ft</i></p> <p>Ground Floor Ceiling Height: <i>12' to 20 ft</i></p> <p>Regularity of Entrances: <i>Every 100 to 200 ft in active Districts & Corridors</i></p>	<ul style="list-style-type: none"> • Primary entrances of buildings are clearly defined, oriented toward and accessible from the street/pedestrian path or a open space with direct-access to/from the street/pedestrian path. • Façades are activated by large, minimally-shaded windows into the most active interior spaces such as lobbies or shared work spaces. Where portions of the street-fronting façade are “blank” (typical of industrial uses), landscaping, public art, or other features that create interest in the visual aesthetic of the building can be provided in this area to soften the appearance from the street. • Ground floor ceilings are high to allow natural light deep into the space. • Parking lots, areas of truck activity, or outdoor storage and operations are well-screened from street views by walls and landscaping. • Common outdoor areas (such as courtyards, outdoor lunch areas, etc...) are oriented to and accessible from the street. • Employee-serving amenities (i.e. outdoor furniture, secured bike parking, etc.) provided within this space are located near a common entry and accessible from the street/sidewalk or common open space. • Front yard landscaping is provided to soften the view of the building from the street and create a comfortable environment for workers and visitors. • Landscaping should not obstruct clear access to the building entry.
<p>Pedestrian Way <i>(the clear path for pedestrian activity)</i></p>	<p>Typical Width: <i>6 to 8 ft</i></p> <p><i>8 to 10 ft for highly-active Districts/Corridors</i></p>	<ul style="list-style-type: none"> • This is a “clear zone” for pedestrian access and is not interrupted by fixed objects (street lights, power poles, driveway ramps, street furnishings); • Width of this space allows pairs of pedestrians walking side by side to pass comfortably.
<p>Landscape/ Amenity Area <i>(the space between the curb and the pedestrian way)</i></p>	<p>Typical Depth: <i>6 to 10 ft</i></p> <p>Tree Spacing: <i>Every 25 to 100 ft</i></p> <p>Planter Width: <i>6 ft min.; equal-to or greater-than width of Pedestrian Way recommended.</i></p>	<ul style="list-style-type: none"> • This area typically includes: street furniture, space for transit stops, street trees and landscaping, pedestrian-scale lighting fixtures, district branding & wayfinding signage, and short-term bike parking; • Street trees are provided in generously-sized landscaped planters and spaced to provide a well-shaded pedestrian environment, with relatively tall canopies that maintain good visibility of the building and its signage; • Planters and landscaping that provide stormwater management are recommended, per NACTO’s Urban Street Stormwater Guide.
<p>Curbside Lane <i>(the space between travel lanes and the curb)</i></p>	<p>Typical Width: <i>7 to 18 ft'</i></p>	<ul style="list-style-type: none"> • This space can be flexibly programmed based on the needs of the business or district, and may include parking, passenger and commercial loading zones, transit stops, bike corrals, parklets, and street trees. • In some cases street trees may be provided within the Curbside Lane in “parking-lane planters” instead of, or in addition to providing such in the Landscape/amenity Area.

*Dimensions provided in this table are typical ranges for this frontage type and are provided herein as reference only. See the Municipal Development Code for applicable required standards.



Multifamily residential building with private terraces behind landscaping and balconies along the façade to activate the frontage.

C. RESIDENTIAL FRONTAGES

Residential frontages must be designed to balance the need to provide ground floor residential units with a reasonable degree of privacy (so that passing pedestrians and motorists aren't perceived to be visually intruding into the home) with the requirement that these frontages provide activity and safety to the public realm environment they are fronting. Within mixed-use Centers, Districts and Corridors—where pedestrian and vehicular traffic is much higher, and front setbacks are much shallower than in residential neighborhoods—these frontages must be carefully designed and calibrated to achieve this balance. Essential characteristics of all residential frontages in this context include:

- + The primary entries of buildings (and in some cases, ground-floor units) are oriented to, and directly accessed from the street/sidewalk (or in some cases, a common space that is accessed directly from the street/sidewalk), and building façades are well fenestrated with windows and openings providing “eyes on the street.”
- + Buildings are set back to provide a comfortable transition between the street/sidewalk and private dwelling, often including low fences, walls and plantings—and in many cases the ground floor is somewhat elevated above the sidewalk—to provide residents with a sense of privacy while enabling them to overlook the street.
- + Provision of on-street guest parking allows visitors arriving on foot, by bike, by transit or by car to be welcomed at the front door.

FIGURE PT-5 MIXED-USE - RESIDENTIAL GROUND FLOOR

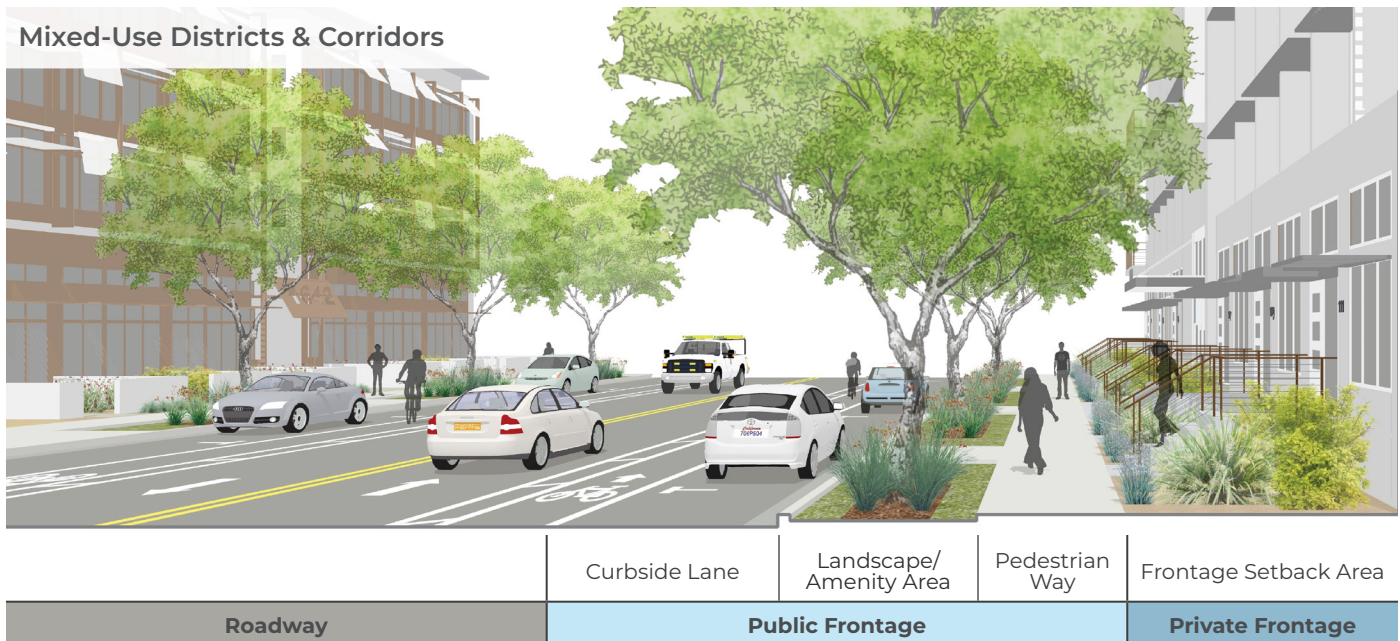


TABLE PT-3 RESIDENTIAL FRONTAGES

FRONTAGE	DIMENSIONS*	NOTES
<p>Frontage Setback Area <i>(the space from the building façade to the pedestrian way)</i></p>	<p>Typical Depth: 5 to 15 ft</p> <p>Ground Floor Ceiling Height: 8 to 15 ft</p> <p>Regularity of Entrances: 1 per 100 feet min. recommended for common entry buildings (will be less if ground floor units are accessed directly from street/sidewalk)</p>	<ul style="list-style-type: none"> Primary entrances of buildings (and in some cases ground-floor units) are clearly defined and oriented toward/accessible from the street/pedestrian path or a common court or open space with direct-access to/from the street/pedestrian path. In configurations where ground floor units are accessed via a common entry/internal corridor, or common court/open space, building façades are well fenestrated by windows and openings, and terraces and balconies are recommended in such cases, where appropriate, to further activate the public realm. Buildings and units are configured with the more social rooms and spaces (kitchen, living, dining, or sales office and community rooms in multi-family buildings) oriented along the frontage. Taller ground floor ceilings heights are recommended to allow natural light deep into the unit. Ground floor units are typically be elevated (1' - 3') above sidewalk level for additional privacy. Landscaping is high-quality and appropriate to the style/architecture of the building. In highly active mixed-use environments, added layers of privacy may be appropriate/needed, such as a low wall or fence (3' max) or plantings that provide a similar physical barrier between the unit and sidewalk. A clear comfortable transition between the public realm and primary building/unit entry is provided.
<p>Pedestrian Way <i>(the clear path for pedestrian activity)</i></p>	<p>Typical Width: 6 to 8 ft</p> <p>8 to 10 ft for highly-active Districts/Corridors</p>	<ul style="list-style-type: none"> This is a clear path for pedestrian access and is not interrupted by, or have to weave-around fixed objects (street lights, power poles, driveway ramps, street furnishings). Width of this path allows pairs of pedestrians walking side by side to pass comfortably.
<p>Landscape/ Amenity Area <i>(the space between the curb and the pedestrian way)</i></p>	<p>Typical Depth: 6 to 10 ft</p> <p>Tree Spacing: Every 25 to 100 ft</p> <p>Planter Width: 6 ft min.; equal-to or greater-than width of pedestrian path recommended.</p>	<ul style="list-style-type: none"> This area typically includes street furniture, space for transit stops, street trees and landscaping, pedestrian-scale lighting fixtures, and short-term bike parking. Street trees are typically provided in wide, continuous Landscape/ Amenity Areas (or generously-sized landscaped planters in very urban environments) and spaced to provide a well-shaded pedestrian environment, with relatively tall canopies that maintain good visibility between the street and building. Planters and landscaping that provide stormwater management are recommended, per NACTO's Urban Street Stormwater Guide.
<p>Curbside Lane <i>(the space between travel lanes and the curb)</i></p>	<p>Typical Width: 7 to 18 ft</p>	<ul style="list-style-type: none"> This space can be flexibly programmed based on the needs of the business or district, and may include visitor parking, passenger and commercial loading zones, transit stops, and bike corrals. In some cases street trees may be provided within the Curbside Lane in "parking-lane planters" instead of, or in addition to providing such in the Landscape/Amenity Area.

*Dimensions provided in this table are typical ranges for this frontage type and are provided herein as reference only. See the Municipal Development Code for applicable required standards.



PART 2. REBALANCING STREETS & PUBLIC SPACES

The public realm of a city comprises streets, parks, and other permanent open spaces that form the network of community public spaces within which much of the active life of a community occurs. The community's vision for Rancho Cucamonga's public realm is one that will afford people of all ages, abilities and incomes the opportunity to move safely and comfortably throughout the city by foot, bicycle, transit, and automobile, providing equitable access to lively, beautiful public places for shopping, dining, socializing, and gathering as a community.

Historically, Rancho Cucamonga's street network—which comprises the majority of the City's public realm—was designed based on the Federal Highway Administration's (FHWA) functional classification system. This system is increasingly considered an automobile-centric method of planning and does not typically consider multimodal priorities and surrounding context. The Mobility chapter acknowledges the traditional road classifications but establishes policies that go well beyond maintaining this outdated system to expand opportunities for connections and mode choices throughout the city, implement complete streets, and support the context of the land use environment. The strategies and tools herein support the intent and policies of the Mobility chapter by illustrating how to rebalance and create active multimodal streets.

Active Streets & Public Spaces

As described in Part 1, the overarching goal of creating active frontages is to provide a comfortable, attractive, human-scale pedestrian environment along the edges of streets, parking lots and other public open spaces. This section describes how our streets and other public spaces may be systematically rebalanced toward and in favor of non-motorists. To help guide this effort, this section includes tools and strategies for:

- + Applying the active frontages described in Part 1 of this Toolkit to existing public streets and private properties;
- + Applying additional streetscape, pedestrian-facility, and traffic calming improvements;
- + Applying bicycle and transit improvements to select streets;
- + Designing new, balanced, "activatable" streets and public spaces as development occurs in new parts of our city or areas that redevelop significantly.

Collectively, these tools and strategies are designed to help ensure that Rancho Cucamonga's network of streets and public spaces are comfortable and attractive places for pedestrians to walk, to access the buildings, and to support community activity.

FIGURE PT-6 STREET RIGHT-OF-WAY COMPOSITION



KEY STRATEGIES DESCRIBED IN PART 2

Key strategies—listed briefly below and illustrated in detail in the sections to follow—may be employed individually and in combinations, in all cases calibrated to and integrated with adjacent private frontages as described in Section 1C Frontage Types: Context, Design & Calibration.

All Streets: *(And in some cases parking lots or other open spaces)*

- + Providing comfortable sidewalks as part of a calibrated public/private frontage assembly (see **Part 1**)
- + Providing a Landscape/Amenity Area between pedestrians and the street, to include street trees and landscaping to buffer and shade pedestrians and support active use of the public realm.

Designated Streets: *(As determined by the City)*

- + Adding dedicated transit lanes or transit-priority lanes
- + Adding bike lanes of various types
- + Adjusting travel lane widths to enable the above and to help moderate vehicular speeds
- + Adding new medians and intersection controls, such as roundabouts and signals, to strategically provide safe pedestrian crossings and better all-mode access to adjacent properties
- + Providing a Curbside Lane between pedestrians and moving traffic lanes for parking and/or other vehicular access

Implementation. The provision of active private frontages will be primarily the responsibility of developers, business owners, and property owners. The provision of active public frontages will be a collaborative effort of those parties and the City. The City will be primarily responsible for planning, approving, designing and implementing new “activatable” streets and public spaces. All such improvements will be financed primarily by developers, but will include support from the City in many cases. Through a rigorously coordinated combination of public and private improvements, Rancho Cucamonga can systematically realize the community’s vision, and establish a new direction for the 21st century.



Generous sidewalk space amply sized to accommodate pedestrians and amenities;



Active street frontages enable social and economic activity.



Dining parklet added into the Curbside Zone of a local street to provide an enlarged amenity zone for the adjacent business.

2A. APPLYING ACTIVE FRONTAGES

Almost all of Rancho Cucamonga's activity centers—our shopping centers, community centers, major parks and civic facilities—are located along arterial or collector streets, and most are separated from the street by parking lots. Most of the public frontages of these streets have relatively minimal sidewalks (if any at all) immediately adjacent to vehicular lanes that traffic moving at 35 MPH or more. In very few cases are there rows of street trees, curbside parking/access lanes, and/or bike lanes to buffer pedestrians from passing traffic.

To realize the community's vision for active frontages, in addition to providing very comfortable places for pedestrians to walk, public frontages must also enable motorists, bicyclists and transit riders to safely and comfortably arrive and become pedestrians along the private frontages of shops, restaurants, community facilities, office or industrial buildings, and residential buildings.

I. RETROFIT STRATEGIES

Applying this active frontage environment to our public streets will, in most cases, require specific design retrofits to either the street itself or to the front of the private property, or both.

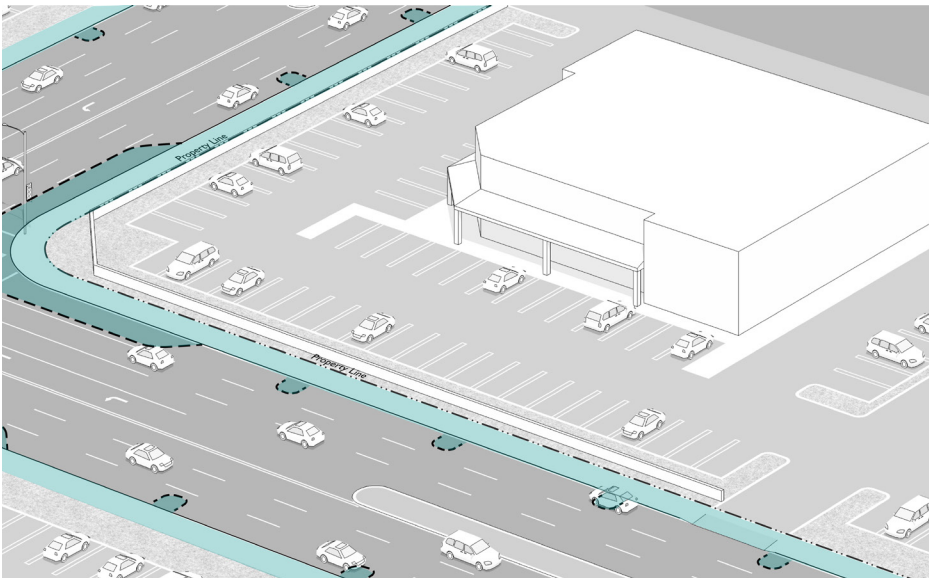
For Local Streets with only one lane of traffic each direction, and vehicular speeds in the 25 to 35 MPH range, creating high quality, human-scale, active frontages is relatively simple. New streets can of course simply be constructed per the guidelines shown in the private and public frontage type examples in Part 1 and the public frontages of existing streets can be retrofitted utilizing strategies that include:

- + **Pedestrian Way:** On any street where there is no sidewalk or the sidewalk is too narrow, a new or wider sidewalk can be provided within the front of the private parcel when that property is developed or redeveloped.
- + **Landscape/Amenity Area:** On existing streets that already have curbside parking and good sidewalks, but which might lack street trees, new street tree planters may be added within the curbside lane, in lieu of or in addition to adding a landscape/amenity area inside the curb. In addition to adding much-needed spatial definition of the pedestrian space of the frontage, street tree rows can help calm traffic speeds and offer opportunities for stormwater management facilities within such planters. See examples on the pages to follow.
- + **Curbside Lane:** Where no curbside space currently exists, one may be added by reconfiguring travel lanes with restriping—where street width allows to provide “bulb-out parking”—or by moving the curb in with “bulb-in” parking, a new sidewalk, and a landscape/amenity area. See B. Bulb-In Type on the pages to follow.

For Arterial or Major Collector Streets that have 2 or 3 travel lanes each direction, and vehicular speeds in the 35 to 50 MPH range, additional strategies and improvements are needed to create safe, comfortable, useful active frontages. The private frontages of retail, residential or office frontages are essentially the same as they are on smaller local streets, but the public frontages must be more extensively retrofitted and recalibrated to render them “activatable.”

To achieve this environment, three broad “types” of retrofits are described on the pages to follow, those retrofit types include:

- I. **“Bulb-Out” Curbside and Landscape/Amenity Area:** Where lane reductions in some form can make a curbside lane for parking possible, it is often a good design strategy to add curb extensions—or bulb-outs—to add landscaped areas at the ends of new parking lanes to alert motorists to the presence of on-street parking and provide a degree of protection for parked cars. Bulb-out parking is created by converting a travel lane into on-street parking and extending curbs in key locations to define and protect the parking lane from moving traffic. In some cases—due to the great width of some existing thoroughfares—it is also possible to add a buffered bike lane between the parking lane and moving traffic. With or without a bike lane, such a reconfiguration reduces the effective street width, visually and physically narrowing the roadway, which helps to moderate driving speeds and to reduce pedestrian crossing distances and times at intersections. Parking can be parallel or angled depending on traffic speed and volume. See I. Bulb-Out Type on the pages to follow.



Bulb-out parking extends the curb into a travel lane, thereby reducing a lane to create on-street parking



Tree planter in Curbside between on-street parking



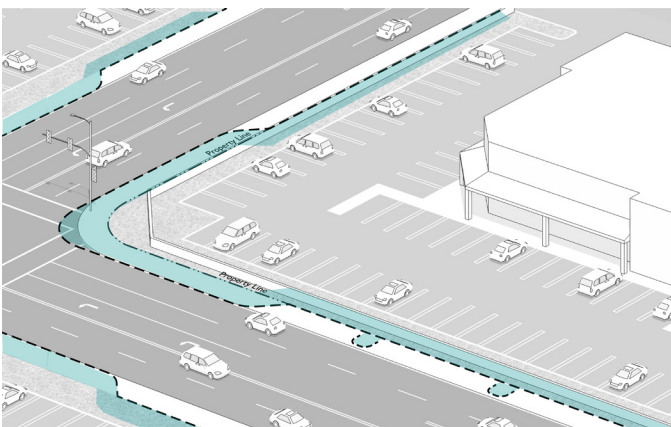
“Clear-View” (back-in) angled parking



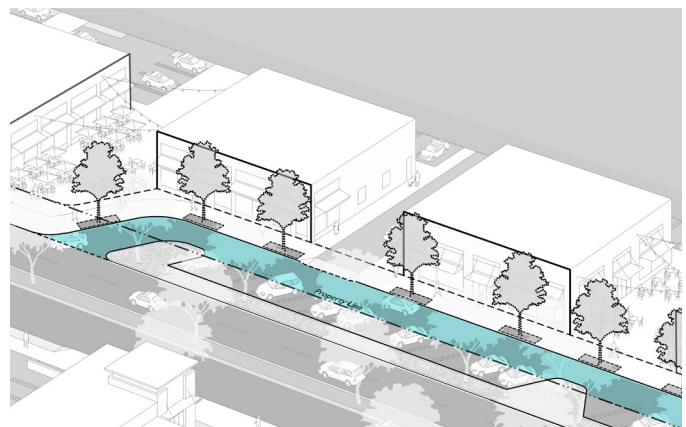
Parking lane planter and permeable paving

II. “Bulb-In” Curbside and Landscape/Amenity Area: On streets where lane reductions to free up land for curbside space are not practical, the curbs can be moved toward the building frontage to provide such a space, along with a sidewalk and potentially also a landscape/amenity area. There is typically no reduction in travel lanes. This strategy can be applied where vacant parcels or large parking lots are being repurposed, and can also be applied where there are existing “pad buildings” near the street. In the latter case, the new on-street parking and pedestrian access can provide new opportunities for such buildings and businesses to face and take access from the major street rather than parking lots. The new streetscape provides improved access and visibility which can provide significant new value to property owners. Parking can be parallel or angled depending on traffic speed and volume. See II. Bulb-In Type on the pages to follow.

III. Frontage Lane: Also referred to as a side access lane, a frontage lane is a one-way travel lane that runs parallel to a higher-speed road. In some cases, a new frontage-lane may be added to the edge of a high-volume street/corridor to provide a highly-valuable public frontage environment that is attractive to and appropriate to the intended ground floor use of the buildings fronting it. Frontage lanes are most appropriate for major mixed-use corridors with higher traffic volumes. Storefronts along frontage lanes can benefit from excellent visibility and access from the street. Parking can be parallel or angled on one or both sides of the frontage lane. The street parking, trees, and slower speed along the frontage lane provide for a more comfortable and safer pedestrian environment. The design and configuration of a frontage lane will depend on the available space, terrain, and traffic conditions at entry and exit points. See III. Frontage Lane Type on the pages to follow.



