



Mobility Plan ◀

City of Downey

Downtown Specific Plan



4. Mobility Plan



This chapter describes the established street network in the Specific Plan area, recommends the improvement strategies for the transportation network to support the types and densities of new development allowed in Downtown, and introduces design standards for recommended street improvements and enhancements to the existing street system. Transportation facilities examined include roadways, intersections, pedestrian walkways, potential bicycle connections and the location of the Downey Depot and bus routes within Downtown.

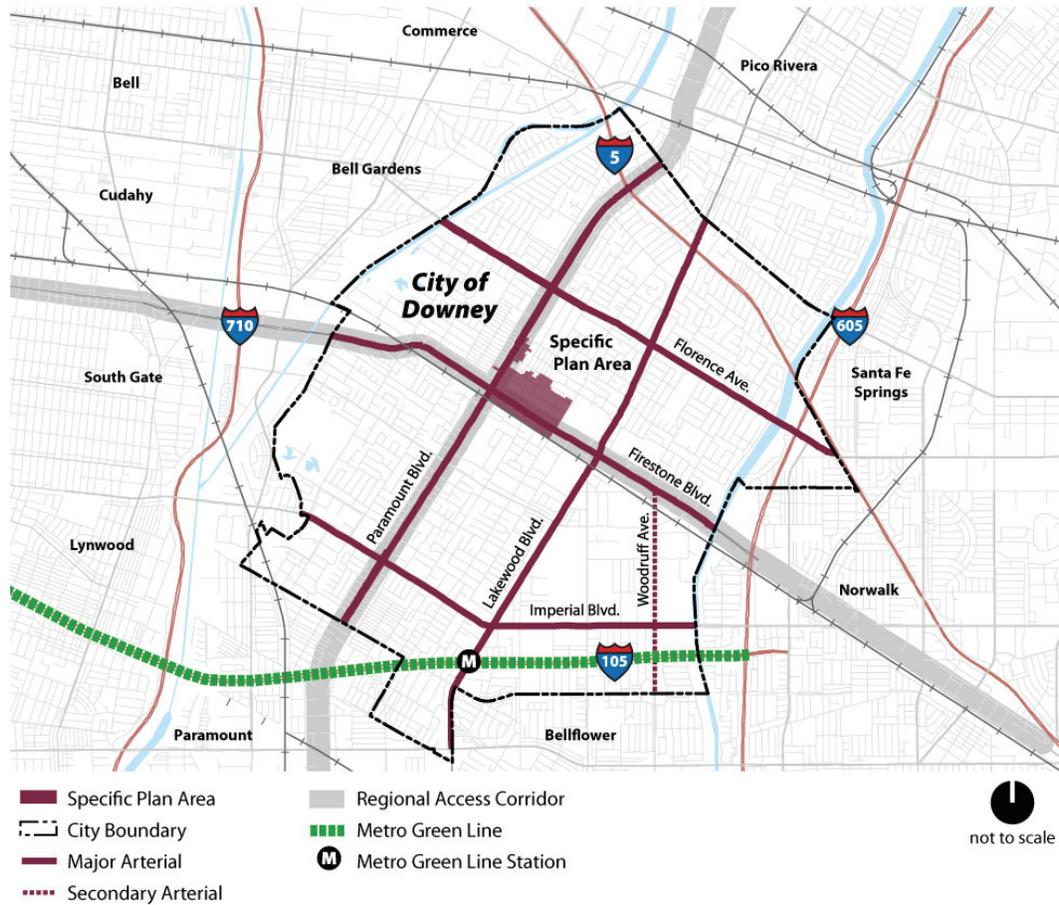
The Specific Plan area is central to and well served by I-5, I-710, I-605, and I-105 freeways. Firestone Boulevard and Paramount Boulevard are the primary arterial roadways serving as regional access corridors to the Specific Plan area. Downey Avenue and Brookshire Avenue also allow access into Downtown. In addition to the freeways and arterial roadways, a relatively well-developed transit system provides access and connectivity between Downtown Downey and the surrounding areas. Exhibit 4.1 illustrates the regional context of Downtown within the larger transportation network.



Image: Street sign at the intersection of Second Street and La Reina Avenue

Image: Metro bus stop along Firestone Boulevard

Exhibit 4.1: Regional Transportation Context



4.1 Mobility Vision

From a transportation perspective, the Specific Plan is intended to balance the needs of the various roadway users. It is desirable to both serve the mobility needs of a wide range of potential modes of transportation and to create an urban space that is vibrant and enjoyable.

As outlined in Chapter 3, Design Standards and Guidelines, the planned land use densities are generally considered “urban” in nature, with three to four (3-4) story buildings allowed throughout the Downtown core and buildings to a maximum of six (6) stories along Firestone Boulevard. The Specific Plan area is generally flat, and the climate is mild and conducive to outdoor activity during most months of the year. These characteristics (mild climate, flat terrain) are favorable for walking, bicycling, and the use of neighborhood electric vehicles.

An effective transportation system will recognize the great variety of users in a community and their differing needs. Some of the variables that influence the best type of transportation for a given user are:

- ▶ Purpose of their trip (work, shopping, school, recreation, etc.)
- ▶ Location of their destination (within Downtown, within the City of Downey, outside the City of Downey)
- ▶ Physical condition and interest in exercise as a side-benefit of travel
- ▶ Family context (part of a multi-purpose trip or stand-alone)

The emphasis of the Downtown Specific Plan is to encourage a broad range of transportation opportunities, reflecting a desire to improve the sustainability of Downtown. The provision of alternative modes of transportation will contribute to sustainable development patterns by allowing users to satisfy their functional travel needs while supporting their environmental, social, and recreational interests.

Mobility Goal:
"Balance the needs of the various roadway users."

To obtain an in-depth understanding of the circulation system in Downtown the *Downtown Downey Specific Plan Traffic Study* (June 2010) was completed, analyzing each roadway in the project area and eleven (11) key intersections. The Traffic Study ultimately demonstrates that the proposed Specific Plan will generate less traffic than is allowed under the currently adopted General Plan. The *Downtown Downey Specific Plan Traffic Study* is provided under separate cover.

4.2 Established Street Network

The Downtown Downey street network was constructed based on a grid pattern, with a typical block size of approximately three hundred (300') feet. The grid allows easy access for automobiles in and out of Downtown while maintaining the area as suitable for pedestrians. In 2001, the City of Downey completed the