Bulb-in parking cuts into the existing sidewalk to create parking and may extend the sidewalk into private property



A frontage lane provides convenient parking and access to shops and businesses along highly trafficked major corridors

Depending on context, curbside parking—recommended for most active frontages—may be added to existing streets via any of the three strategies above. On-street parking provides motorists with convenient access to street adjacent uses, valuable convenient parking for local businesses, and visitor parking for residences. Such parking—whether on the street itself, or in frontage lanes—is also critically important to supporting development that face new buildings toward the street rather than toward parking lots in rear.

The presence of on-street parking also tends to reduce traffic speeds and provides a valuable buffer between the car traffic and pedestrians. On-street parking is particularly advantageous in corridor environments with ground-floor retail as it creates a more comfortable and safer environment for walking, dining, and shopping, thereby encouraging active use of the public realm and adding value to the street adjacent properties.

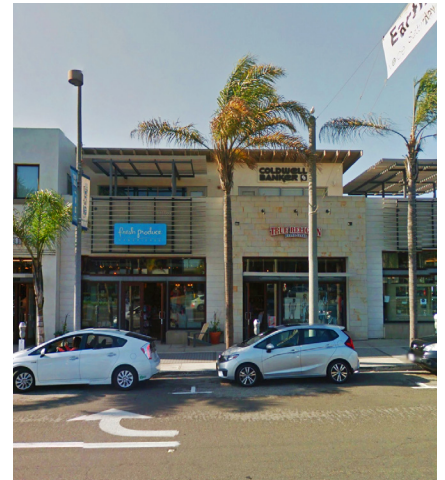
Key Considerations for On-Street Parking

- + Depending on traffic speeds and volumes, allowing for a “car door buffer” between the parked car and moving traffic can be very useful. While on-street parking spaces are nominally 7-8 feet wide, it may be appropriate to provide a striped buffer of 2 to 3 feet as well.
- + Where angled parking is feasible, reverse-angled design (or “clear-view parking”) is proven to be much safer than conventional head-in parking, especially on streets where bicyclists are expected.
- + In retail environments, on-street parking must be managed so that there is always a space or two open per block. If managed by pricing, revenue can be used for improvements and maintenance in that area.
- + Permeable pavement in the parking spaces can provide a visual distinction from travel lanes and reduce stormwater runoff.
- + Planters at intervals between 2 to 4 parking spaces can be used to accommodate utility poles, trees, and additional stormwater facilities.
- + Accommodations for bikes should be provided wherever possible. These may be buffered/protected lanes or, in some cases, in shared vehicular and bike lanes (sharrows) where vehicular speeds are low.

For Parking Lots, Part 3 of this Toolkit provides additional strategies for improved activation of many of our existing (suburban) shopping centers where shops are disconnected from the street/public realm by large surface parking lots. In these cases, strategies for extending the public realm environment into the site to reconnect building frontages to pedestrians not arriving by car are provided. See Section 3C. “Parking Lot Retrofits.”



Frontage lane provides a high-quality and safe public frontage off of a busy corridor.



Convenient curbside customer parking is a valuable amenity for businesses.

A. BULB-OUT TYPE

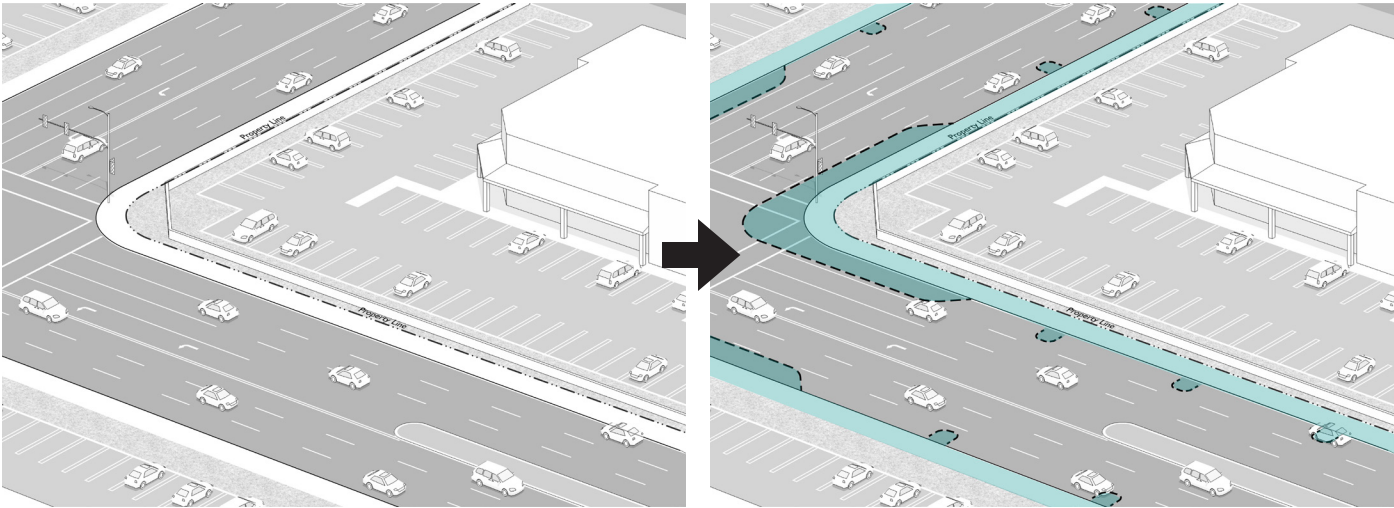
Based as they were on prevailing auto-centric engineering standards of the mid to late 20th century, the curb-to-curb vehicular way within many of Rancho Cucamonga's streets are wider than necessary to accommodate existing and projected vehicular volumes. In some cases, an entire travel lane may be repurposed as space for curbside parking, bike lane or transit lane, and on streets where the number of vehicular travel lanes must be retained to ensure adequate traffic flows, the widths of many lanes may be reduced somewhat, which has been shown in many cases to moderate vehicular speeds with little or no reduction (and in some cases, counter-intuitively, an increase) in its capacity as measured in vehicles per hour.

Based on the time-tested value of efficiency and thrift, the preferred strategy is to simply re-allocate existing built streets to rebalance modes to favor active frontage wherever possible. Key considerations in implementing the strategy include:

Through consultation with a developer proposing new buildings along an existing street, the City will determine whether it is possible and desirable to reconfigure existing lanes within a sufficient segment of that street to make available space for curbside space.

- + In reaching such a determination, the City will consider whether that street has been designated as a Transit-Priority or Bicycle-Priority Street, and/or whether improved medians related to potential new signalized intersections may be desirable. The provision of such facilities of corridor-wide value and significance would take priority over assigning existing public right-of-way or use as a bulb-out curbside space for any one property.
- + Working with the developer, the City will determine the appropriate location and extent and depth of the bulb-outs, in relation to proposed development, existing and proposed cross-streets, potential new transit stops, and access to existing and potential future development on adjoining parcels.
- + In some cases, in order to provide an adequate landscape/amenity area and tree plantings, the developer may be required to reconstruct the sidewalk partially or entirely within the front strip of the private parcel, and/or to construct tree planters within the bulb-out curbside space.
- + In some cases, the Bulb-Out Curbside space may be made deep enough to accommodate a bus stop, in which case it would also be deep enough to provide a car door buffer between parking spaces and vehicular travel lanes. Such a buffer may also be required regardless of the presence of a potential bus stop, based on the City's assessment of vehicular speeds and volumes and hence the reality and perception of safety in parking along that street.

► “Bulb-Out” Frontage Improvements



Bulb-out parking extends the curb into a travel lane, thereby reducing a lane to create on-street parking



On-street parking can be angled or parallel



Bulbed extensions at mid-block crossing



Parking lane planter



Parking lane planter and permeable paving in parking lane

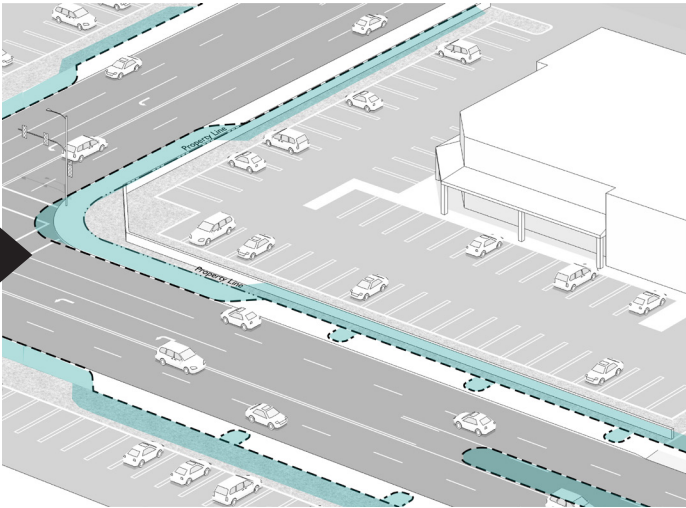
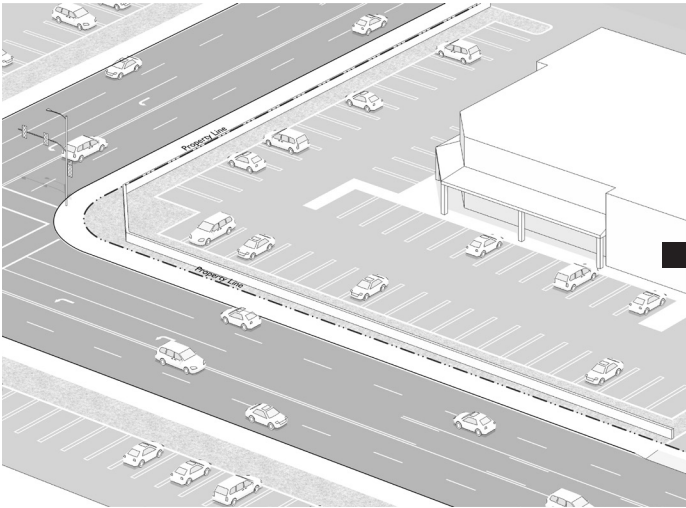
B. BULB-IN TYPE

On streets where no curbside lane is present, where the City has determined that the number and widths of travel lanes cannot be reduced to free up enough space for curbside space, the curblines may be “bulbed-in” toward the adjoining property to provide space for a curbside lane, landscape/amenity area and pedestrian way at the time of its development or redevelopment.

In most cases, the entire new public frontage assembly will be constructed behind the existing curb toward the building frontage, thus providing new and enhanced access and visibility to the property owner. Key considerations in implementing this strategy include:

- + Working with the developer, the City will determine the appropriate location, extent and depth of the bulb-in curbside lane assembly, in relation to proposed development, to existing and proposed cross-streets, and to potential new transit stops. Access to existing and potential future development on adjoining parcels may also be taken into account.
- + In some cases, the City may require that bulb-in curbside lane be made deep enough to accommodate a bus stop, in which case it would also be deep enough to provide a car door buffer between parking spaces and vehicular travel lanes. Such a buffer may also be required regardless of the presence of a potential bus stop, based on the City’s assessment of vehicular speeds and volumes and hence the reality and perception of safety in parking along that street.
- + In order to provide an adequate landscape/amenity area and tree plantings, the developer may be required to reconstruct the sidewalk partially or entirely within the front strip of the private parcel, and/or to construct tree planters within the bulb-out curbside lane.

► “Bulb-In” Frontage Improvements



Bulb-in parking cuts into the existing sidewalk to create on-street parking and may extend the sidewalk toward the building



Transit stop at bulbed corner



Parallel parking in front of shops



Bulbed corners improve crossings for pedestrians



Storm infiltration system in bulbed corner

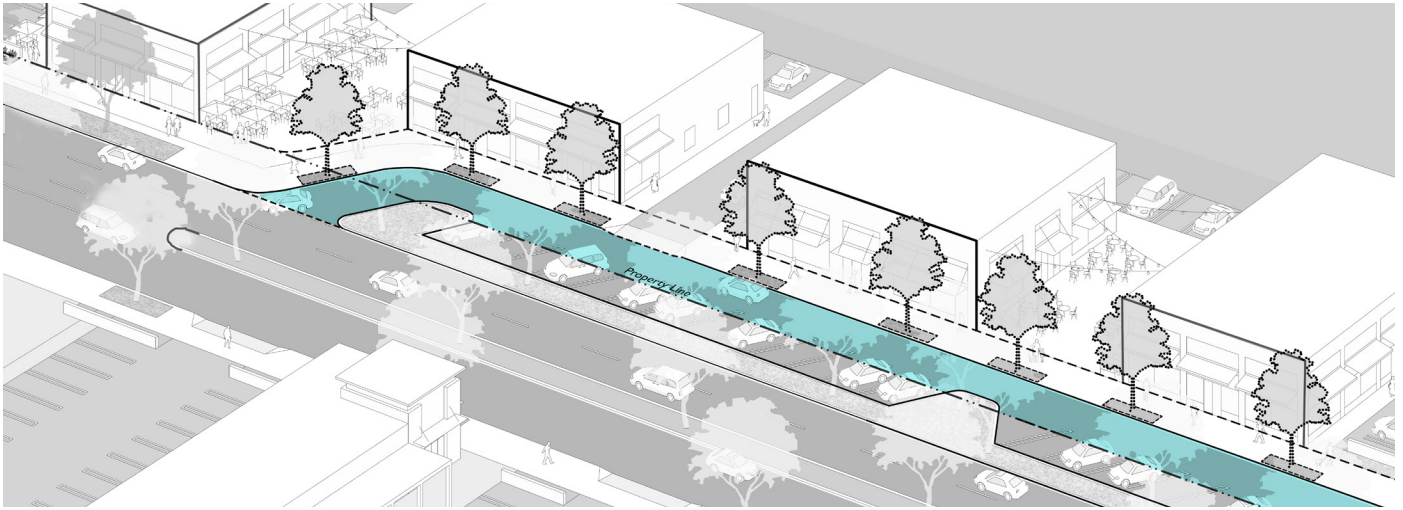
C. FRONTAGE LANE TYPE

On streets where no curbside lane is present, where the City has determined that the number and widths of travel lanes cannot be reduced to free up space for curbside space, and where the City determines that due to vehicular speeds and volumes on that street a safe and comfortable curbside lane cannot be provided immediately adjacent to vehicular travel lanes, a frontage lane—also known as a side access lane—may provide low speed vehicular access and parking along the building frontages. Side access lanes were, and are, common along the edges of the classic “boulevards” of great American and European cities, providing a comfortable pedestrian environment adjacent to major crosstown thoroughfares. They may equally be seen as “front parking lots” that look more like part of an important street than “parking lots” in front of the buildings.

As illustrated to the right, a frontage lane is a low-speed, one-way roadway, separated from the main thoroughfare by a median/planting strip, with parking on one or both sides. Parking may be parallel or angled, up to 90 degrees, both head-in and back-in. As with all other active public frontage types, the frontage lane is adjoined by a landscape/amenity area and comfortable sidewalks. Key considerations in implementing this strategy include:

- + Street tree rows are within the landscape/amenity area and the median/planting strip.
- + In many cases a bike lane or transit lane may run adjacent to the curbline of the primary thoroughfare, since the curbside lane and pedestrian way functions are accommodated within the frontage lane.
- + This configuration requires that buildings be set back farther from the main thoroughfare than in the case of bulb-in parking, but the ground floor uses within those buildings are provided with a higher quality parking and pedestrian experience, and in many cases would be set back no more than existing buildings.
- + In select cases where the City determines that the number and width of travel lanes may be reduced, it may prove possible to construct frontage lanes outward into the existing streets, encroaching less or not at all into the private properties adjacent.
- + Where frontage lanes are constructed along Transit-Priority Streets, the City—in coordination with developers and Omnitrans—may incorporate bus stops into the median/planting strip or along the curbs within the frontage lane to provide very convenient rider access to a high-quality, active pedestrian environment and adjoining businesses and other uses.

► Frontage Lane Improvements



A frontage lane provides convenient parking and access to shops and businesses along highly trafficked major corridors.



Frontage lane with angled parking adjacent to sidewalk



Transit stop in median between frontage lane and travel lanes



Street trees and parked cars provide physical and visual buffer from vehicular traffic for pedestrians



Frontage lane with raised crosswalk slows traffic, especially at intersections

2B. APPLYING ADDITIONAL IMPROVEMENTS

I. ADDING CROSSWALKS AND CONTROLLED INTERSECTIONS

Crosswalks are important elements of complete pedestrian networks and should be located at major street intersections and, where safe and appropriate, at certain mid-block locations. Many major streets—designed to carry large volumes of vehicles at relatively high speeds to “connect” the community—end up being barriers to active transportation and to convenient access to many parcels because of the wide spacing of intersections and consequent scarcity of safe, convenient, and comfortable pedestrian crossings.

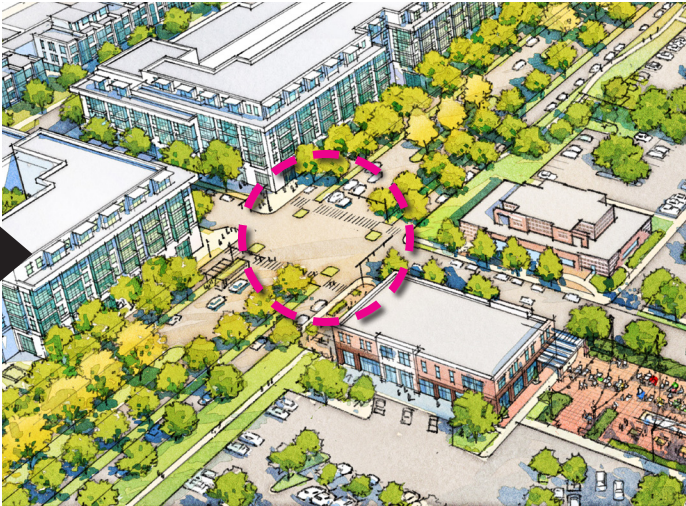
As many of the city’s corridors evolve toward places where people walk, bike, shop, and gather as a community, it is critically important that these large streets become much more “crossable” by pedestrians, bicyclists, and even motorists who simply want to go a short distance to a destination on the other side of the street. Accordingly, as large parcels of land along major streets are subdivided into smaller blocks accessed by new streets, many of the new streets of this more complete network must cross existing arterials and large collector streets to enable all-mode connectivity between Neighborhoods, Centers and Districts.

More closely spaced intersections will also help moderate the average speed of car traffic, while drastically increasing the effective connectivity of a place for those who seek to access amenities and visit friends along the corridor rather than just driving by. Strategies that can contribute to improved “crossability” as new intersections are created include:

- + Insert landscape medians with low shrubs near crossings.
- + Introduce “medianettes” with pedestrian refuges at selected crossings.
- + Extend (bulb-out) corners of intersection sidewalks to reduce pedestrian crossing distance and accommodate access ramps.
- + Design crosswalks with high visibility enhancements, including advance or in-street warning signage, overhead lighting, refuge island, high-visibility markings, such as zebra style crosswalks, and raised or tabletop design.
- + Restrict parking on the crosswalk approach.
- + Plant strong street tree rows within medians to further define and shade the space of wide streets, along with pedestrian crossing refuges where appropriate.
- + Within Transit-Priority Streets, dedicated bus rapid transit (BRT) or light rail transit (LRT) guideways and tracks may be located within medians.



New signalized intersection needed



New signalized intersection added



Landscaped median with shorter left turn pockets



Bulbed-out corners



Mid-block crossing with zebra style crosswalk



Crosswalk with median refuge



Neighborhood streets provide opportunities for circulation and recreation to residents.

II. NEIGHBORHOOD STREET RETROFITS

Neighborhood streets are spaces of the public realm that residents experience most frequently. They also define the “location” and “curb appeal” of each residence and are thus foundational to property value and neighborhood lifestyle.

It is of course vitally important that neighborhood streets provide safe mobility and access for people of all ages, physical abilities, and modes of travel. In addition to providing safe and comfortable all-mode access to homes, neighborhood streets should be designed as places where children play, and neighbors meet and interact as a community. As has become even more evident during the pandemic, the opportunity to walk out of one's front door and immediately enter a comfortable and attractive walking, biking and socializing environment is an invaluable amenity.

The following sections present design strategies that can improve the safety, comfort, appearance, and usability of any street, and all can be applied to neighborhood streets. Many of these strategies help to calm traffic, improve walking and biking routes, and help make these streets very attractive and useful public spaces. Implementation of the design strategies presented in this section will require careful consideration of physical constraints, street function, safety, and of course engagement with neighborhood residents and property owners.



Neighborhood streets vary in size, traffic volumes and speeds, and curbside parking needs; improvements will also vary.



With slower vehicular traffic speeds, comfortable walking and biking routes, and nice landscaping, neighborhood streets can become “the living rooms of the neighborhood”, providing places for social interaction, play and recreation..



Buffered bike lane next to curbside parking.



Existing bike lane on Highland Avenue is not well protected from vehicular traffic and could be improved with a buffer.

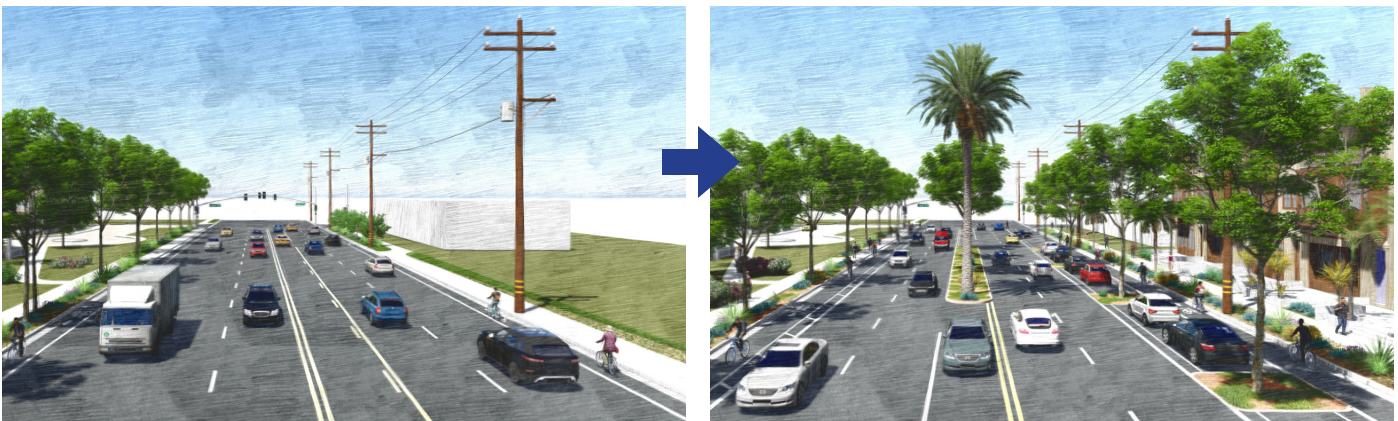
III. TRAFFIC CALMING & PLACE MAKING

The urban design strategies presented in this Toolkit—noted above and described and illustrated in a bit more detail here—are applicable throughout Rancho Cucamonga’s street network and public realm, some particularly suitable for improving the safety, comfort and appearance of neighborhood streets.

A. ADDING STREET TREES

Planting strong rows of street trees is perhaps the simplest way to improve the quality of the environment on any street. Street trees help to define the space of the street as an “outdoor room of the community”, and have a “visual narrowing” effect, which increases pedestrian comfort and moderates driving speeds. In Rancho Cucamonga’s increasingly hot, dry, windy and unpredictable climate, the shading and wind-buffering effect of a robust urban tree canopy can radically transform the microclimates and human comfort of our streets. Not to mention the beauty of trees themselves, and the filtered sunlight beneath them that generates pleasant places for people to walk, shop, and just spend time out in public with friends and family. The principles below should be followed when adding trees in medians and along the edge of streets.

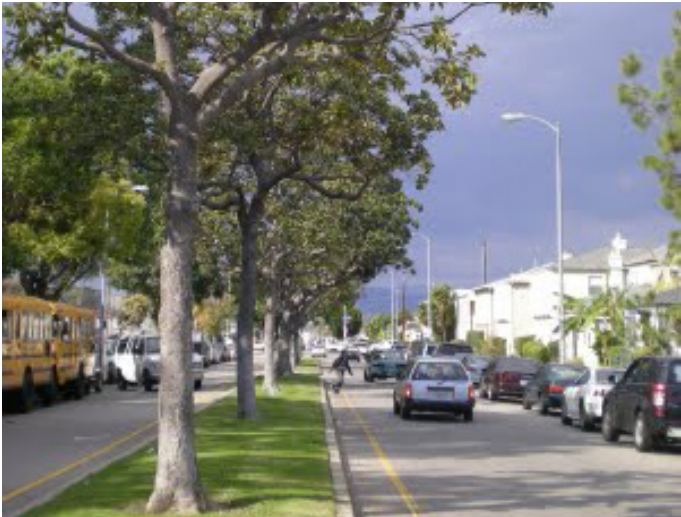
- + Design the landscape/amenity area with sufficient width for the desired tree type—not the other way around.
- + Although there are many considerations on tree types that depend on the specific context, they should generally be as tall and full as possible.
- + Street trees in the amenity zone should be distanced far enough away from the building to shape an open and comfortable pedestrian space. This also visually “narrows” streets that feel too wide and exposed. Additional trees in a center median may be needed to achieve this on especially-wide streets.
- + To the extent possible, each street, or segment of street, should be consistent in its regularity and species of trees.



Improved street environment with the addition of street trees in median, parking lane planters, and along sidewalk



Large canopy trees provide shade and frame the streetscape



Center median with strong tree rows



Parking lane planter



Regularly spaced trees contribute to an attractive streetscape



Shade provided by street trees helps create a more comfortable pedestrian environment

Add Trees Along Street Edges

Adding trees to streets contributes both to traffic calming and to improving the look and comfort of walking environments in and around neighborhoods. Trees can be added to various locations within the streetscape to visually narrow the roadway, which moderates driving speeds, and, if the canopies are large enough, they can provide shade and wind protection on sidewalks.

- + **Parking Lane Planters.** Where there is on-street parking, small planters with or without curbs can be constructed in between parking spaces. In addition to providing shade to the parking lane and sidewalk, this reduces the wide appearance of streets that have on-street parking.
- + **Continuous Planting Strip.** A four- to six-foot-wide planting strip between the sidewalk and the street provides space for trees that can shade the sidewalk and part of the roadway. Where possible, instead of creating street tree square planters, as is often done in urban locations, allowing the planting strip to continue uninterrupted is advantageous in neighborhoods because it provides more space for landscaping and is better for stormwater management.
- + **Add Medianettes.** Trees can also be added into the roadway in medianettes. See the next section.



Parking lane planters bring trees closer into the roadway, narrowing the look of the street, encouraging drivers to move at more careful speeds.



Parking lane planters can be a continuation of the sidewalk curb, or be constructed separate from the curb.



Wide, continuous planting strip allows for frequently spaced large trees with large canopies, providing lots of shade.

Add Trees in Medianettes

Small medians can be added to calm traffic and provide another location for landscaping and street trees. The ability to add medianettes will depend on the width of the roadway and travel lanes. Where there are already center turn lanes, medianettes can be added in a manner that still allows adequate spacing for required left turn access. However, even streets with no center turn lane can often be reconfigured by narrowing lanes to host 5-foot wide medianettes (large enough for trees).

- + **Collector Streets.** Collector streets tend to have high speed traffic, and often do not require curbside parking. Where roadway width allows, medians could calm traffic. This would be especially important on collector streets that have bike lanes.
- + **House-Fronting Streets.** Streets with house fronts benefit from the medianette's ability to slow down traffic and add trees to streetscape.



Where there are large roadways and curbside parking, medianettes can be designed in conjunction with parking lane planters.



Lemon Avenue, which has house fronts, is a wide roadway, allowing cars to speed freely. Introducing medianettes is one way to encourage cars to drive more slowly and carefully through this neighborhood, in addition to improving the environmental quality.



Street Retrofit: Lanes are narrowed and reconfigured, where street width allows, to accommodate the installation of medianettes with street trees and landscaping. This contributes to a more comfortable and attractive environment for all users—pedestrians, cyclists, and motorists.

B. ADD LIGHTING

Lighting is an important part of pedestrian safety and comfort. Well-placed and well designed lighting ensures that public areas are still accessible after dark and that motorists can see pedestrians on sidewalks and at intersections while at the same time minimizing light pollution. This is most important on collector streets that are not fronted by houses, where residential lights do not provide any illumination, and wherever there are potential traffic conflicts between pedestrians, bikes, and cars, such as at crosswalks. The appropriateness of lighting on streets is also determined by neighborhood character—some rural streets may not require pedestrian lighting. It is essential that lighting produces a minimum amount of glare and light pollution as well as creating an inviting environment.

- + **Pedestrian Scale.** In addition to lighting oriented to the roadway, lighting should be oriented toward sidewalks, illuminating walking paths. Pedestrian scale lights can be added to street lights, lighting patterns can be selected that focus adequate light onto the sidewalk, or shorter luminaires can be provided near sidewalks within landscaping.
- + **Intersection Corners and Crosswalks.** Providing lighting at the arrival points of crosswalks creates safer conditions because cars can see pedestrians approaching sidewalks and bicycles approaching intersections.



Pedestrian scale lights as freestanding or part of street lights.



Mid-block crossing with a medianette pedestrian refuge.



A mid-block bulb-out protecting a pedestrian crossing.

C. ADD SAFE CROSSINGS

In neighborhood streets with wider crossings (generally > 40 feet), or higher traffic volumes and speeds (generally > 25 mph), the following are examples of strategies for enhancing the safety and comfort of pedestrian crossings.

- + **Curb Extensions.** Wherever there is on-street parking, the curbs at intersections (where parking is no longer allowed) can be extended to provide a shorter crossing distance for pedestrians.
- + **Mid-Block Bulb-outs.** In the same manner as curb extensions, bulb-outs can be constructed around crosswalks to shorten crossing distances. These also visually narrow the roadway and provide better visibility of pedestrians waiting to cross.
- + **Raised Crosswalks/Speed Tables.** Raising a crosswalk at an intersection necessarily slows vehicle speeds.



A raised crosswalk, also known as a speed table.

D. ADD CHICANES

Chicanes are a form of traffic calming that utilize offset curb extensions or other barriers to vehicular travel to redirect lanes. These can be used on neighborhood streets with a variety of widths to significantly slow traffic speeds. Chicanes can also be created by alternating on-street parking.

- + **Alternating Curb Extensions.** Medianettes can be added on the sides of street as curb extensions, providing more room for landscaping on neighborhood streets. When constructed as a retrofit, these medianettes are often separated from the gutter to allow drainage. Where there are bike lanes, medianettes can be separated from the sidewalk curb with enough distance to allow a bike to pass, improving safe passage for bikes.
- + **Alternating Parking.** On streets with some on-street parking, the parking provided can switch from one side to the other, shifting travel lanes. This can be reinforced with some physical barriers such as curbs and landscaping.



Chicane (NACTO)



Chicane on a neighborhood street

E. ADD ROUNDABOUTS

Roundabouts, both regular and mini-sized, can be added to most intersections and may replace stop signs or traffic signals, providing significant safety and environmental benefits. Motorists must slow down to navigate around a physical island, without stopping. Accordingly, as is often possible with travel lane width reductions, such roundabouts offer the multiple and counterintuitive benefits of increased traffic capacity; reduced travel time, environmental noise and GHG emissions; and significant enhancements to pedestrian, bicycle and motorist safety.



Chicane with medianettes.



Mini Roundabout



Mini Roundabout

2C. APPLYING TRANSIT & BIKE IMPROVEMENTS

I. TRANSIT PRIORITY STREET RETROFITS

Providing safe, convenient and comfortable access to transit is essential to rebalancing travel modes and creating a street environment that equitably serves the needs of users of all ages and abilities. The Vision Diagram, shown in Volumes 1 & 2 of this Plan, illustrates a framework for multi-modal access throughout the city and identifies “Transit Priority Streets” to enhance transit mobility and access. In particular, Foothill Boulevard and Haven Avenue are identified in the Mobility Chapter, in Volume 2, as boulevards “that promote economic development around high-quality transit service, including light rail (LRT), streetcar, and bus rapid transit (BRT), while fostering a pedestrian scale environment in which walking and biking actively complement public transit.”

This section provides design strategies for transit priority streets to better accommodate transit service and provide high-quality amenities and improved streetscape for people who walk and take transit. Implementation of the design strategies presented in this section will require thoughtful consideration of surrounding land use context and characteristics—both current and expected. It will also require coordination with adjacent development as well as collaboration and coordination between City departments and relevant transit agencies, especially when designing within a limited right-of-way.

There are generally three broad strategies for integrating transit, whether as improvements to streets with existing transit or as a new major infrastructure improvement. The following options for adding high-quality transit are described in detail on the following pages.

- + Peak-Hour Bus Lane
- + Bus-Priority Frontage Lane
- + Center-Running Transit Lane

In conjunction with the improvements for the options above, transit stop location should consider the physical and operational context of the street and transit route. In general, transit stops can be located on the near side or far side of the intersection, or at midblock. Far side stops improve pedestrian safety when riders use the crosswalk behind the bus and allows other cars to use the right lane at intersection approaches. Midblock stops can help to avoid vehicle queuing that may occur at intersections but tend to make for longer walks to the stop from side streets. Far side stops are the most common but near side and midblock stop locations may also be considered based on site conditions and other transit criteria.

► **Peak-Hour Bus Lane**

A peak-hour bus lane provides a dedicated lane for bus travel during peak hours, typically between 7am-9am and 4pm-7pm, thereby increasing the efficiency of transit service during peak travel times. Peak-hour bus lanes are typically placed in the outer travel lane on major streets with heavy transit ridership.

Peak-hour bus lanes should be installed with bus pads, appropriate signage, and pavement markings. If the appropriate width for a bicycle lane is not feasible alongside a peak-hour bus lane, the lane may be designed as a shared bike-bus lane.

On-street parking, where available, is prohibited during peak hours. Where possible, the bus lane may be “offset” by a parking lane so that on-street parking is not restricted. Bus bulbs, where the sidewalk is extended to accommodate a curbside bus stop, should be installed in conjunction with offset lanes.



Peak-hour bus lanes may be integrated in streets with or without frontage lanes.



Red paint delineates and reinforces the lane for bus use only



Bus bulb with transit shelter and amenities



Bus lane signage



Shared bus-bike lane



Shared bus-bike lane

► Bus-Priority Frontage Lane

Where frontage lanes are present, the bus may enter it via slip lanes from the main travel-way to access bus stops on the sidewalk. For that segment of the frontage lane, the bus takes priority. A bus-priority frontage lane avoids having passengers cross the frontage lane when getting to/from a median boarding island. It also preserves roadway traffic capacity as the bus does not stop in a primary travel lane. A slight variation of this option is to locate the bus stop before the entry to a frontage lane so the bus does not travel in the frontage lane.

Bus pads, appropriate signage, and pavement markings should be installed for bus-priority segments. Entry slip lanes should be limited access for buses only and, where possible, be of sufficient width to accommodate a bus waiting to slip into the frontage lane.



Bus stop in frontage lane



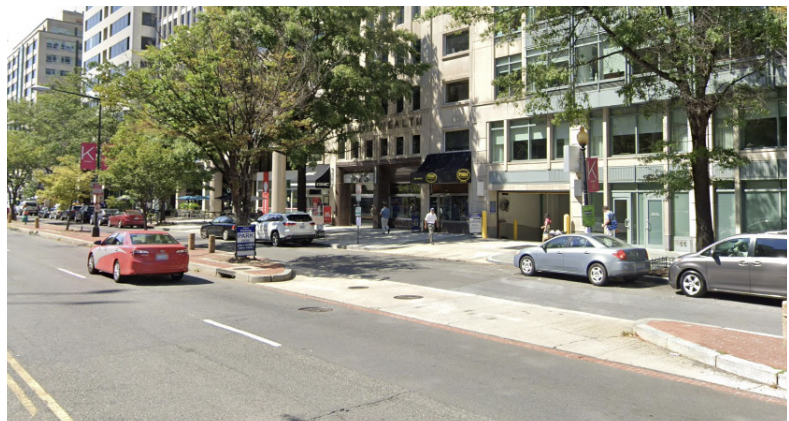
Bus traveling along frontage lane



Wide median between frontage lane and travel lanes



Entry to frontage lane



Midblock entry to frontage lane

► **Center-Running Transit Lane**

Dedicated lanes down the center of streets enhance efficiency for bus travel along major corridors and may also accommodate bus rapid transit (BRT), streetcar, and light rail (LRT). Transit lanes can be separated from other travel lanes by striping or a median. In either case, transit stops are located on median boarding islands. Left turn lanes can also be accommodated in the median and should be provided with a protected turn signal.

Center-running transit lanes should be installed with bus pads, appropriate signage, and pavement markings. Median boarding islands should be placed in close proximity to safe, signalized crosswalks and with sufficient queuing space for buses. Boarding islands should be a raised platform with a ramp for greater accessibility and include an enclosure or barrier separating waiting passengers from moving traffic.



Center-running bus lanes with medians that accommodate transit stops and left turn lanes.



Barrier and shade structure at median boarding island

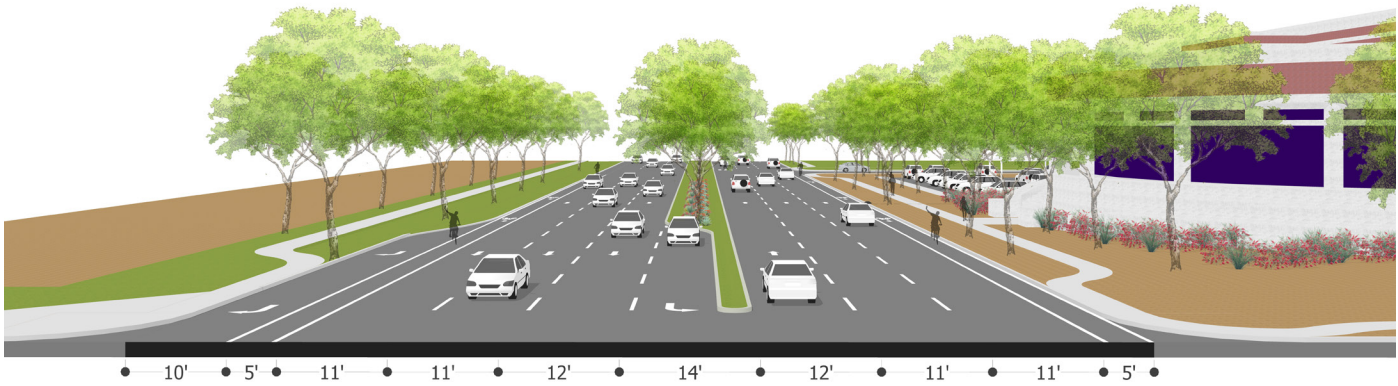


Center-running bus lanes

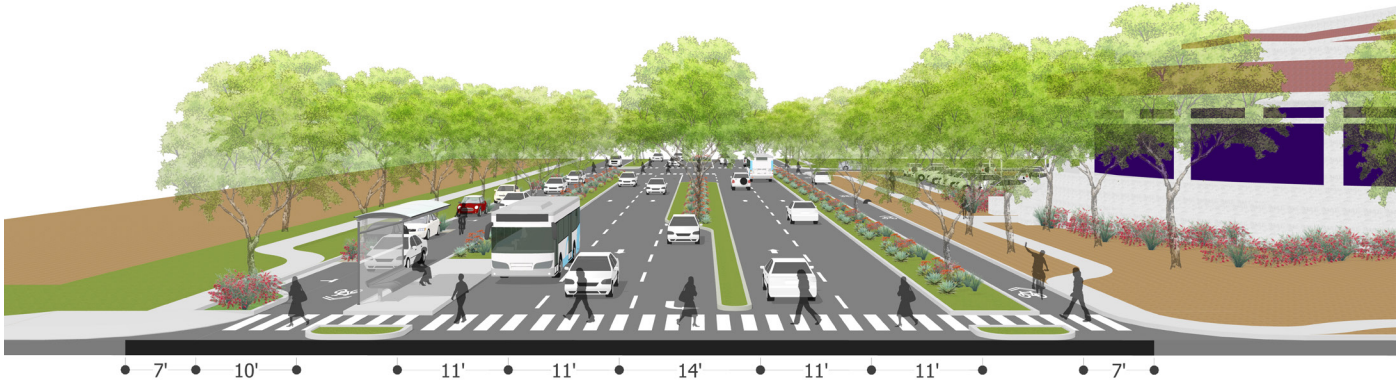


Striped median busway with raised platform bus stop

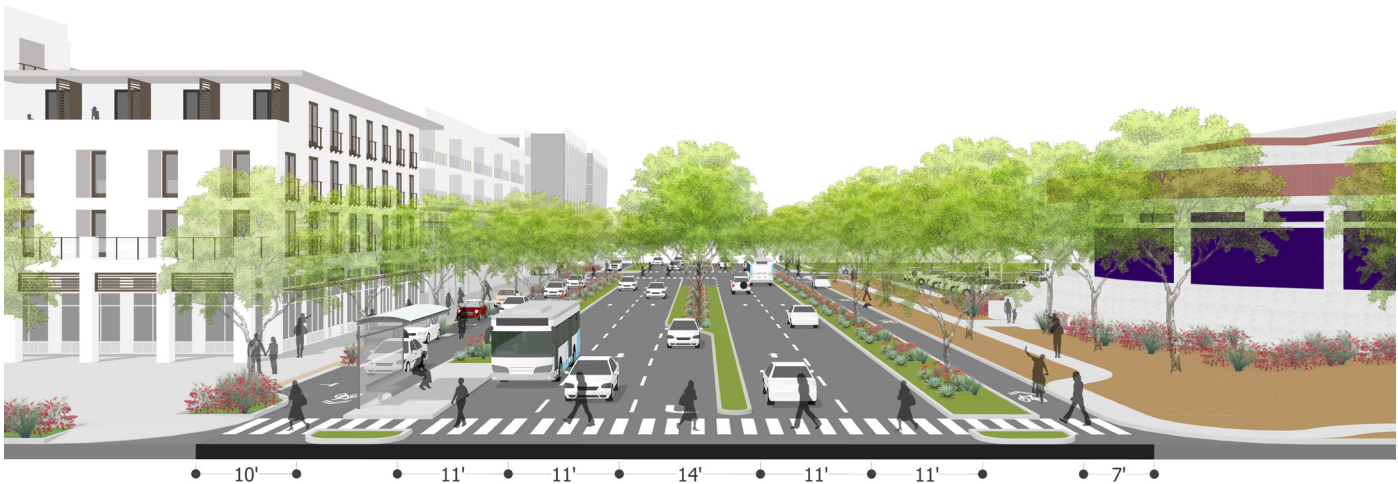
FIGURE PT-7 EXAMPLE SCENARIO: HAVEN AVENUE TRANSFORMATION



Typical Existing Condition: Narrow sidewalk directly lining 7-lane street with existing buildings set far back.



Phase 1: Reconfigure existing street, either by reducing travel lane widths or the number of travel lanes, to accommodate appropriate public realm dimensions. Introduce frontage lane with on-street parking where adjacent development is expected. Provide protected bike lane in-lieu of frontage lane in the short term.



Phase 2: Enhance existing sidewalk and provide new street trees and landscaping, if not already installed, to create an appropriately, safe, attractive and comfortable public frontage environment to support new street fronting commercial buildings.

FIGURE PT-7 EXAMPLE SCENARIO: HAVEN AVENUE TRANSFORMATION (cont'd)



Phase 3: Convert protected bike lane into frontage lane with new curbside parking, street trees, landscaping, and enhanced sidewalk with the development of new street fronting commercial buildings.



Alternative Frontage Lane Configuration: Curbside parking may be placed along the median to allow bulb-outs near intersections. The bulb-outs provide additional space for median refuge and for transit stops at median boarding islands.



Bikers cycling along protected bikeway

II. BIKE PRIORITY STREET RETROFITS

As illustrated in the Vision Diagram of this General Plan, shown in Volumes 1 & 2, “Bike Priority Streets” are identified throughout the city as part of the framework for multi-modal network connectivity. This section provides design strategies for bike priority streets to better accommodate bicyclists with improved bicycle infrastructure and amenities. Implementation of the design strategies presented in this section will require careful consideration of physical constraints, street configuration, and design speed.

Bike priority streets should be designed to encourage safer vehicle speeds, fewer collisions, and a pedestrian- and bicycle-friendly environment. Adding dedicated bike lanes is a simple way to slow traffic while providing cyclists with a safe space for travel between destinations as they allow riders to travel at speeds appropriate to bicyclists rather than moving traffic.

There are generally two strategies for retrofitting streets to accommodate bike lanes of various types. The two strategies can be used in conjunction to optimize the use of the street right-of-way and create a more safe, comfortable, and attractive environment for all users—pedestrians, cyclists, and motorists.

- + **Lane Reconfiguration.** Streets can be reconfigured to accommodate a bike lane and other pedestrian- and bicycle-friendly street improvements, such as on-street parking and wider sidewalks, by restriping the roadway. This typically involves reduction in the number of lanes either by converting the outer travel lane or by introducing a center-turn lane.
- + **Lane Narrowing.** Narrowing the width of wider travel lanes (12 feet or wider) can provide space for bike lanes as well as other beneficial street improvements, such as wider sidewalks and landscaped medians and Landscape/Amenity Areas, within existing right-of-way. Narrower lanes provide traffic calming by encouraging slower speeds and reduce the risk of collisions.

In general, travel lanes may be narrowed to 10-11 feet depending on target operating speeds and street context and characteristics. Streets with frequent volumes of larger vehicles, such as trucks and buses should have at minimum one 11-foot-wide travel lane in each direction.

The following are some key considerations when adding bike lanes to existing streets through the reallocation of existing street space.

- + Wider bicycle lanes (greater than the required minimum width of 5 feet but less than the width of a vehicular travel lane) should be considered on streets with heavy bicycle traffic and on streets with steep inclines to allow faster moving cyclists to pass one another.
- + Left-side bike lanes should be considered on one-way arterial streets if significant transit service is present on the right-most travel lane.

- + Wider bike lanes should be considered on streets with steep inclines
- + On streets with bike lanes, consider using parallel parking spaces as buffer to protect the bike lanes.
- + Consider painting a striped buffer between the bike lane and parking lane to reduce the risk of conflict and “dooring” collisions with bicyclists.



Bikes **Travel and Turn Lanes** **Bikes**

Typical Existing Condition: Wide travel lanes, especially the outer lane, with minimal bike lane space



Bikes **Travel and Turn Lanes (reduced widths)** **Parking** **Bikes**

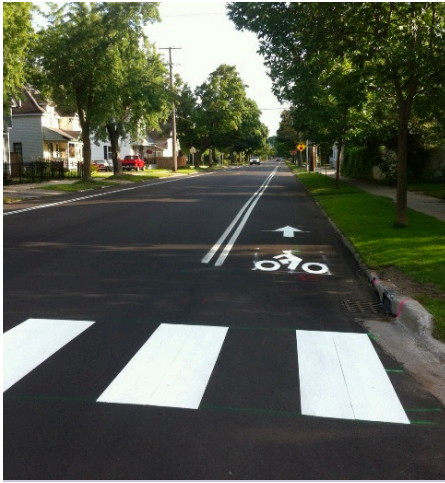
Street Retrofit: Lanes are narrowed and reconfigured to accommodate protected bike lanes and on-street parking. The installation of parklets and median with street trees and landscaping further improves the streetscape to create a comfortable and attractive environment for all users—pedestrians, cyclists, and motorists.

Bike Lane Types and Applications

In a city as large as Rancho Cucamonga, and with mild year-round climate, extending safe and comfortable bike routes into as many streets, neighborhoods, corridors, centers and districts as possible will be a very high value amenity for residents, workers, and the environment.

Bicycle facility types and the recommended applications and contexts for each are described in detail in the standards and guidelines promulgated by the National Association of City Transportation Officials (NACTO), and the Mobility chapter of this Plan further addresses the future bicycle network within the City's street network. The City's Trails Master Plan defines the currently planned off-street facilities throughout the city and should be updated based on the policies of this Plan. Accordingly, this discussion focuses on recommendations for integrating NACTO-compliance facilities into the Street Types and Place Types of the General Plan.

- + **Off-Street Lanes (NACTO Class 1)** are provided within public open spaces, include broad greenways along selected street and within the City's extensive, and growing, network of trails and greenways within public utility easements.
- + **Striped Lanes (NACTO Class 2)** are dedicated one-way bike lanes, marked with painted striping to the right of the rightmost vehicular lane. Such lanes are provided where Class 3 lanes are deemed to be unsafe and/or where street width allows. Where on-street parking is provided, car door buffers are recommended.
- + **Striped Buffered Lanes (NACTO Class 2)** are dedicated one-way bike lanes, with striped buffers on one or both sides. Buffers to the left of the cyclists help improved cyclist safety and comfort (although by State law motorists must provide cyclists with 3 feet of clearance when passing) and are recommended on higher-speed, higher-volume streets where roadway width allows. As noted above, car door buffers are also recommended where bike lanes are adjacent to curbsides with on-street parking.
- + **Shared Lanes (NACTO Class 3)** are bicycle "routes", marked with signage and pavement markings, in which bicycles share lanes with motorized vehicles. Such routes are limited to relatively low speed, low volume streets, including most neighborhood streets as well as many local streets within Centers, Corridors and some Districts.
- + **Protected Lanes (NACTO Class 4)**, sometimes also referred to as "cycle tracks," are a newer type in which a physical barrier—curbs and/or bollards—separate a bike lane from vehicular lanes. Such facilities are ideal for higher-speed, higher-volume major thoroughfares, and may be one-way or two-way, depending on the street and Place Type context.



Striped bike lane



Buffered bike lane



Protected bike lane



Typical right turn lane transitions



Bike boxes at intersections (NACTO)



Bike lane between curb and parking



Bike lane along walk zone

2D. CREATING NEW STREETS & PUBLIC SPACES

I. CREATING NEW STREETS



As large vacant parcels along major corridors are developed and redeveloped, a more complete network of balanced, all-mode streets will be extended into them. This new network will provide high quality all-mode access to new higher intensity, more active, mixed-use development, all of which will have the types of Active Frontages defined and detailed in Section 1C, above.

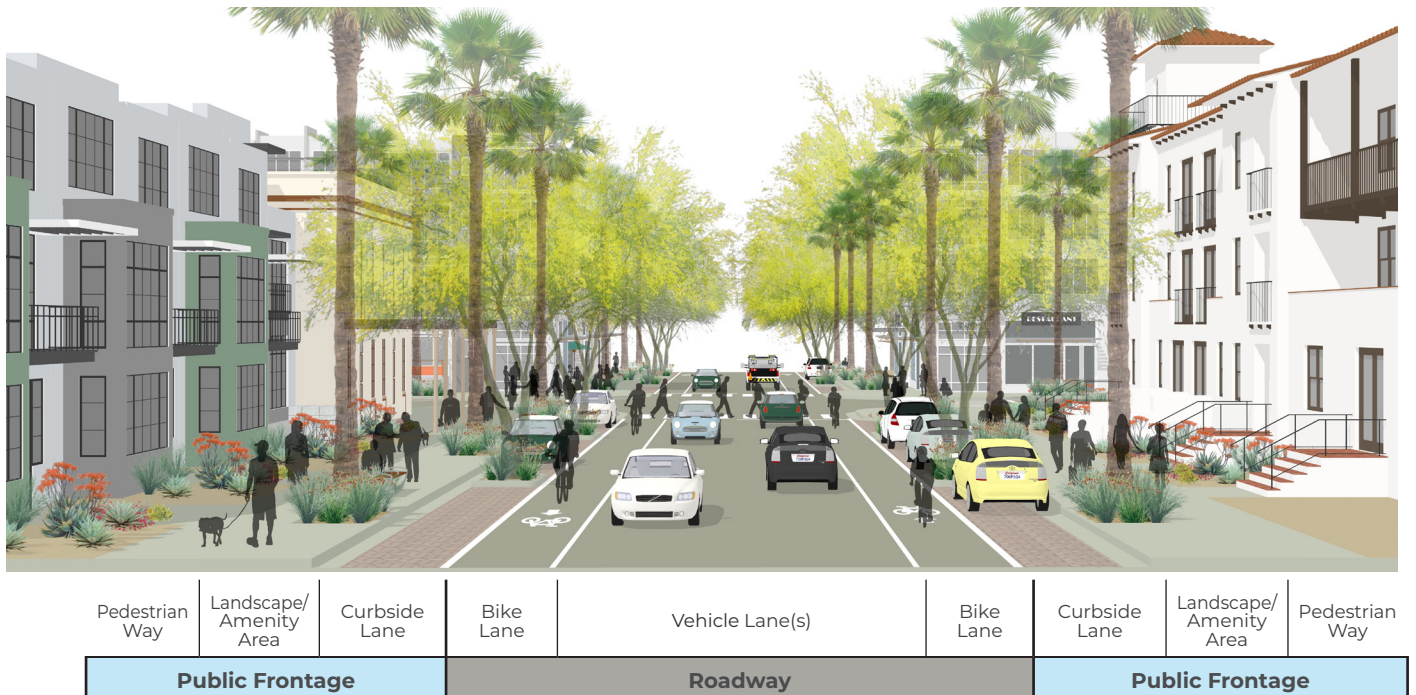
These new streets will almost invariably have one travel lane in each direction—with or without center turn lanes and medians—providing them with comfortable Curbside Lanes, Landscape/Amenity Areas and Pedestrian Ways that are appropriate to their ground floor uses. Key attributes of such streets include:

- + **One Travel Lane Each Direction.** This manages vehicular speeds, moderates pedestrian crossing distances, and helps to make the width of the street space—as measured from building face to building face—a reasonably human scale “outdoor room”. In some cases, medians are helpful to control left turn movements as one exits a major corridor, and to provide left turn lanes where needed.
- + **Curbside Lane Parking.** Along commercial/retail frontages, customer parking —parallel or angled—is very important in enabling some customers to park right in front of shops and restaurants and gracefully become pedestrians within the public realm. Parallel guest parking along residential frontages is a valuable amenity and convenience. In all cases the parking provides an important buffer between pedestrians and moving traffic, although some Curbside Lane space may be reserved for pick-up and drop-off functions.
- + **Landscape/Amenity Area and Street Trees.** The Landscape/Amenity Area provides valuable opportunities for street trees and other landscaping, for bike racks, trash receptacles, street lights and perhaps parking meters, and in some cases for other furniture to make spaces in which it is comfortable to linger and spend time with friends and family. Landscaping is prioritized along residential frontages to provide another layer of privacy for residents.
- + **Pedestrian Way.** Described in some detail in Part 1; in general sidewalks along commercial frontages are wider than along residential frontages.
- + **Intersections and Crosswalks.** New intersections should have very comfortable wide, short crosswalks, and in certain environments mid-block crosswalks may be both desirable and quite practical.

FIGURE PT-8 COMMERCIAL STREET WITH DIAGONAL PARKING



FIGURE PT-9 RESIDENTIAL STREET WITH BIKE LANE AND PARALLEL PARKING



II. CREATING NEW PUBLIC SPACES

As described and illustrated in Section 3, below, the public realm network within new and redeveloping corridors, centers and districts is comprised of the street network and also non-vehicular open spaces in the form of plazas, courts, squares, greens and parks.

These spaces are to be measured more in terms of quality than quantity. Most are not intended to function as typical suburban parks do, accommodating sports activities as well as “passive” recreation. Rather, they are conceived as “the finest outdoor rooms” in the city, with active frontages and human activity lining their edges, as they line the streets, but without the constraints on human activity that streets must impose as they also accommodate cars. All of the Frontage Types defined in Section 1 may directly front such open spaces, with the exact type of open space calibrated to the adjacent ground floor uses. Examples of such fine community open spaces—several of which are already present in Victoria Gardens—include:

- + **Plazas** are small to moderately sized active open spaces best faced by commercial frontages on 2 or more sides. Ground surfaces are predominantly hardscape, tree canopy is provided for shade and spatial definition, and water features and public art are welcome focal points and enhancements. Plazas are ideal for outdoor dining, performances, and special events such as farmers markets.
- + **Squares** are typically larger than plazas, usually surrounded on 3 or 4 sides by buildings, including commercial and residential frontages. These frontages typically open directly to the square on 2 or 3 sides, and across small, very crossable streets on the other sides. The ground surfaces of squares are typically a combination of hardscape and landscape, often including areas of turf or other soft surfaces. Some areas and edges may be designed for outdoor dining or other commercial activity, while others may be designed for informal play and just spending quiet time outdoors.
- + **Greens** are small parks, mostly landscaped with some areas of hardscape or soft non-plant ground surface material. In centers and higher intensity neighborhoods, greens provide ideal play areas for children, sometimes with play equipment and sometimes just with interesting places for them to run around, play hide and seek, and have a picnic with their friends and family. Greens may be surrounded by small, easily crossable streets on 1 to 4 sides.
- + **Paseos/Malls** are linear open spaces acting in large measure as “car-less streets.” In most cases, they are lined with commercial or residential active frontages, but some narrow paseos may simply provide a pedestrian passage/shortcut between the sides of buildings. The design of these narrow paseos needs to provide for human-scale comfortable spaces that incorporate CPTED principles to avoid the creation of “dark alleys.”



Plazas and squares can feature shade and water elements.



A mixed use building fronts this plaza, which has seating, retail kiosks, and a fountain.



Greens can offer a place to site and picnic.



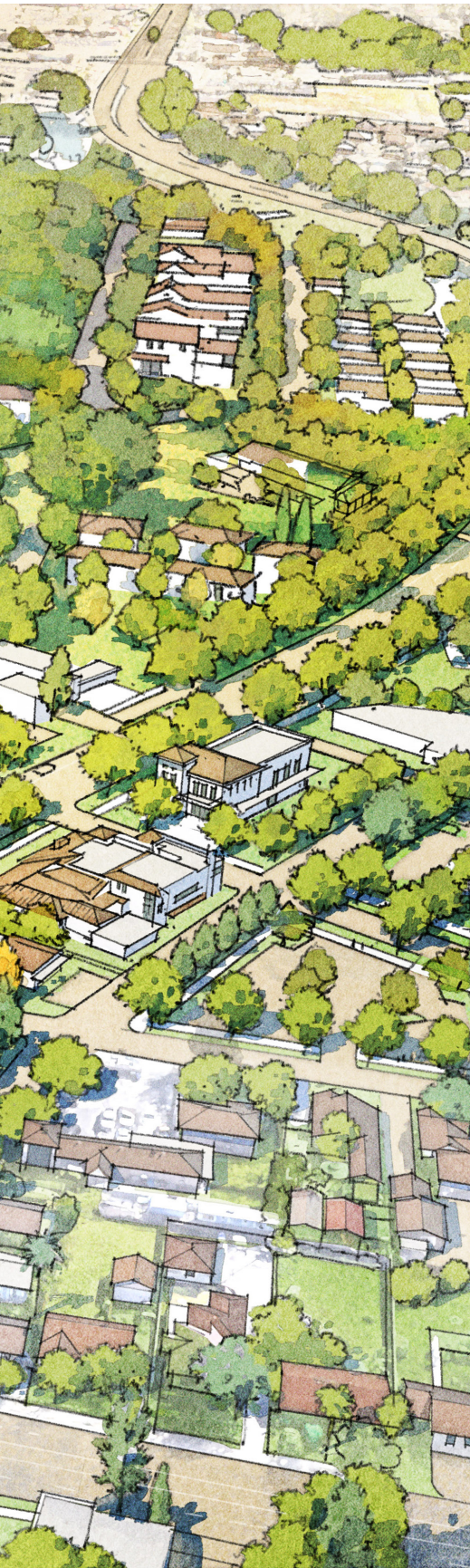
Larger greens can host programmed activities or performances.



This paseo is fronted by residences.



Some paseos provide access between buildings and space to gather.



PART 3. COMPLETING THE COMMUNITY FABRIC

Part 3 of this Toolkit defines and illustrates strategies for extending the active, human-scale public realm network of Rancho Cucamonga—as described in Parts 1 and 2—into large development sites and areas that have not yet been developed or are undergoing significant market-based change. A central and over-arching intent of the General Plan—as described throughout the Plan, and as implemented through the use of this Toolkit—is that the city’s street and open space network seamlessly connect people by all travel modes within and between our City’s neighborhoods, centers, corridors and districts. A closely related intention is that all buildings, businesses and residences be provided with active frontages, equitable all-mode access, and unique and valuable addresses that make them an integral and well-connected part of our city.

+ Regulation of Large Sites

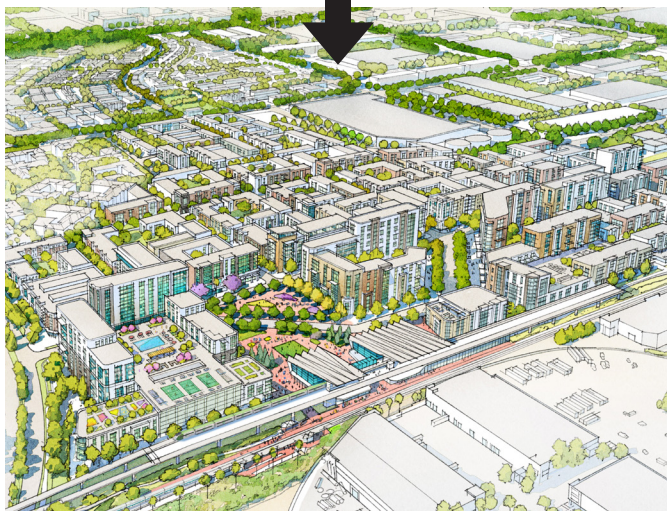
Large sites—generally defined as 3 acres and more—that are being developed for the first time or substantially redeveloped present unusual opportunities to extend new active frontages and all-mode access into areas within which these are currently lacking. Many such sites also provide once-in-a-generation opportunities to establish new connections between existing adjoining development and existing major streets, providing current residents with new and expanded mobility choices and multi-modal access to new amenities. Accordingly, such large sites will be subject to a permit, with specific submittal requirements and required findings of consistency with the applicable Place Type Designations, Focus Area Plans, zoning standards, and public realm design standards.

+ Large Site Planning Process and Case Studies

Accordingly, this section describes the process by which developers will collaborate with the City to define master plans for large sites that meet the intentions of the applicable Place Type Designation(s), and connect it to the existing street network and adjoining development. Two case studies are provided to illustrate this process as applied to prototypical large sites. Case Study #1 addresses the planning of a large, undeveloped piece of land, while Case Study #2 illustrates the potential redevelopment of one of the oldest shopping centers in Rancho Cucamonga. The basic patterns and methodologies outlined in these case studies are exemplary of both centers and corridors and can be implemented at various scales throughout the city.

+ Parking Lot Retrofits

While the case studies demonstrate the steps for development or redevelopment of large sites, many existing shopping centers and other commercial uses with large parking lots may be unlikely to change significantly in the near term. Therefore, this final section makes general recommendations for relatively simple enhancements that can improve the appearance and performance of existing shopping centers and the businesses within them.



New development must create new places, based on the General Plan Place Types. The illustrative example above accomplishes this and is further described in **Volume 2, Chapter 2, Focus Area 3.**

New development must create new places, based on the General Plan Place Types. The illustrative example above accomplishes this and is further described in **Volume 2, Chapter 2, Focus Area 4.**

3A. GENERAL GUIDELINES FOR LARGE SITE DEVELOPMENT

Whenever developing/redeveloping large vacant, or underutilized sites within our City, the following priorities should be considered, as reflected in the Case Studies to follow:

- 1. Appropriately address context and edge conditions.** First assess the Site, its edge conditions, and the development form and character of those contexts. Determine how new development must relate to each edge, consistent with the Place-Type-based intent for the site per Volume 1, Chapter 2 of the General Plan.
- 2. Establish points of connection.** Provide connections to existing streets at regular intervals - and to adjoining existing development wherever possible - to ensure robust all-mode access to and through the site. The minimum intersection density shall be determined according to Policy LC-4.7 of the General Plan, generally including at least 2 intersections per quarter mile along the length of a major corridor, with closer spacings within the site.
- 3. Connect new streets through the site.** Lay out a network of new streets - which may be public or private - linking the points of connection established in Step 2. These primary connections through the site serve to complete and enhance the multi-modal network of the site and context. Their alignment can be configured in a variety of ways to create a beautiful and active public realm network and all-mode access to the planned new development, however a traditional grid pattern or variation of such a pattern will be the most effective in meeting the connectivity envisioned in the General Plan.
- 4. Create walkable blocks for the planned development types.** Complete the public realm network with additional streets, paseos, and open spaces to define blocks that are sized and shaped for walkability and to generate active frontages for all new buildings. In general, blocks should have a perimeter less than 1,500 feet, and not exceeding 2,000 feet. The completed public realm network shall be comprised of public space types per Toolkit Part 2 and beautiful, active, well-calibrated frontages per Toolkit Part 1.
- 5. Provide alleys within blocks to support the development types and public realm quality.** Alleys provide vehicular access for parking and services, enabling streets to be free of garages, driveways, utility equipment and trash collection, allowing the fronts of buildings to be scaled to and welcoming to pedestrians. Alleys carry far less traffic than streets - and at much lower speeds - so they can also provide safe play areas for kids and families to enjoy. Alleys enable a single block to accommodate multiple building types, and to evolve over time without deforming street frontages with additional, redundant vehicular access points.
- 6. Introduce development that benefits from and supports the public realm framework.** New development must activate the established public realm framework in conformance with the intended Place Type and surrounding context. This includes calibrating building forms, frontages, and ground floor uses as described in Part 1. Generally, the most active non-residential frontages—like retail—and the most intense development should be located along and near to major streets, while development of lower scales and intensities should abut existing lower-intensity neighborhoods to generate seamless transitions.

CASE STUDY #1 LARGE UNDEVELOPED SITE

Case Study #1 is a large, undeveloped site at the southwest corner of Foothill Boulevard and Hermosa Avenue. It is located within the “City Corridor - Moderate” General Plan designation. The following page spreads illustrate the process of defining a plan for this site that meets the intent of its designation and connects it appropriately to the surrounding context. The illustrations herein are conceptual steps for design and planning only and should not be interpreted as project site design layouts.



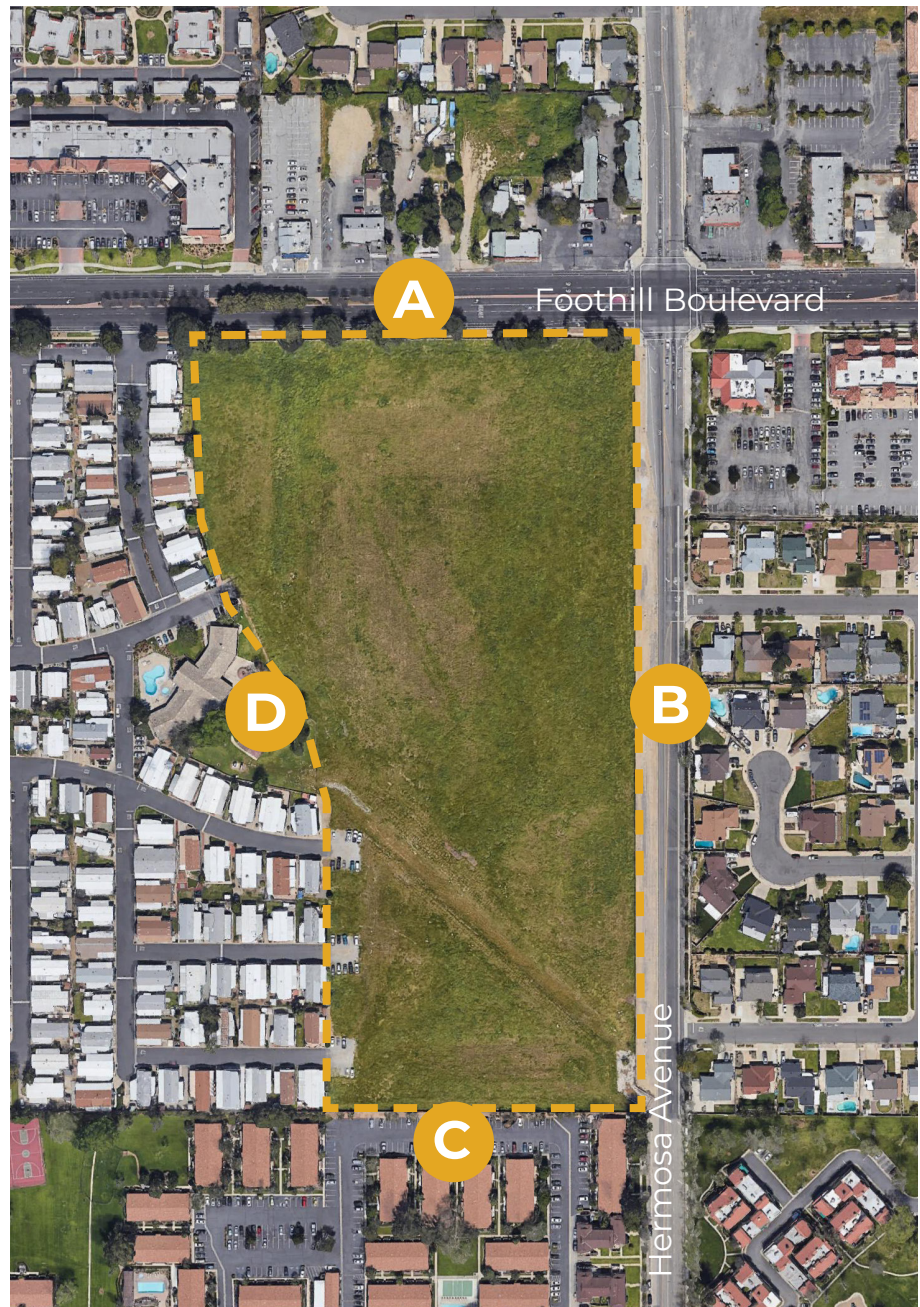
Case Study #1 Site seen from the southwest

STEP 1

APPROPRIATELY ADDRESS THE CONTEXT AND EDGE CONDITIONS

This site (See Figure 4.3.1) is an undeveloped piece of land bounded by multi-modal corridors to the north and east (A and B), and primarily by existing residential neighborhoods along the west and south edges (C and D).

FIGURE PT-10 CASE STUDY #1 SITE CONTEXT AND EDGE CONDITIONS



 Site Boundary



A. Foothill Boulevard

Foothill Boulevard is designated as a multi-modal corridor featuring bike lanes and bus transit. Improvements to the street should be calibrated to the intended development types and per Toolkit Part 2. Based on consultation with City staff, these will likely include improving bike lanes, narrowing excessively wide vehicular lanes, and adding parking on the street or in a frontage lane to support new development.



B. Hermosa Avenue

The east edge is Hermosa Avenue, which has no public frontage on its west side. Improvements to that street should be made per Toolkit Part 2, likely including new bike lanes, narrowing unnecessarily wide vehicular lanes, and an entirely new public frontage from the travel lanes to new development, including Curbside parking, Landscape/Amenity Area with street trees, and a comfortably wide sidewalk.



C. Parking lots of adjacent housing

The south edge of the site is lined by a parking lot and the side of one multifamily residential building. New development should treat this as a rear or side condition, and accordingly line it with building sides, backs, and/or alleys.



D. Mobile home park

The west edge comprises sides and backs of mobile homes and private streets/drives that dead end at the site edge. Development should present sides or backs to this edge and make connections—which may be variously pedestrian and bike only or all-mode connections—to most dead ends in order to provide a more complete the (see following spread) and direct access from existing residences to the new neighborhood and its amenities.

STEP 2

ESTABLISH POINTS OF CONNECTION TO THE CONTEXT

Define connections to the context at regular intervals. Minimum intersection density shall be determined according to Policy LC-4.7 of the General Plan. Generally, there be at least 2 intersections per quarter mile along the length of a corridor.

FIGURE PT-11 CASE STUDY #1 NEW POINTS OF CONNECTION





A. Connect to major corridors.

Connections can be made to major corridors either directly or via frontage roads (see Toolkit Part 2). Where a new street connection is close to an intersection, especially on major corridors such as Foothill Boulevard, new connections may provide only right-in, right-out vehicular access.



B. Connect to existing neighborhoods.

Where a high degree of continuity is desired, connect at existing T intersections to create new 4-way intersections. Where a less direct—although still connected—route is appropriate, new streets can be offset from T intersections. Along this Hermosa Avenue edge a combination of aligned, 4-way intersections and offset connections may be appropriate.



C. Not all edges warrant street connections.

Parking lots dominate the short south edge of the site. New street connections are not necessary here. Alleys can connect to parking drives to reduce gaps in the street wall if this can be arranged with adjacent development. Pedestrian/bike connections can also be made here to support the active mobility network.



D. Connect to dead ends.

It is typically desirable to connect to streets and paseos that currently form dead ends at the edge of the site. Where vehicular connections are not desired, new connections can be pedestrian paseos with bike access where appropriate. The type and design of such will be planned and designed in coordination with City staff and with the owners and residents of adjoining properties.

STEP 3

CONNECT NEW STREETS THROUGH THE SITE

Within this site, new streets should link the points of connection established in Step 2 in a very straightforward manner. These will be pedestrian-oriented neighborhood streets that provide very safe, comfortable pedestrian routes, and also safe bike routes within shared lanes due to low vehicular speeds.

FIGURE PT-12 CASE STUDY #1 STREETS CONNECT THROUGH THE SITE



Flexibility of street alignment

These primary street connections through the site can be configured in a variety of ways. For example, the north-south route could be offset in order to create a 'pin-wheel' plaza, as shown below, creating a focal point of neighborhood activity, potentially better accommodating the intended development types, while calming traffic and reducing vehicular speeds.

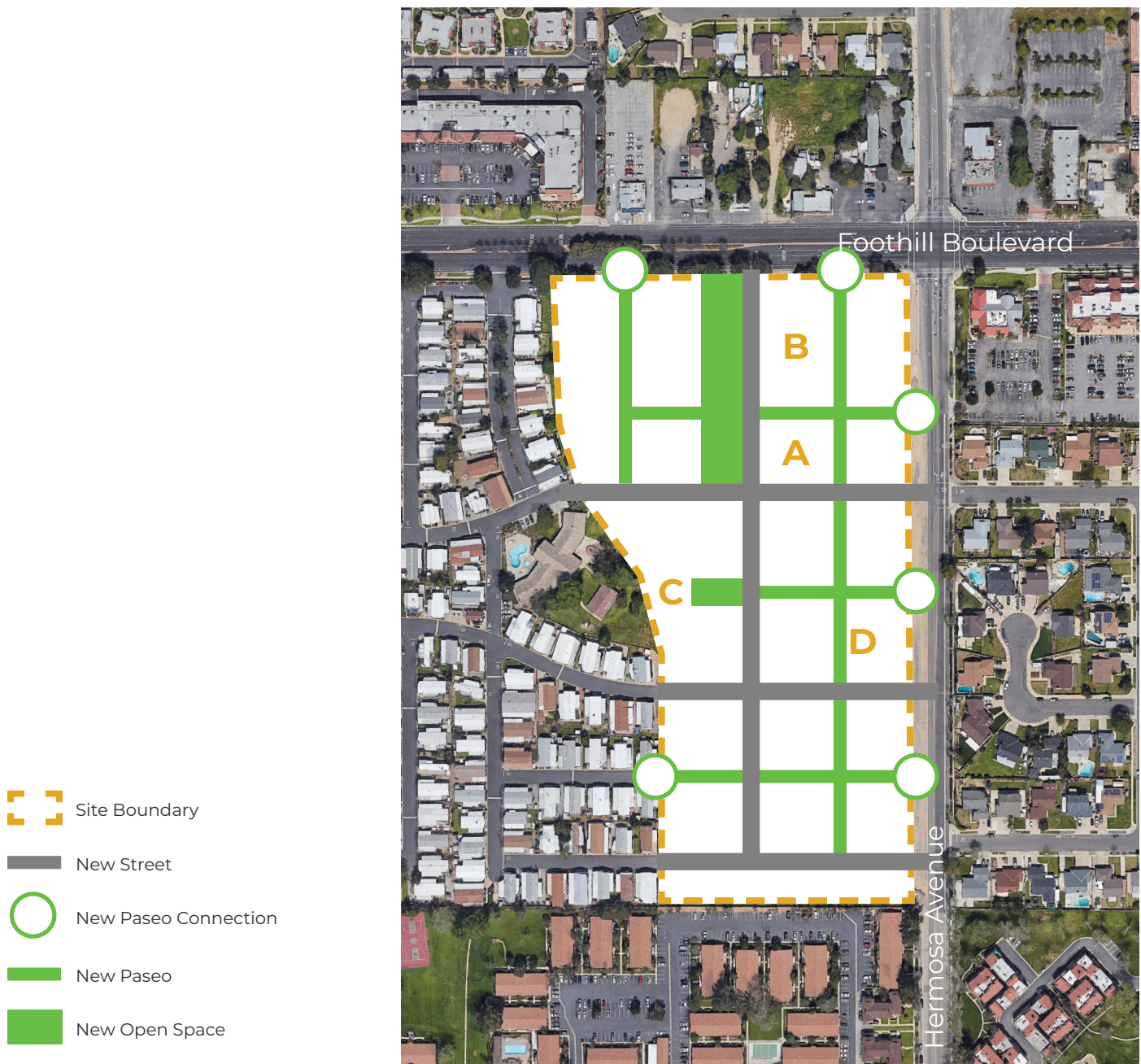
FIGURE PT-13 CASE STUDY #1 FLEXIBILITY OF STREET ALIGNMENT



STEP 4 CREATE WALKABLE BLOCKS THAT SUPPORT THE INTENDED DEVELOPMENT TYPES

In this development example, the block sizes for the intended building types are smaller than the basic connectivity framework—the block perimeters of most are significantly less than 1,500 feet—and the additional access routes and frontages are provided with non-vehicular paseos and green open spaces rather than vehicular streets.

FIGURE PT-14 CASE STUDY #1 WALKABLE BLOCKS





Blocks throughout the site establish a walkable framework for multi-family residential types.



Longer blocks abut Foothill Boulevard, accommodating commercial buildings with parking lots within the block.



Paseos provide pedestrian connectivity and a pleasant home for residential frontages.

A. Streets, paseos, and open spaces define walkable blocks.

The streets, alleys, and open spaces of this framework define very walkable blocks with a maximum block perimeter of 1,300 feet. The blocks are generally rectangular in shape, allowing them to accommodate a variety of development types now and in the future.

B. Longer blocks to accommodate internal parking for commercial.

The blocks along Foothill Boulevard are longer in order to accommodate parking for commercial uses lining the corridor within the block.

C. Extending the public realm into the block.

The largest block in this framework abuts a large adjacent block of the mobile home park. In order to provide access into the heart of the block, the public realm is extended from the street into the site as a forecourt. This forecourt provides active frontages for buildings within the center of this relatively large block. Additionally, this forecourt serves as a pedestrian destination that terminates views from the paseo to the east.

D. Paseos for residential frontages.

In the heart of the new neighborhood fabric, paseos provide pedestrian connectivity and a pleasant, quiet space for residential frontages, away from vehicular traffic. Where buildings front onto paseos, visitor parking must still be nearby, and vehicular access must be provided to each lot via alleys (see Step 5).

STEP 5

USE ALLEYS WITHIN BLOCKS TO SUPPORT THE DEVELOPMENT TYPES AND PUBLIC REALM

Alleys are threaded through the blocks within this public realm framework to provide vehicular access to commercial parking lots and to the rear of residential properties. This is critically important where buildings front onto paseos, as the alley serves as the only vehicular access to each residence.

FIGURE PT-15 CASE STUDY #1 ALLEYS WITHIN BLOCKS



Alley Orientation Allows Buildings to Front onto Major Corridors.

The alleys are oriented to allow development to face Foothill Boulevard and Hermosa Avenue. Although most alleys run north-south along the lengths of blocks in this framework, east-west alleys are provided in the north to minimize the number of alleys exposed to Foothill Boulevard. The alleys are also used in southern portion of the site to create continuous frontages along southernmost east-west street, which terminates the north-south streets and paseos.

Relationship to the Context

On the west edge of the site, alleys create a buffer against existing sides and backs. On the southern portion of the site, alleys can connect to existing parking lot drives if that configuration proves beneficial and the adjacent property owners agree.

Such connections will help to realize two of the main goals of the General Plan: 1) providing equitable access to those who choose to drive, and to those who cannot or prefer not to, and 2) reducing vehicle miles traveled and greenhouse gas emissions per person. A pattern that forced residents of the apartments to the south to walk a long distance out to Hermosa Avenue and along Hermosa Avenue and then back into the new neighborhood—or more likely to drive that route—would fail in many ways to meet the intent of the General Plan, particularly where a short, safe and pleasant walking route can so simply be provided.

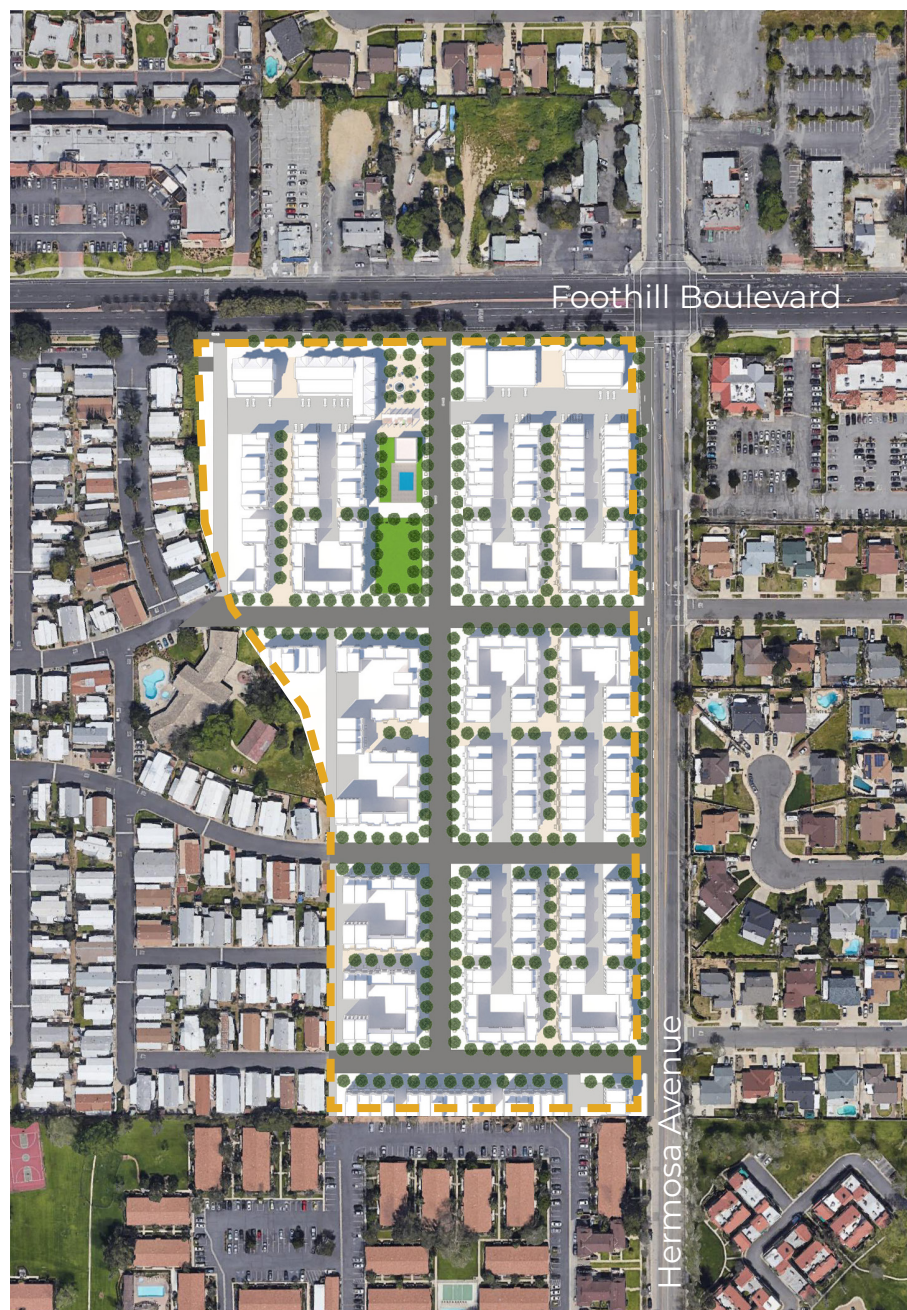


STEP 6

INTRODUCE DEVELOPMENT THAT BENEFITS FROM AND SUPPORTS THE FRAMEWORK

As described in Step 1, two sides of the site abut existing residential, while two sides abut corridors. Building form and frontages must be calibrated accordingly, as described in Figure 4.3.6B of the General Plan.

FIGURE PT-16 CASE STUDY #1 DEVELOPED SITE



- Site Boundary
- Building Footprint

FIGURE PT-17 CASE STUDY #1 DEVELOPED SITE SEEN FROM THE NORTHEAST

A. Retail Frontage on Foothill Boulevard. Foothill Boulevard is a major multimodal corridor that provides good access and exposure for retail uses to succeed. Here, retail and other commercial uses are accessible to citywide customers via Foothill Boulevard, and to nearby customers via new neighborhood streets. As noted in Step 1, a frontage lane could be added to Foothill Boulevard to provide easy parking and pick-up/drop-off access for new shops, restaurants or offices.

B. Retail-Ready Frontage along Hermosa Avenue. Retail-ready ground floors should be located along secondary corridors, ready to transition to retail use in the future if the near-term demand for retail is not adequate to fill those spaces at the time of initial development. Such frontages could line the first block of Hermosa Avenue south of Foothill Boulevard, while simple residential frontages could line the remainder of Hermosa Avenue. Where residential ground floors front onto corridors, on-street visitor parking is typically necessary to support real, functional front entries.

C. Residential Neighborhood. The heart of this infill site may be entirely residential, according to housing needs and the local context. Building forms that provide a consistent—although not continuous—“wall” of building façade s should line a linear park in the center of the site to clearly define it as an “outdoor room” for neighborhood activity.

D. Neighborhood Edge. New townhouse building forms can smoothly transition to existing neighborhoods. With relatively small façade increments and regularly-spaced front doors on the street, they can step down in height adjacent to the existing neighborhoods to provide a seamless transition to existing housing. As noted in Step 1, the adjacent neighborhoods present their backs and sides to this site, so new development should likewise present sides and backs in a manner which completes blocks and provides new connections.

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CASE STUDY #2 EXISTING SHOPPING CENTER

The second case study is an aging shopping center at the southwest corner of Base Line Road and Carnelian Street. It is located within the “Neighborhood Center” General Plan designation. Carefully planned, such large shopping centers may ultimately be significantly transformed, but such transformations are likely to occur incrementally in phases. It is important that a master plan guide each increment of development and prepare the way for subsequent increments or phases. Such master plans must be flexible enough to respond to changing economic conditions but must lock in key characteristics that matter most to making a comfortable and walkable environment, namely that streets and spaces are designed for people and framed by active, human-scale frontages. The following page spreads illustrate how a development framework could be defined for the above shopping center site to evolve it toward a new, more active Place Type-based portion of the city. The illustrations herein are conceptual steps for design and planning only and should not be interpreted as project site design layouts.

Further Resources

Retrofitting Suburbia, by Ellen Dunham Jones and June Williamson, and *Sprawl Repair Manual*, by Galina Tachieva, are excellent resources on the topic of parking lot infill and shopping center redevelopment. They contain helpful discussion, techniques, and case studies for the successful implementation of this strategy.



Case Study #2 Site seen from the southwest

STEP 1

APPROPRIATELY ADDRESS THE CONTEXT AND EDGE CONDITIONS

It is first necessary to assess the site, its edge conditions, and the development form and character of the context. Determine how new development will relate to that context.

FIGURE PT-18 CASE STUDY #2 THE SITE CONTEXT AND EDGE CONDITIONS

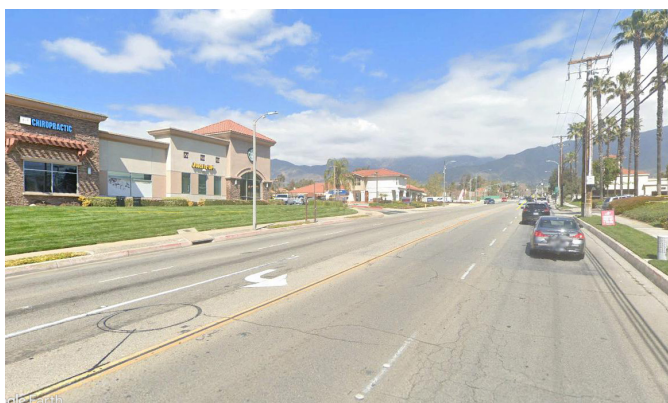


 Site Boundary



A. Base Line Road

Base Line Road is designated as an auto-priority street, planned to have much improved pedestrian and bicycle facilities and to support bus transit. Active frontages, as illustrated in Toolkit Parts 1 and 2, are required. The existing trees can be preserved, and bulb-in street parking between the trees may be introduced to support these new active fronts.



B. Carnelian Street

Similar to Base Line Road, Carnelian Street is designated as an auto-priority street and is to receive improved pedestrian and bicycle facilities, support bus transit, and be provided with active frontages at all new development.



C. Existing medical center and neighborhood

The southerly edge of the subject site abuts the sides of multi-family housing and a medical center. New development should treat this edge as a rear or side condition, and line it with building sides, backs, and/or alleys.



D. Cucamonga Creek Channel and Trail

The western edge of the site abuts the Cucamonga Creek channel and open space easement, which the General Plan recommends be further enhanced as a linear green open space connecting from Cucamonga northward through Alta Loma, to the natural and rural open spaces of the foothills above. Accordingly, this edge presents a fine opportunity to provide direct physical and visual access from this Center to an important community open space and the citywide trail network.

STEP 2

ESTABLISH POINTS OF CONNECTION TO THE CONTEXT

Form connections to the context at regular intervals. Minimum intersection density shall be determined according to Policy LC-4.7 of the General Plan. Generally, there should be at least 2 intersections per quarter mile along the length of a corridor.

FIGURE PT-19 CASE STUDY #2 NEW POINTS OF CONNECTION





A. Connect to Base Line Road

A new street can be introduced to align with Topaz Street and form a new 4-way intersection. This would better link new development with existing neighborhoods and create an opportunity for pedestrians to cross Base Line Road. A second street can take the place of the existing shopping center entry drive, forming a T intersection with Base Line Road.



B. Connect to Carnelian Street

Similar to the entry drive on Base Line Road, the entry drive on Carnelian Street can be transformed into a new street connection.



C. Connect to dead ends

Napa Court terminates in a cul-de-sac south of the site. A non-vehicular connection here could link between existing residential to the south and new shops and amenities. One possibility is that this paseo connect through the existing building via a new entry or arcade. This would require coordination with City staff, property owners, and residents of adjoining properties.



D. Connect to the trail network

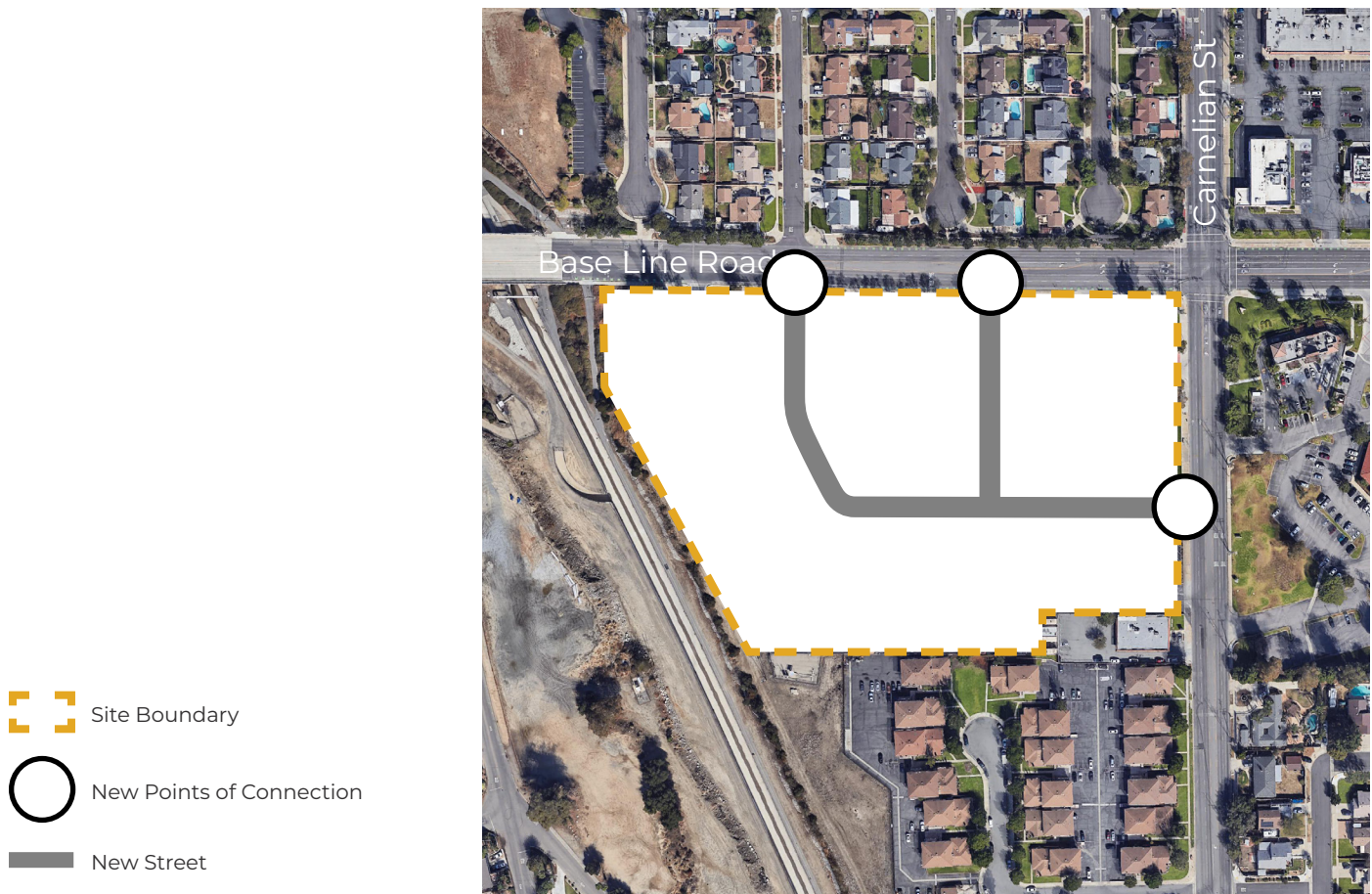
As described in Step 1, a new active mobility connection to the Cucamonga Creek Trail would provide access from this Center to an important community open space and the citywide trail network. This connection would need to deal with existing topography in an accessible manner.

STEP 3

CONNECT NEW STREETS THROUGH THE SITE

Streets, created in accordance with Toolkit Section 2, can link the points of street connection established in Step 2 in a straightforward fashion. Some of these new street alignments may correspond to existing drive lanes. Where development is not expected in the near term, those drive lanes can already be designed as streets.

FIGURE PT-20 CASE STUDY #2 STREETS CONNECT THROUGH THE SITE



STEP 4 CREATE WALKABLE BLOCKS WHICH ACCOMMODATE DESIRED DEVELOPMENT TYPES

Paseos linking to the neighborhood to the south and the trail network to the west (as described in Step 2) complete the public realm network in order to define walkable blocks which accommodate the development

A rectangular plaza is shown at the nexus of multiple streets and paseos in the site. This plaza can accommodate parking and offer a new active space for existing commercial and new development types desired on the site.

FIGURE PT-21 CASE STUDY #2 WALKABLE BLOCKS



STEP 5

LOCATE ALLEYS AND PARKING WITHIN BLOCKS TO SUPPORT THE DEVELOPMENT TYPES AND PUBLIC REALM.

Alleys in this framework configuration access structured and surface parking within blocks.

FIGURE PT-22 CASE STUDY #2 ALLEYS WITHIN BLOCKS





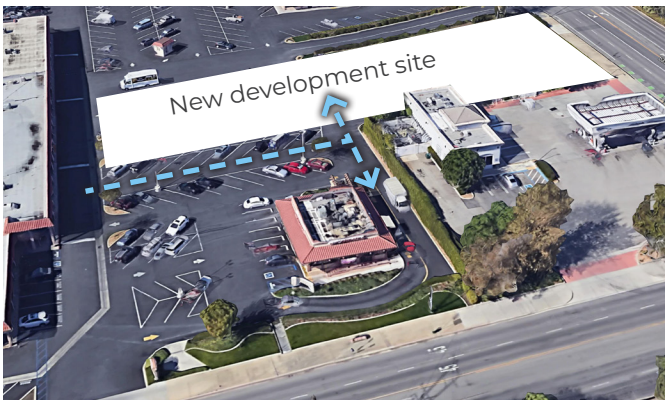
A. Southern service access remains.

Service and employee parking access remains behind the southern portion of the existing commercial center. This functions as the inside of the block and this southern side of the existing building can continue to function as a rear.



B. Structured parking within the block

Structured parking within blocks supports more intense development types and can also be shared with some existing retail. Such structures can be topped with solar panels.



C. Share parking access between existing and new uses

The parking lot and drives of the existing restaurant on Carnelian St can remain in the mid-term while providing access to tuck-under or structured parking of new development to the west.

STEP 6

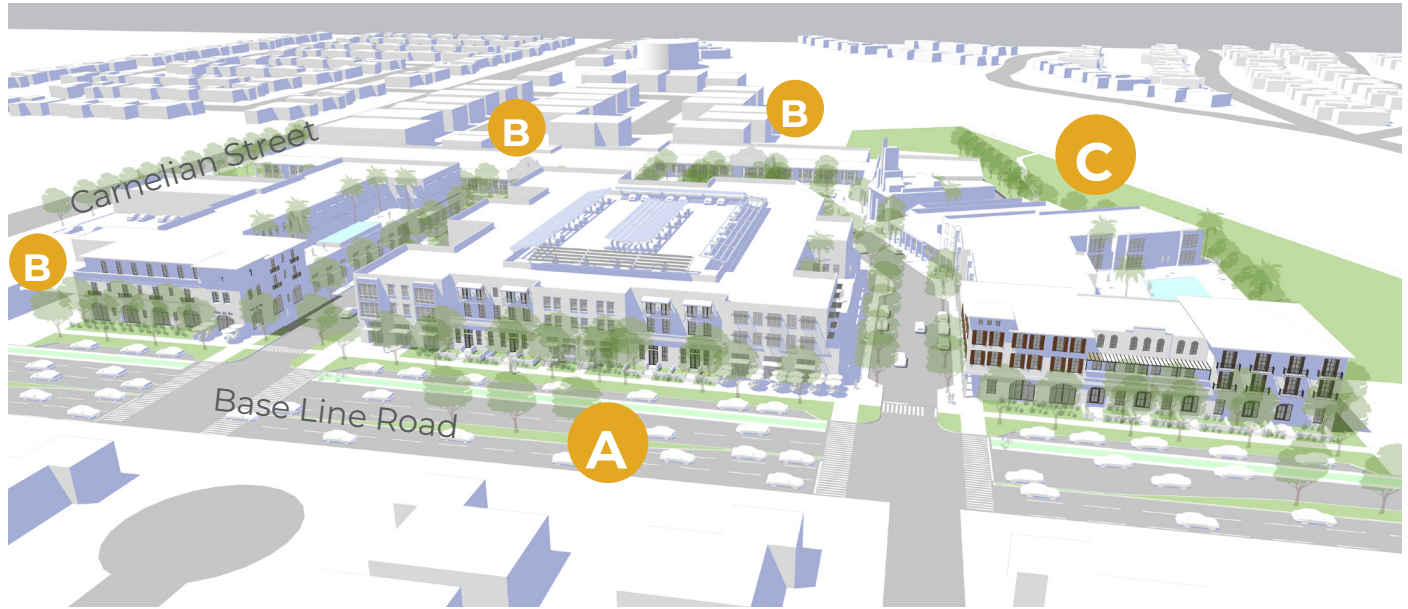
INTRODUCE DEVELOPMENT WHICH BENEFITS FROM AND SUPPORTS THE FRAMEWORK

Development should fill the established framework according to the context.

FIGURE PT-23 CASE STUDY #2 DEVELOPED SITE



- Site Boundary
- Building Footprint

FIGURE PT-24 CASE STUDY #2 DEVELOPED SITE SEEN FROM THE NORTHWEST

A. Base Line Road Frontage. More intense development and some retail and retail-ready frontage should line Base Line Road while still presenting a façade rhythm and massing which relates to the neighborhood scale of the context. The existing site level is much lower than Base Line Road, so subterranean parking could be located under the first inhabitable level without much, if any, excavation. The first inhabitable level should be at or slightly above the existing ground level of Base Line Road. A new sidewalk can be built behind the preserved existing trees, and street parking can be introduced to support these new frontages.

B. Some Existing Commercial Remains. The site can be redeveloped without replacing all of the existing commercial. In this case, the gas station and commercial at the corner of Base Line Road and Carmeliam Street is preserved. The portion of the shopping center which lines the southern portion of the site can also remain.

C. Cucamonga Creek Trail and Linear Park. An architectural gateway can invite pedestrians and cyclists into the trail network. A linear park can be developed along this edge, and new residences can overlook this improved open space.



Active fronts can line parking lots and dining can extend into parking spaces.

PARKING LOT RETROFITS

As with Case Study #2, most of the existing retail shopfronts and restaurants in Rancho Cucamonga currently face parking lots. Case Study #2 expresses the long-term vision of this Plan for typical future commercial and residential frontages that directly front and engage streets rather than surface parking lots. However, it is not anticipated nor intended that existing shopping centers, shops, and restaurants will go away any time soon, or in many cases ever. Accordingly, this section presents general recommendations for simple enhancements that can improve the appearance and performance of existing shopping centers and the businesses within them. The following spread illustrates such enhancements implemented on a prototypical shopping center site.

As a result of the COVID-19 pandemic, restaurant businesses have experimented in unprecedented ways with the possibilities of repurposing existing sidewalks and parking spaces along their frontages in new and creative ways. This experimentation has led to indoor/outdoor dining environments and experiences that were not widely contemplated previously, resembling in fascinating ways the indoor/outdoor environments that have been present for decades in many American cities, and for centuries in European and other international cities.

- + **Dining Parklets.** In the same way that many California downtowns have redeployed on-street parking spaces as “sidewalk expansions” to create new outdoor dining areas, restaurants in shopping centers throughout the country—and in Rancho Cucamonga—have been “camping out” in their parking spaces adjacent to existing shopfronts.. Barriers between cars and diners are necessary, of course, and can take many forms, including fences, planters, wine barrels, beer kegs, or any other objects that are attractive, about 3 feet tall, and reasonably heavy. Overhead tents and canopies are possible, but tend to block visibility for other businesses, so simple umbrellas and space heaters are recommended in the long term. Parklets can be rather temporary and relocatable, or a permanent part of the landscape/hardscape.
- + **Dining Islands.** In addition to redeploying a few parking spaces immediately adjacent to existing shopfronts, a block of spaces across a drive aisle may also be converted—temporarily or permanently—to a small “plaza” or “square” within a larger parking lot.
- + **Arcades.** Deep arcades are a classic solution too making comfortable shaded spaces for shoppers to stroll in, and may be deep enough to also accommodate some outdoor dining. Arcades are also a relatively simple way to put a new face on an old shopping center.
- + **Courts.** Some shopping centers already have courtyards or plazas or other pedestrian-only open spaces. But enhancing those, and in some cases creating new or updated shopfronts opening into them, they can become higher quality and more valuable activity spaces within existing shopping centers.



A parklet can take the place of a couple parking spaces alongside an arcade.



Parklets can be implemented simply with planters, barrels, and tables.



Pedestrian courts can host dining and gathering.



Dining parklets can extend into parking spaces.



Arcade



Arcade



Prototypical shopping center

ACTIVATING EXISTING COMMERCIAL CENTERS AND THEIR PARKING LOTS

The following spread illustrates how the enhancements described on the previous pages implemented on a prototypical shopping center site. This prototypical shopping center, like various shopping centers throughout the city, privilege private automobile transport over all other forms of mobility. Such shopping centers are typically set behind large parking lots and do not present active frontages to the public street. As previously stated, many of these sites are not likely to be redeveloped in the near term. In such cases, strategic frontage and public realm interventions can activate these old car-oriented shopping centers for the mutual benefit of the city and the businesses themselves.



Prototypical existing car-oriented shopping center



Potential public realm and frontage improvements

► **Extend the public realm into the site**



The public realm network can be extended into the site to connect previously disconnected uses. One example is shown here in which a pedestrian Pedestrian Way extends from the sidewalk to a prominent, central entrance of the shopping center. The Pedestrian Way and prominent entry tower are flanked dining and gathering islands and landscaping.

► **Activate frontages along drive lanes within the site**



Frontages can be activated even where shops and restaurants front onto parking lots or internal drives. As illustrated here, a dining or gathering parklet can be created in the place of parking spaces. Here, the court replaces only one parking space and also takes advantage of the corner of the lot which would otherwise be underutilized.

► **Activate frontages along the street**



As with other commercial ground floors, as described in Toolkit Part 1, portions of shopping centers which abut the street should have calibrated frontages which add value to the business and life to the street. The dining terrace shown here illustrates one example of such frontage. A pergola holds retractable canvas awnings and string lights, while new landscaping provides a beautiful buffer and transition between diners and the rest of the public frontage.



SENATE BILL 1000 (SB 1000)

The state of California recognizes that environmental justice disparities are a threat to overall quality of life across all communities and has developed various policies, such as Senate Bill 1000 (SB 1000) and the Planning for Healthy Communities Act, to identify and address these environmental justice disparities. The bill was passed in 2016 and serves three important purposes:

- + Reducing harmful pollutants and associated health risks in environmental justice communities;
- + Promoting equitable access to health-inducing benefits; and
- + Promoting transparency and public engagement.

Through SB 1000, the state of California mandates that jurisdictions concurrently updating two or more elements of their General Plan identify “disadvantaged communities,” engage stakeholders in these communities, and adopt either an environmental justice element or integrate environmental justice policies throughout the General Plan to reduce unique and compounded health risks and pollution burdens. The areas in the city that are affected most by development are outlined in the background document for the General Plan, and in the individual chapters. Rather than a standalone environmental justice chapter, the City has considered environmental justice issues in every aspect of design for the future.

HEART OF THE MATTER

By law the General Plan must address at least the following five health and environmental justice outcomes: 1) reduction of pollution exposure, including improvement of air quality; 2) improvement of public facilities; 3) promotion of food access; 4) promotion of safe and sanitary homes; and 5) promotion of physical activity. This General Plan addresses the required topics of SB 1000 and includes policies and implementation strategies designed to address existing environmental justice issues in the City and prevent future issues from occurring.



GENERAL PLAN POLICIES AND IMPLEMENTATION STRATEGIES

The following tables list the environmental justice goals and policies within each chapter of this General Plan as well as implementation strategies, and identify the health and environmental justice outcome it addresses.

TABLE EJ-1 LAND USE & COMMUNITY CHARACTER

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL LC-1 A CITY OF PLACES. A beautiful city with a diversity and balance of unique and well-connected places.					
+ LC-1.1 Complete Places. Ensure that a broad range of recreational, commercial, educational, arts, cultural, and civic amenities are nearby and easily accessible to residents and workers in each neighborhood and each employment district.		X	X	X	
+ LC-1.4 Connectivity and Mobility. Work to complete a network of pedestrian- and bike-friendly streets and trails, designed in concert with adjacent land uses, using the public realm to provide more access options.	X	X	X	X	X
+ LC-1.6 Disadvantaged Communities. Prioritize development appropriate to the needs of disadvantaged communities, particularly south of Foothill Boulevard.		X		X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ LC-1.7 Design for Safety. Require the use of Crime Prevention Through Environmental Design (CPTED) techniques such as providing clear lines of sight, appropriate lighting, and wayfinding signs to ensure that new development is visible from public areas and easy to navigate.</p>		X		X	
<p>+ LC-1.13 Improved Public Realm. Require that new development extend the “walkable public realm” into previously vacant and/or parking lot-dominant single-use parcels of land.</p>	X	X		X	X
<p>GOAL LC-2 HUMAN SCALED. A city planned and designed for people fostering social and economic interaction, an active and vital public realm, and high levels of public safety and comfort.</p>					
<p>+ LC-2.3 Streetscape. Enhance the pedestrian experience through streetscape improvements such as enhanced street lighting, street trees, and easement dedications to increase the widths of the sidewalks, provide side access parking lanes, and other pedestrian and access amenities.</p>	X	X			X
<p>+ LC-2.4 Tree Planting. Require the planting of predominantly native and drought-tolerant trees that shade the sidewalks, buffer pedestrians from traffic, define the public spaces of streets, and moderate high temperatures and wind speeds throughout the city.</p>	X	X			X
<p>GOAL LC-3 FISCALLY SUSTAINABLE. A fiscally sound and sustainable City.</p>					
<p>+ LC-3.2 Community Benefit. Require a community benefit and economic analysis for large projects that affect existing neighborhoods or for any project at the maximum density, with a focus on resolving physical, economic, and aesthetic impacts.</p>				X	X
<p>+ LC-3.3 Community Amenities. Balance the impacts of new development, density, and urbanization through the provision of a high-level of neighborhood and community amenities and design features.</p>				X	
<p>+ LC-3.4 Institutional Land Uses. Site new institutional land uses based on all forms of access available to service population. Satellite offices that are disbursed in the community may be necessary to ensure equitable access.</p>		X			

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>GOAL LC-4 COMPLETE NEIGHBORHOODS. A diverse range of unique neighborhoods, each of which provides an equitable range of housing types and choices with a mix of amenities and services that support active, healthy lifestyles.</p>					
<p>+ LC-4.2 Complete Neighborhoods. Strive to ensure that all new neighborhoods, and infill development within or adjacent to existing neighborhoods, are complete and well-structured such that the physical layout, and land use mix promote walking to services, biking and transit use, and have the following characteristics.</p> <ul style="list-style-type: none"> • Be organized into human-scale, walkable blocks, with a high level of connectivity for pedestrians, bicycles, and vehicles. • Be organized in relation to one or more focal activity centers, such as a park, school, civic building, or neighborhood retail, such that most homes are no further than one-quarter mile. • Require development patterns such that 60 percent of dwelling units are within 1/2-mile walking distance to neighborhood goods and services. • Provide as wide a diversity of housing styles and types as possible, and appropriate to the existing neighborhood context. • Provide homes with entries and windows facing the street, with driveways and garages generally deemphasized in the streetscape composition. 	X	X	X	X	X
<p>+ LC-4.3 Connected Neighborhoods. Require that each new increment of residential development make all possible street, trail, and open space connections to existing adjoining residential or commercial development and provide for future connections into any adjoining parcels.</p>		X		X	X
<p>+ LC-4.4 Balanced Neighborhoods. Within the density ranges and housing types defined in this General Plan, promote a range of housing and price levels within each neighborhood to accommodate diverse ages and incomes.</p>				X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ LC-4.5 Equitable Housing Opportunities and Diversity of Housing Types. Within the density ranges and housing types defined in this General Plan, promote a diversity of land tenure opportunities to provide a range of choices on the types of property estate available and ready access to an equitable array of opportunities at a variety of price points. For projects five acres or larger, require that diverse housing types be provided and intermixed rather than segregated by dwelling type.</p>				X	
<p>+ LC-4.12 Conventional Suburban Neighborhood Design. Discourage the construction of new residential neighborhoods that are characterized by sound wall frontages on any streets, discontinuous cul-de-sac street patterns, long block lengths, single building housing types, and lack of walking or biking access to parks, schools, goods, and services.</p>		X		X	X
<p>GOAL LC-5 CONNECTED CORRIDORS. A citywide network of transportation and open space corridors that provides a high level of connectivity for pedestrians, bicyclists, equestrians, motorists, and transit users.</p>					
<p>+ LC-5.1 Improved Street Network. Systematically extend and complete a network of complete streets to ensure a high-level of multi-modal connectivity within and between adjacent Neighborhoods, Centers and Districts. Plan and implement targeted improvements to the quality and number of pedestrian and bicycle routes within the street and trail network, prioritizing connections to schools, parks, and neighborhood activity centers.</p>	X	X		X	X
<p>+ LC-5.2 Connections Between Development Projects. Require the continuation and connectivity of the street network between adjacent development projects and discourage the use of cul-de-sacs or other dead-end routes.</p>		X	X		X
<p>+ LC-5.3 Green Public Realm. Ensure that a significant tree canopy and landscaping is provided along corridors, and linkages between land uses, to provide shade and wind protection for pedestrians and bicyclists, and to define these corridors as the “outdoor living rooms” of the City.</p>		X			X
<p>+ LC-5.4 Multi Family Development. Focus new multifamily housing development along corridors between commercial nodes and centers and ensure that it is well-connected to adjoining neighborhoods and centers by high quality walking and biking routes.</p>		X		X	X

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ LC-5.6 Foothill Boulevard as a Connector. Transition Foothill Boulevard from a “divider” to a “connector” that brings the north and south sides together. Ensure that new development along the Foothill Corridor generates a high-quality pedestrian- and transit-oriented environment and a concentration of commercial and civic amenities and community gathering places for residents from all parts of the city.</p>		X		X	X
<p>GOAL LC-6 ACTIVE CENTERS. A rich variety of commercial and mixed-use centers throughout the city, which bring a range of opportunities for shopping, dining, recreations, commerce, employment, arts and culture within easy reach of all neighborhoods.</p>					
<p>+ LC-6.1 Diverse Centers. Encourage the development of neighborhood-serving, community-serving and city-wide serving centers that address the full range community needs and market sectors.</p>		X	X		
<p>+ LC-6.4 Access to Transit. Encourage the development of commercial and mixed-use centers are located at and organized in relation to existing or planned transit stops, especially along Foothill Boulevard and Haven Avenue.</p>	X	X	X	X	
<p>+ LC-6.5 Walkable Environments. Centers should include very walkable and pedestrian-friendly streets with active building frontages along primary corridors and internal streets. In some cases, side access lanes may be inserted between existing major streets and building frontages, providing a low-speed environment that is very safe and comfortable for pedestrians and bicyclists, with pedestrian-oriented building frontages.</p>	X	X			X

TABLE EJ-2 OPEN SPACE

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>GOAL OS-1 OPEN SPACE. A complete, connected network of diverse parks, trails, and rural and natural open space that support a wide variety of recreational, educational and outdoor activities.</p>					
<p>+ OS-1.1 Equitable Access to Parks. Strive to ensure that at least one park or other public open space is within safe, comfortable walk from homes and jobs, without crossing major streets except at signalized crossings. Equitable access to parks should be determined based on the fundamental character of the place (rural, suburban, urban) and corresponding transportation infrastructure.</p>	X	X		X	X

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ OS-1.2 Underserved Communities. Prioritize the provision of new trails, parks, plazas, and other open space types in areas of the city that underserved by parks, services, and amenities.		X	X		X
+ OS-1.5 Design for Safety. Require the use of Crime Prevention Through Environmental Design (CPTED) design techniques such as providing clear lines of sight, appropriate lighting, and wayfinding signs to ensure that parks are safe and easy to navigate.		X			X
+ OS-1.6 New Development. Ensure that new residential and non-residential developments provide adequate on-site recreational and open space amenities consistent with applicable General Plan Designations, and the needs of new development.	X	X		X	X
+ OS-1.7 New Parks. Provide adequate park and recreational facilities that meet the City standard of 5.0 acres of parkland (including trails and special facilities) for every 1,000 persons.		X			X
+ OS-1.9 Joint Use. Pursue and expand joint use of public lands that are available and suitable for recreational purposes, including school district properties and flood control district, water district, and other utility properties.		X			
+ OS-1.11 Locally Grown Food. Support small-scale locally grown food in front/backyard gardens, community gardens, parks/open space areas, and utility and flood control easements.			X		
GOAL OS-2 TRAILS. A complete, connected network of diverse trails and connected open space that improves access to all areas of the city and encourages non-motorized activities.					
+ OS-2.1 Trail Corridors. Extend, improve and complete the multi-purpose trail network, wherever possible, by utilizing existing flood control channel and utility corridor rights-of-way as public trail corridors.					X
+ OS-2.6 Design for Heat. Consider extreme heat in the design of streets, parks, trails, and playgrounds to support activity throughout the year and in all weather conditions by including shade trees, shade structures, water fountains, splash pads, lighting for night play in most spaces.		X			
+ OS-2.7 Access. Require new development to provide access to existing or future trails and provide appropriate trail amenities (e.g., benches, drinking fountains, hitching posts, bike stands, and other amenities).		X		X	X

TABLE EJ-3 MOBILITY & ACCESS

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL MA-1 REGIONAL MOBILITY HUB. A multimodal transportation hub that connects regional and local destinations.					
+ MA-1.5 Provide Mobility Options. Provide roadway connections and local mobility hubs designed to capture 80% of the population and employment south of Base Line Road.		X			
GOAL MA-2 ACCESS FOR ALL. A safe, efficient, accessible, and equitable transportation system that serves the mobility needs of all users.					
+ MA-2.1 Complete Streets. Require that new roadways include provisions for complete streets, balancing the needs of all users of all ages and capabilities.		X			X
+ MA-2.2 New Streets. To achieve the vision for transportation and mobility in the city, the final design, location, and alignment of streets shall provide levels of access, connectivity, and circulation consistent with the conceptual layouts shown in this Mobility and Access Chapter.		X			X
+ MA-2.3 Street Design. Implement innovative street and intersection designs to maximize efficiency and safety in the city. Use traffic calming tools to assist in implementing complete street principles. Possible tools include roundabouts, curb extensions, high visibility crosswalks, and separated bicycle infrastructure.		X			X
+ MA-2.4 Street Connectivity. Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance.		X	X		X
+ MA-2.6 Context. Ensure that complete streets applications integrate the neighborhood and community identity into the street design. This can include special provisions for pedestrians and bicycles.		X			X
+ MA-2.9 High-Quality Pedestrian Environment. Enhance sidewalks to create a high-quality pedestrian environment, including wider sidewalks, improved pedestrian crossings, buffers between sidewalks and moving traffic, pedestrian lighting, wayfinding signage, shade trees, increased availability of benches, end of cul-de-sac access, etc.		X			X
+ MA-2.11 Master Planning. Master plan sites so as to ensure a well-structured network and block pattern with sufficient access and connectivity; especially in all focus areas, including the Cucamonga Town Center, Etiwanda Heights Town Center, and the Southeast Industrial Area.		X		X	X

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ MA-2.13 Healthy Mobility. Provide pedestrian facilities and class II buffered bike lanes (or separated bikeways) on auto-priority streets where feasible to promote active transportation.		X			X
+ MA-2.14 Bicycle Facilities. Enhance bicycle facilities by maintaining and expanding the bicycle network, providing end-of-trip facilities (bike parking, lockers, showers), improving bicycle/transit integration, wayfinding signage, etc.		X			X
GOAL MA-3 SAFETY. A transportation network that adapts to changing mobility needs while preserving sustainable community values.					
+ MA-3.1 Pedestrian and Bicycle Networks. Maintain the Active Transportation Plan supporting safe routes to school, and a convenient network of identified pedestrian and bicycle routes with access to major employment centers, shopping districts, regional transit centers, and residential neighborhoods.		X			X
+ MA-3.2 Traffic Safety. Prioritize transportation system improvements that help eliminate traffic-related fatalities and severe injury collisions.		X			
+ MA-3.3 Vulnerable User Safety. Prioritize pedestrian improvements in the Pedestrian Priority Area shown on Figure 8 to promote safety in the southwestern area of the city.		X			X
+ MA-3.4 Emergency Access. Prioritize development and infrastructure investments that work to implement, maintain, and enhance emergency access throughout the community.		X			
GOAL MA-5 SUSTAINABLE TRANSPORTATION. A transportation network that adapts to changing mobility needs.					
+ MA-5.1 Land Use Supporting Reduced VMT. Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.	X	X			X

TABLE EJ-4 HOUSING

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL H-1 HOUSING OPPORTUNITIES. A diverse community with a broad range of housing types and opportunities to accommodate expected new households.					
+ H-1.1 RHNA Requirement. Encourage the development of a wide range of housing options, types, and prices that will enable the City to achieve its share of the RHNA.				X	
+ H-1.2 Elderly and Disabled Household Needs. Recognize the unique characteristics of elderly and disabled households and address their special needs.				X	
+ H-1.3 Accessory Dwelling Units. Facilitate the development of accessory dwelling units to provide additional housing opportunities pursuant to State law and established zoning regulations.				X	
GOAL H-2 AFFORDABLE HOUSING. A city where housing opportunities meet the needs of all socioeconomic segments of the community.					
+ H-2.1 Rental Assistance Programs. Encourage the use of rental assistance programs to assist lower income households and support the Housing Authority of the County of San Bernardino (HACSB) applications for additional vouchers to meet the needs of lower income households.				X	
GOAL H-3 HOMELESSNESS. A compassionate community with a wide range of options and support for the housing insecure and those experiencing homelessness.					
+ H-3.1 Homeless Services. Provide assistance as it becomes available towards efforts of local organizations and community groups to provide emergency shelters, transitional housing opportunities, and services to the City’s homeless population and those at-risk of homelessness.				X	
+ H-3.2 Homeless Programs. Participate with adjacent communities toward the provision of a sub-regional shelter program and encourage the County to develop a comprehensive homeless program.				X	
GOAL H-4 HOUSING QUALITY. A community with quality, healthy housing.					
+ H-4.2 Substandard Housing. Encourage the revitalization and rehabilitation of substandard residential structures.				X	
+ H-4.3 Residential Rehabilitation. Focus rehabilitation to neighborhoods with deteriorating units.				X	
+ H-4.5 Housing Maintenance. Actively encourage the maintenance of existing housing in to as to maintain the housing stock in sound condition.				X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ H-4.6 Code Enforcement. Utilize concentrated Code Enforcement programs to target specific areas or problems when the need and community support warrants such activity.				X	
GOAL H-6 EQUAL HOUSING OPPORTUNITIES. An equitable community that provides equal housing opportunities for all residents.					
+ H-6.1 Reduce Housing Discrimination. Explore and consider programs that will reduce the incidence of housing discrimination within the City.				X	
+ H-6.2 Land Use Plan. Facilitate development projects that will improve a neighborhood's access to resources and opportunities.				X	
+ H-6.3 Fair Housing Outreach and Education. Support outreach and education efforts to actively further fair housing practices and understanding of fair housing rights, with emphasis on proactive education and voluntary compliance, as well as through legal enforcement on a case-by-case basis, including, but not limited to, assistance with the resolution of tenant/landlord disputes and housing discrimination complaints.				X	
+ H-6.4 Accessible or Barrier-Free Housing. Encourage the provisions of disabled-accessible units and housing for the mentally and physically disabled.				X	

TABLE EJ-5 PUBLIC FACILITIES & SERVICES

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL PF-1 STATE-OF-THE-ART FACILITIES. Residents enjoy state-of-the-art public and community facilities that support existing programs, accommodate future needs, and are accessible to all members of the community.					
+ PF-1.1 New Building Standards. Continue to implement high-quality standards for new public facilities and improvements to existing buildings.		X			
+ PF-1.2 Underserved Neighborhoods. Prioritize new community facilities in underserved neighborhoods and centers.		X		X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ PF-1.3 Facilities Collaboration. Maximize public facility use by sharing with nonprofit organizations, school districts, and community organizations. Look for opportunities to create joint-use community space at facilities owned by private organizations such as faith-based groups and service clubs.</p>		X			
<p>+ PF-1.4 Capital Improvements Program. Coordinate, plan, and manage a comprehensive capital improvements program for expansion and improvement of critical facilities and infrastructure in response to the needs of a growing community.</p>		X			
<p>GOAL PF-5 WATER-RELATED INFRASTRUCTURE. Water and wastewater infrastructure facilities are available to support future growth needs and existing development.</p>					
<p>+ PF-5.2 Wastewater Treatment. Consult with the Inland Empire Utilities Agency and the Cucamonga Valley Water District (CVWD) to ensure that the treatment facility has sufficient capacity to meet future wastewater treatment needs.</p>		X			
<p>GOAL PF-7 UTILITY INFRASTRUCTURE. Protect and expand utility infrastructure in a sustainable and innovative manner to serve the current and future needs of the community while ensuring that natural and environmental resources are available for future generations.</p>					
<p>+ PF-7.1 Communications. Expand access to high quality established and emerging communications technologies for individuals, businesses, educational institutions, and government functions.</p>		X			
<p>+ PF-7.2 High Speed Internet. Prioritize extending high speed internet into underserved lower income neighborhoods.</p>		X			
<p>+ PF-7.6 Phasing of Public Facilities. Require new parks, open spaces, infrastructure, and other facilities be funded by and/or provided by new development as necessary so as to ensure services can be provided to new development.</p>		X			

TABLE EJ-6 RESOURCE CONSERVATION

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL RC-5 LOCAL AIR QUALITY. Healthy air quality for all residents.					
<p>+ RC-5.1 Pollutant Sources. Minimize increases of new air pollutant emissions in the city and encourage the use of advance control technologies and clean manufacturing techniques.</p>	X				
<p>+ RC-5.2 Air Quality Land Use Compatibility. Avoid siting of homes, schools, hospitals, and childcare facilities and land uses within 500 feet of land uses that are considered large emitters.</p>	X				
<p>+ RC-5.3 Barriers and Buffers. Require design features such as site and building orientation, trees or other landscaped barriers, ventilation and filtration, construction, and operational practices to reduce air quality impacts during construction and operation of large stationary and mobile sources.</p>	X				
<p>+ RC-5.4 Health Risk Assessment. Consider the health impacts of development of sensitive receptors within 500 feet of a freeway, rail line, arterial, collector or transit corridor sources using health risk assessments to understand potential impacts.</p>	X				
<p>+ RC-5.5 Impacts to Air Quality. Ensure new development does not disproportionately burden residents, due to age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, with health effects for air pollution. Prioritize resource allocation, investments, and decision making that improves air quality for residents disproportionately burdened by air pollution because of historical land use planning decisions and overarching institutional and structural inequities.</p>	X				
<p>+ RC-5.6 Community Benefit Plan. Require that any land use generating or accommodating more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week, provide a community benefit plan demonstrating an offset to community impacts of the truck traffic.</p>	X				

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ RC-5.7 New Sensitive Receptors Near Existing Industrial Uses. Avoid placing homes, schools, hospitals, and childcare facilities within 1,000 feet of a land use that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week.</p>	X				
<p>+ RC-5.8 New Localized Air Pollution Sources Near Existing Sensitive Receptors. Avoid placing land uses that accommodate more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week within 1,000 feet of homes, schools, hospitals, and childcare facilities.</p>	X				
<p>+ RC-5.9 Truck Hook-Ups at New Industrial or Commercial Developments. Require new industrial or commercial developments at which heavy-duty diesel trucks idle on-site to install electric truck hook-ups in docks, bays, and parking areas.</p>	X				
<p>+ RC-5.10 Clean and Green Industry. Prioritize non-polluting industries and companies using zero or low air pollution technologies.</p>	X				
<p>+ RC-5.11 Dust and Odor. Require new construction to include measures to minimize dust and odor during construction and operation.</p>	X				
<p>GOAL RC-6 CLIMATE CHANGE. A resilient community that reduces its contributions to a changing climate and is prepared for the health and safety risk of climate change.</p>					
<p>+ RC-6.1 Climate Action Plan. Maintain and implement a Climate Action Plan (CAP) that provides best management practices for reducing greenhouse gas emissions.</p>	X				
<p>+ RC-6.2 Renewable Energy. Encourage renewable energy installations and facilitate green technology and business.</p>	X				
<p>+ RC-6.3 Reduce Energy Consumption. Encourage a reduction in community-wide energy consumption.</p>	X				
<p>+ RC-6.4 Urban Forest. Protect the city’s healthy trees and plant new ones to provide shade, carbon sequestration, and purify the air.</p>	X				
<p>+ RC-6.5 GHG Reduction Goal. Reduce emissions to 80 percent below 1990 levels by 2050 and achieve carbon neutrality by 2045.</p>	X				

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ RC-6.6 Co-Benefits. Prioritize the development and implementation of GHG reduction measures that also achieve economic, health, social, environmental, and other co-benefits for the City and its residents and businesses.	X				
+ RC-6.7 Structural Equity. Encourage GHG reduction and climate adaptation measures such as trail completion, equipment upgrade, sidewalk connectivity, tree planting, and buffers be included in the City's Capital Improvement Program (CIP) to improve areas of the city where these features are lacking.	X	X			X
+ RC-6.8 Reduce Vehicle Trips. Require Transportation Demand Management (TDM) strategies, such as employer provided transit pass/parking credit, bicycle parking, bike lockers, high-speed communications infrastructure for telecommuting, and carpooling incentives, for large office, commercial, and industrial uses.	X	X			X
+ RC-6.9 Access. Require pedestrian, vehicle, and transit connectivity of streets, trails, and sidewalks, as well as between complementary adjacent land uses.	X	X	X		X
+ RC-6.10 Green Building. Encourage the construction of buildings that are certified Leadership in Energy and Environmental Design (LEED) or equivalent, emphasizing technologies that reduce GHG emissions.	X	X			
+ RC-6.11 Climate-Appropriate Building Types. Encourage alternative building types that are more sensitive to and designed for passive heating and cooling within the arid environment found in Rancho Cucamonga.	X				
+ RC-6.12 Reduced Water Supplies. When reviewing development proposals, consider the possibility of constrained future water supplies and require enhanced water conservation measures.	X				
+ RC-6.13 Designing for Warming Temperatures. When reviewing development proposals, encourage applicants and designers to consider warming temperatures in the design of cooling systems.	X	X			
+ RC-6.15 Heat Island Reductions. Require heat island reduction strategies in new developments such as light-colored paving, permeable paving, right-sized parking requirements, vegetative cover and planting, substantial tree canopy coverage, and south and west side tree planting.	X	X			X

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ RC-6.16 Public Realm Shading. Strive to improve shading in public spaces, such as bus stops, sidewalks and public parks and plazas, through the use of trees, shelters, awnings, gazebos, fabric shading and other creative cooling strategies.	X	X			X
+ RC-6.17 Offsite GHG Mitigation. Allow the use of creative mitigation efforts such as offsite mitigation and in lieu fee programs as mechanisms for reducing project-specific GHG emissions.	X				
+ RC-6.18 Water Sources with Low GHG Emissions. Encourage local and regional water utilities to obtain water from sources with low or no GHG emissions.	X				
GOAL RC-7 ENERGY. An energy efficient community that relies primarily on renewable and non-polluting energy sources.					
+ RC-7.2 New EV Charging. Require new multifamily residential, commercial, office, and industrial development to include charging stations, or include the wiring for them.	X				
+ RC-7.3 EV Charging Retrofits. Encourage existing development to retrofit to include charging stations.	X				
+ RC-7.4 New Off-Road Equipment. When feasible, require that off-road equipment such as forklifts and yard necessary for the operations of all new commercial and industrial developments be electric or fueled using clean fuel sources.	X				
+ RC-7.6 Efficiency Retrofits. Encourage existing private property owners to implement energy efficiency retrofits during substantial improvement as defined by the California Building Code.	X				
+ RC-7.7 Sustainable Design. Encourage sustainable building and site design that meets the standards for Leadership in Energy and Environmental Design (LEED), Sustainable Sites, Living Building Challenge, or similar certification.	X	X			
+ RC-7.8 Farmers Market, Fork to Table. Support microscale agriculture and farmers markets, and similar methods of encouraging locally grown and consume produce.	X		X		
+ RC-7.9 Passive Solar Design. Require new buildings to incorporate energy efficient building and site design strategies for the arid environment that include appropriate solar orientation, thermal mass, use of natural daylight and ventilation, and shading.	X	X			

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ RC-7.10 Alternative Energy. Continue to promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.	X	X			
+ RC-7.11 Community Development Subdivisions. When reviewing applications for new subdivisions, require residences be oriented along an east-west access, minimizing western sun exposure, to maximize energy efficiency.	X				
+ RC-7.12 Solar Access. Prohibit new development and renovations that impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.	X				
+ RC-7.13 Energy-Efficient Infrastructure. Whenever possible, use energy-efficient models and technology when replacing or providing new city infrastructure such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.	X	X			

TABLE EJ-7 SAFETY

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL S-1 LEADERSHIP. A city that is recognized for its leadership roles in resilience and preparedness.					
+ S-1.2 Culture of Preparedness. Promote a culture of preparedness for businesses and residents that empowers them to increase their resilience to hazard related events and a changing climate.		X		X	
+ S-1.3 Evacuation Capacity. Require new developments, redevelopments, and major remodels to enhance the City's evacuation network and facilities and comply with the City's Evacuation Assessment.		X		X	
+ S-1.4 WUIFA Access Points. Require all new developments and redevelopments within the WUIFA to provide a minimum of two points of access by means of public roads that can be used for emergency vehicle response and evacuation purposes.		X		X	
+ S-1.5 Enhanced Circulation. In areas of the city with limited access routes and circulation challenges, require additional roads and improvements to ensure adequate emergency vehicle response and evacuation.		X		X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ S-1.6 Evacuation Road Widths. Require any roads used for evacuation purpose to provide at least 26 feet of unobstructed pavement width.</p>		X		X	
<p>+ S-1.9 Mutual Aid. Ensure mutual aid agreements with Federal, State, local agencies, and the private sector establish responsibility boundaries, joint response services, and multi-alarm and station coverage capabilities.</p>		X		X	
<p>GOAL S-2 SEISMIC AND GEOLOGIC HAZARDS. A built environment that minimizes risks from seismic and geologic hazards.</p>					
<p>+ S-2.1 Fault Setbacks. Require minimum setbacks for structures proposed for human occupancy within State and City Special Study Zones. Setbacks will be based on minimum standards established under State law and recommendations of a Certified Engineering Geologist and/or Geo-technical Engineer.</p>		X		X	
<p>+ S-2.3 Seismically Vulnerable Buildings. Prioritize the retrofit by private property owners of seismically vulnerable buildings (including but not limited to unreinforced masonry, soft-story construction, and non-ductile concrete) as better information and understanding becomes available.</p>				X	
<p>GOAL S-3 WILDFIRE HAZARDS. A community where wildfire impacts are minimized or reduced through investments in planning resilience.</p>					
<p>+ S-3.1 Fire Risk Reduction. Apply all state and local codes and regulations (fire safe design, adherence to Standard 49-1) to new development, redevelopment, and major remodels in the WUIFA.</p>		X		X	
<p>+ S-3.2 Fire Protection Plans. All new development, redevelopment, and major remodels in the WUIFA will require the preparation of Fire Protection Plans (FPPs) to reduce fire threat, in accordance with Fire District policies and procedures.</p>		X		X	
<p>+ S-3.3 Vegetation Management. Owners of properties and public/private roads within and adjacent to the WUIFA are required to conduct brush clearance and fuel modification to reduce fire ignition potential and spread.</p>		X		X	
<p>+ S-3.4 Buffer Zones. Require development projects to incorporate buffer zones as deemed necessary by the City's Fire Marshal for fire safety and fuel modification.</p>		X		X	
<p>+ S-3.5 Water Supply. All developments will meet fire flow requirements identified in the Fire Code.</p>		X		X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ S-3.7 Wildfire Awareness. Assist residents and property owners with being better informed on fire hazards and risk reduction activities in the WUIFA.				X	
+ S-3.8 New Essential Facilities (WUIFA). Prohibit the siting of new essential public facilities (including, but not limited to, hospitals and health care facilities, emergency shelters, emergency command centers, and emergency communications facilities) within the WUIFA, unless appropriate construction methods or strategies are incorporated to minimize impacts.		X			
GOAL S-4 FLOOD HAZARDS. A community where developed areas are not impacted by flooding and inundation hazards.					
+ S-4.1 New Essential Facilities (Flood). Prohibit the siting and construction of new essential public facilities within flood hazard zones, when feasible. If an essential facility must be located within a flood hazard zone, incorporate flood mitigation to the greatest extent practicable.		X			
+ S-4.2 Flood Risk in New Development. Require all new development to minimize flood risk with siting and design measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and minimization of structure located in floodplains.		X		X	
+ S-4.3 500-Year Floodplain. Promote the compliance of 100-year floodplain requirements on properties located within the 500-year floodplain designation.		X		X	
+ S-4.4 Flood Infrastructure. Require new development to implement and enhance the Storm Drain Master Plan by constructing stormwater management infrastructure downstream of the proposed site.		X		X	
+ S-4.5 Property Enhancements. Require development within properties located adjacent, or near flood zoned and areas of frequent flooding to reduce or minimize runoff and increase retention on-site.		X		X	
GOAL S-5 EMERGING HAZARDS. A built environment that incorporates new data and understanding about changing hazard conditions and climate stressors.					
+ S-5.1 Future Conditions. Ensure future climatic conditions and public health emergencies are considered as part of community resilience and investment efforts.		X		X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ S-5.2 Urban Forestry Plan. Minimize damage associated with wind-related hazards and address climate change and urban heat island effects through the development of an urban forestry plan and proper landscaping planting and management techniques.</p>		X		X	
<p>+ S-5.3 Soil Transport. Require that properties with high wind-blown soil erosion potential such as agricultural operations and construction sites prevent soil transport and dust generation wherever possible.</p>	X				
<p>+ S-5.4 Extreme Heat Vulnerabilities. Require that new developments, major remodels, and redevelopments address urban heat island issues and reduce urban heat island effects for the proposed project site and adjacent properties.</p>	X	X		X	
<p>+ S-5.5 Resilience Resources. Require new developments and redevelopment to incorporate resilience amenities such as, but not limited to community cooling centers, emergency supplies, and backup power that can be used by residents and businesses within a 1/4-mile radius of the location.</p>				X	
<p>+ S-5.6 Underground Utilities. Promote the undergrounding of utilities for new development, major remodels, and redevelopment.</p>				X	
<p>+ S-5.8 Climate Resiliency. Address climate resiliency and inequities through the planning and development process.</p>	X				
<p>+ S-5.9 Address High Winds. Require buildings and developments exposed to high wind conditions to incorporate design elements and features that minimize or reduce damage to people, structure, and the community.</p>				X	
<p>GOAL S-6 HUMAN CAUSED HAZARDS. A community with minimal risk from airport hazards and hazardous materials.</p>					
<p>+ S-6.2 Neighboring Properties. Encourage properties that store, generate, or dispose of hazardous materials to locate such operations as far away as possible from areas of neighboring properties where people congregate.</p>				X	
<p>+ S-6.3 Site Remediation. Encourage and facilitate the adequate and timely cleanup of existing and future contaminated sites and the compatibility of future land uses.</p>				X	

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
+ S-6.4 Airport Planning. Protect Rancho Cucamonga interests regarding land use and safety by participating in the airport land use planning process for Ontario International Airport.		X		X	
+ S-6.6 Development Near Airport. New development within the Ontario Airport Influence Area shall be consistent with the approved Airspace Protection Zones identified in the latest version of the Airport Land Use Compatibility Plan.		X		X	
+ S-6.7 Railroad Safety. Minimize potential safety issues and land use conflicts when considering development adjacent to the railroad right-of-way.		X		X	

TABLE EJ-8 NOISE

Goals & Policies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
GOAL N-1 NOISE. A City with appropriate noise and vibration levels that support a range of places from quiet neighborhoods to active, exciting districts.					
+ N-1.2 Noise Barriers, Buffers, and Sound Walls. Require the use of integrated design-related noise reduction measures for both interior and exterior areas prior to the use of noise barriers, buffers, or walls to reduce noise levels generated by or affected by new development.	X	X		X	
+ N-1.4 New Development Near Major Noise Sources. Require development proposing to add people in areas where they may be exposed to major noise sources (e.g., roadways, rail lines, aircraft, industrial or other non-transportation noise sources) to conduct a project level noise analysis and implement recommended noise reduction measures.	X	X		X	
+ N-1.7 Rail Crossing Quiet Zones. Allow the establishment of a full or partial at-grade rail crossing or quiet zone near transit hubs or residential development.	X			X	
+ N-1.8 Vibration Impact Assessment. Require new development to reduce vibration to 85 VdB or below within 200 feet of an existing structure.	X	X		X	

TABLE EJ-9 IMPLEMENTATION STRATEGIES

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
FUNDING					
<p>+ Greenhouse Gas Reduction Funding Opportunities: In the short- and mid-term, explore and identify potential funding sources or incentives for the following greenhouse gas reduction activities:</p> <ul style="list-style-type: none"> • Evaluate the feasibility of a local or regional Vehicle Miles Traveled (VMT) impact fee program, bank, improvement program or exchange. • Identify funding for and create an Urban Forestry Master Plan. • Investigate including tree planting in the capital improvement program and development fee structure as an offset for new development impacts to greenhouse gases and on the environment in accordance with the urban forestry plan. • Investigate possible incentives for existing non-residential developments to install electric hook-ups for truck in docks, bays, and parking areas to reduce heavy-duty truck idling on-site. • Investigate incentives for existing public and private developments to improve energy efficiency. 	X	X		X	
<p>+ Hazard Retrofit Funding Opportunities: Investigate potential funding sources for risk reduction activities that may include:</p> <ul style="list-style-type: none"> • Investigate the creation of a Geologic Hazard Abatement District that can be used to generate funds to mitigate geologic hazards. • Investigate potential funding opportunities for voluntary improvements/retrofits on private properties. • Investigate possible incentive programs to encourage property owners to retrofit their homes/businesses against climate-related hazards such as extreme weather, flooding, wildfire, etc. • Explore new funding sources for vegetation management activities for properties located within the WUIFA. 		X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
IMPROVEMENTS					
<ul style="list-style-type: none"> + Railroad Crossings: Investigate the feasibility and funding of quiet zones at-grade crossings, improved current at-grade crossing gates, and grade separated crossing(s). 		X		X	
<ul style="list-style-type: none"> + Trail Network: Continue to expand and improvement the trail network as feasible to: <ul style="list-style-type: none"> • Build a well-connected, off-street trail system along the existing Pacific Electric Trail (PET), flood channels and utility corridors. • Create north-south trail connections along the utility channels and easements to create a connected trail system, including Deer Creek channel, Day Creek/ Southern California Edison easement, and other utility corridors connecting to Ontario. 		X			X
<ul style="list-style-type: none"> + Critical Facilities and Infrastructure: Periodically review and update the City critical facilities and infrastructure inventory used to support and implement the EOP, LHMP, and CIP. The inventory should be updated to include the following: <ul style="list-style-type: none"> • Critical facilities/infrastructure located in high-risk areas where relocation may be a possible mitigation strategy. • Potentially substandard structures/infrastructure for future retrofit and rehabilitation. • Future funding opportunities for critical facility/ infrastructure improvements, retrofits/relocations. • Roadways designated as key evacuation routes are prioritized during the CIP planning process. • Seismically vulnerable structures and infrastructure to integrate into the City's Capital Improvements Program. 		X			
PROCESS AND INFORMATION					
<ul style="list-style-type: none"> + Equity and Environmental Justice: The City will continue to maintain equitable civic engagement in the decision-making process and will continue to improve communication regarding new development projects and potential health impact as follows: <ul style="list-style-type: none"> • Review and update, as appropriate, procedures to provide translation and interpretation services at public meetings on issues affecting populations whose primary language is not English. 	X	X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> Review and update, as appropriate, the variety of electronic and personal techniques for outreach. Continue to update the “Improve the Healthy Communities” program. Create a development checklist or disclosure tool to inform the public, especially low-income minority populations, on the potential health impacts of new development. Identify resources for the existing sensitive receptors experiencing adverse air quality issues to incorporate measures to improve air quality, such as landscaping, barriers, ventilation systems, air filters/cleaners, and other measures. Establish procedures and tools to consider the health needs of projects with sensitive receptors such as through a healthy needs assessment, the Healthy Development Measurement Tool (HDMT) or other tools. 					
<p>+ Mobility and Access Plans, Programs, and Activities: The City currently maintains and updates a variety of plans, programs and activities to improve mobility and access in the community. These plans, programs and activities are regularly used and require ongoing management and/or periodic update to ensure compliance with local, state, and Federal requirements, consistency amongst these efforts, and incorporation of the most up to date information as follows:</p> <ul style="list-style-type: none"> Maintain a list of Transportation Demand Management (TDM) strategies for employers and new developments. Develop a system to measure roadway segments, intersection traffic volumes, and measure vehicle level of service along key corridors. Include bicycle, pedestrian, and truck counts along with vehicle counts in the City’s operations management system and make available to the public. Update routes in the Safe Routes to School (SRTS) program and develop a prioritization process for infrastructure enhancements. Update and implement the Trail Implementation Plan to improve equestrian access and crossing on the trails as appropriate. 	X	X			X

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> Develop a strategy or action plan that prioritizes systems-based approach to preventing traffic fatalities, focusing on the built environment, systems, and policies that influence behavior, as well as messaging that emphasizes that traffic losses are preventable. As new transportation technologies and mobility services, including autonomous vehicles, electric vehicles, electric bicycles and scooters, and transportation network companies (e.g., Uber and Lyft) are used by the public, review and update City policies and plans to maximize the benefit to the public of such technologies and services without adversely affecting the City's transportation network. Updates to the City's policies and plans may cover topics such as electric vehicle policies and plans may cover topics such as electric vehicle charging stations, curb space management, changes in parking supply requirements, shared parking, electric scooter use policies, etc. Coordinate with SBCTA and Omnitrans to review and consider alternatives to conventional bus systems, such as smaller shuttle buses (micro-transit), on-demand transit services, or transportation networking company services that connect neighborhood centers to local activity centers with greater cost efficiency. 					
<p>+ Climate Change Vulnerability and Sustainability Activities and Programs: The City currently provides information for and conducts a variety of programs to address climate change and sustainability in the community. These programs and activities will be continued, and new programs developing including:</p> <ul style="list-style-type: none"> Energy- or climate change-themed publications and workshops. Energy audits for residents. Urban Heat Island analysis that integrates into the Urban Forestry Plan and identifies priority projects within the City that will mitigate the effects of future extreme heat events. 	X	X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> Information for the community regarding the benefits of solid waste diversion, recycling, and composting, and programs that make it easy for all people in Rancho Cucamonga to work toward and achieve City waste reduction objectives. 					
<p>+ Hazards-Related Plan Integration and Updates: The City currently maintains and updates a variety of plans, programs and activities that address the risks associates with natural and human-caused hazards throughout the City. These plans, programs and activities are regularly used and require ongoing maintenance and periodic update to ensure compliance with local, state, and Federal requirements. To ensure greater consistency amongst these plans and incorporate the most up to date information, future updates should accomplish the following:</p> <ul style="list-style-type: none"> Updates to the EOP, Safety Element, and CWPP, should occur concurrent with the LHMP update every five years. Maintain consistency between the Safety Element, LHMP, EOP, CWPP, and Capital Improvements Program. Plan updates should incorporate climate change data and information documented by staff during subsequent hazard events that occur within the City. Maintain an emergency evacuation plan that is proactive, integrates data-driven approach and core community values, and plans for all residents equitably. 		X		X	
<p>+ Emergency Preparedness Programs: The City currently conducts trainings and educational awareness to staff, citizens, and businesses. To ensure increased preparedness and resilience future opportunities to expand these activities should investigate:</p> <ul style="list-style-type: none"> Continue to promote “Ready, Set, Go” and Firewise Community programs for existing and new developments within the WUIFA to educate residents about wildfire prevention and preparedness. 		X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> Implement a training program to improve staff understanding of how vulnerable community members, including senior citizens, low-income persons, and persons with disabilities, may impacted by changing climatic conditions. Disseminate information on dam inundation areas within the City that could be impacted by a dam breach event. Identify key locations within the City for community-oriented backup power locations to serve vulnerable populations disproportionately affected by hazard events that affect electrical infrastructure. Conduct annual staff trainings on the Emergency Operations Plan (EOP) and Annexes to ensure staff can effectively respond to emergency situations. Develop or update strategic plans for public safety that identify strategies for staffing, service delivery, and critical infrastructure needs to enhance City services. These updates should identify potential improvements for professional standards and operational readiness. Expand and enhance the Ready RC program to better meet future community issues and challenges. Increase and expand the delivery of Ready RC programs and materials to the community to increase preparedness and resilience. Expand and enhance the strategy for post-disaster recovery that focuses on community resilience and sustainability. Develop a cooling and heating plan to offset the health effects of severe weather on lower income communities. 					
RULES AND COORDINATION					
<p>+ Transit-Related Regional Coordination: The City currently coordinates and works with regional partners to improve transit for the region. The City will continue to work in concert with regional partners on the following:</p> <ul style="list-style-type: none"> Development of High-Speed Rail to Las Vegas through Rancho Cucamonga. Implementation of the Cucamonga Station Specific Plan. 	X	X			

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> • Support a future transit study to connect Rancho Cucamonga with Ontario, Eastvale, and Corona. • Support a proposed tunnel to LA/Ontario Airport. • Bus Rapid Transit Connection projects along Foothill Boulevard and Haven Avenue. • Consult with Caltrans, SCAG’s Connect SoCal RTP/SCS, SBTA’s Nexus Study and Congestion Management Plan, Omnitrans, San Bernardino County, the South Coast Air Quality Management District, and neighboring cities in support of a consistent and comprehensive regional transportation system. 					
<p>+ Mobility and Access Standards and Regulations: The following updates and amendments to transportation-related standards and requirements will ensure compliance with local, state, and Federal requirements, consistency with the General Plan, and incorporation of the most up to date information as follows:</p> <ul style="list-style-type: none"> • Develop and maintain a list of locations within the City where LOS E or LOS F are acceptable on auto-priority streets where, due to the right-of-way limitations or physical constraints, roadways improvements are not appropriate. • Revise Engineering Design standards to include Complete streets design elements. • Identify the major arterial streets along new mixed-use corridors and consider developing street sections that are unique to each corridor. • Continue to review and implement the City of Rancho Cucamonga VMT thresholds and screening criteria to reflect the updated VMT analysis and utilize transportation impact study guidelines for VMT analysis when analyzing proposed new projects in the City. • Complete and maintain the citywide Active Transportation Plan. • Maintain a current truck route map on the City’s website, and a truck route signage system that identifies key goods movement corridors and ensures goods movement needs are adequately served while reducing impacts to other uses. 	X	X			

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> Establish restrictions on vehicle weight limit near sensitive land uses such as schools and residential areas to discourage cut-through truck traffic. Work with technological providers to ensure equitable treatment of all users by the ride hailing and Transportation Network Companies (TNC) services, easier options to use the services for all users, a diverse dataset in Audiovisual (AV) technology that correctly recognizes people of color, etc. Modify the roadway design standards to include innovative and energy saving alternatives such as traffic circles, roundabouts, and similar designs. 					
<p>+ Climate Action Plan (CAP): Implement and update the Climate Action Plan (CAP) goals, strategies, and measures to reduce community-wide and municipal GHG emission reductions in the categories of zero emission and clean fuels, efficient and carbon free buildings, renewable energy and zero carbon electricity, carbon sequestration, local food supply, efficient water use, waste reductions, and sustainable transportation.</p>	X	X	X	X	X
<p>+ Air Quality-Related Measures and Regional Coordination: Improving air quality is a public health imperative as it affects all residents. Much of the air quality impact is associated with heavy trucks and industrial uses that are often located near lower income neighborhoods. This makes improving air quality both a public health and an equity issue. To address these issues the City will:</p> <ul style="list-style-type: none"> Develop guidelines to avoid locating new development with sensitive receptors within 500 feet of a freeway or high-volume roadway. If avoidance is not feasible, development with sensitive receptors may be located within 500 feet of a major roadway only if the applicant first prepares a project-specific health risk assessment (HRA) addressing potential health risks to sensitive receptors from exposure to toxic air contaminant (TAC) emissions. The HRA shall be conducted in accordance with guidance and approval from SCAQMD. Feasible measures shall be implemented to reduce health risks from TAC exposure to levels determined by the HRA. 	X	X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<ul style="list-style-type: none"> • Develop and maintain a standard list of development conditions that would reduce health risk impacts, such as toxic air contaminant (TAC) emissions, when siting new sensitive receptors within 1,000 feet of a major roadway. • Amend Municipal Code to require new development that exceeds applicable air quality thresholds to notify nearby residents and business of potential pollutants; consult with the air quality management district, incorporate feasible best management practices for substantially reducing or avoiding air pollutant emissions during construction and operational phases. • Update development code to require applicant to install air filters with a Minimum Efficiency Reporting Value (MERV) of 13, or greater (as defined by ASHRAE standard 52.2 or Newer) in all buildings as proposed for sensitive uses (e.g., residences, schools, offices, medical facilities). • Ensure dust control provisions in the City's Development Code meet SCAQMD standards as they are updated. • Coordinate air quality improvement activities with those of neighboring local governments and other agencies, including the Southern California Association of Governments (SCAG), San Bernardino Council of Governments (SBCOG), and SCAQMD to maximize the potential local and regional air quality benefits of City activities. • Collaborate with SCAQMD to review and provide input on regional air quality plans and to identify and implement best management practices to meet and maintain State and Federal ambient air quality standards. • Support programs and investments that increase ridesharing, reduce pollutants generated by vehicle use, and meet the transportation control measures recommended by SCAQMD in the adopted Clean Air Plan. 					

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ Resiliency-Related Regional Coordination: The City currently coordinates with neighboring cities, special districts, and the County to address regional issues and collaborate on resilience, hazard mitigation, and disaster response strategies and programs. To ensure future coordination meets community needs, the City should expand the following activities:</p> <ul style="list-style-type: none"> • Periodically coordinate and review operations and response plans for any dams that have the potential to inundate portions of Rancho Cucamonga. • Promote the strengthening of infrastructure owned and operated by other agencies/entities within the City. • Partner with utility providers, water purveyors, and other public agencies to reduce wildland vegetation fuels. • Work with water purveyors to ensure adequate water supply, long term maintenance, anticipated future supplies, and fire flow is provided throughout the City. • Coordinate with Southern California Edison on electrical infrastructure that may be impacted by wildfires and/or Public Safety Power Shutoff events. 		X			
<p>+ Hazards-Related Standards and Regulations: The following updates and amendments to risk reduction and hazards mitigation-related standards and requirements will ensure compliance with local, state, and Federal requirements, consistency with the General Plan, and incorporation of the most up to date information:</p> <ul style="list-style-type: none"> • Adopt design standards that ensure new development provides adequate public safety and blends with natural surroundings to protect development and open space areas from fire hazards. • Enact a geologic disaster recovery ordinance for use following severe winter storms that cause extensive landslide or erosion damage. • Determine the viability of requiring enhanced building standards for new developments, redevelopments, and major remodels to ensure building functionality after a seismic event. 		X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ WUIFA Requirements: The City’s WUIFA currently regulates all properties in compliance with California Fire Safe Regulations. To ensure continued compliance and reduce future vulnerabilities to wildfire, the City shall:</p> <ul style="list-style-type: none"> • Require brush clearance activities on private properties within the WUIFA prior to the start of the fire season. • Update the municipal code to require annual brush clearance and vegetation management on all public and private roadways within the WUIFA. • Periodically review and update WUIFA appropriate landscaping options and make available to the public. • Periodically review and adopt the latest codes adopted by the Building Standards Commission to address wildfire. • Develop an existing non-confronting uses risk reduction program that identifies compliance gaps within the WUIFA and ensures properties are brought up to code in a timely manner. 	X	X		X	
<p>+ Urban Forestry Plan: Prepare an Urban Forestry Master Plan that achieves the following:</p> <ul style="list-style-type: none"> • Provides information on proper tree pruning practices to the public. • Incorporates the management and enhancement of native trees. • Minimizes damage associated with wind- and fire-related hazards and risks and address climate change and urban heat island effects. • Manages the removal and replacement of trees that are diseased, damaged, or considered vulnerable to high wind and/or wildfire conditions. • Provides landscaping recommendations and requirements for new developments, redevelopment, and major remodels. • Reflects the results of the Urban Heat Island Analysis. 	X	X		X	

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
FOCUS AREA IMPLEMENTATION					
<p>+ Street Connectivity: Facilitate new street connections and intersections for the following as development/ redevelopment occurs.</p> <ul style="list-style-type: none"> Extend Civic Center Drive to the west, bridging over the Deer Creek Channel and connecting north to Foothill Boulevard and west to Hermosa Avenue via Devon Street. Create a new signalized crossing of Foothill to connect directly into Terra Vista Town Center, which may in the future also be updated to a mixed-use center environment. Realign Red Hill Country Club Drive to create a safer and more functional intersection with Foothill Boulevard. Extend Red Hill Country Club Drive southward to a small new park at San Bernardino Road. Extend Roberds Street—and possibly create a new north-south street parallel to and east of Amethyst Avenue—to provide improved connection between the historic retail businesses and the newer shopping centers and opportunities for infill housing in the Town Center. Facilitate the development of new and enhanced connections from the Southeast Area to other parts of the city to provide additional north-south and east-west capacity. Complete Wilson Avenue and create a network of new neighborhood streets to improve and distribute traffic in the Etiwanda Town Center area. Extend 7th Street, 9th Street, and Feron Boulevard to create a more complete street network that improves connectivity and access to and from the Cucamonga Town Center to neighboring destinations. 	X	X			

Implementation Strategies	Reduce Pollution Exposure	Improve Public Facilities	Promote Food Access	Promote Safe & Sanitary Homes	Promote Physical Activity
<p>+ Parks Master Plan: Prepare a Parks Master Plan to plan for new open space and trail network in the Focus Areas that considered opportunities as follows:</p> <ul style="list-style-type: none"> • Create a small neighborhood green on vacant land at the junction of the 8th Street Trail and Archibald Avenue and allow it to be fronted by housing. • Create a new neighborhood park at Roberds Street and Base Line Road to accommodate a variety of community activities. • Create a community park at the intersection of the Pacific Electric Trail and Amethyst Avenue. • Provide new trailhead connections to the Deer Creek Corridor—both south and north of Foothill Boulevard—to provide trail access between the Civic Center area and neighborhoods to the north and south, and to connect to the Pacific Electric Trail. • Expand the trail network by creating a new multipurpose trail in the historic 8th Street right-of-way adjacent to the planned High Speed Rail line. • Reconfigure the existing trailhead parking lot and access way to the Pacific Electric Trail to integrate it better into the gateway center environment, while ensuring adequate parking for visitors and trail users. Visually enhance the existing bridge to be a more appropriate “gateway statement” for the city. • Coordinate with Southern California Edison and the San Bernardino County Flood Control district to improve the large open spaces along Day Creek Channel as a usable recreational open space and a multipurpose trail. 		X		X	X

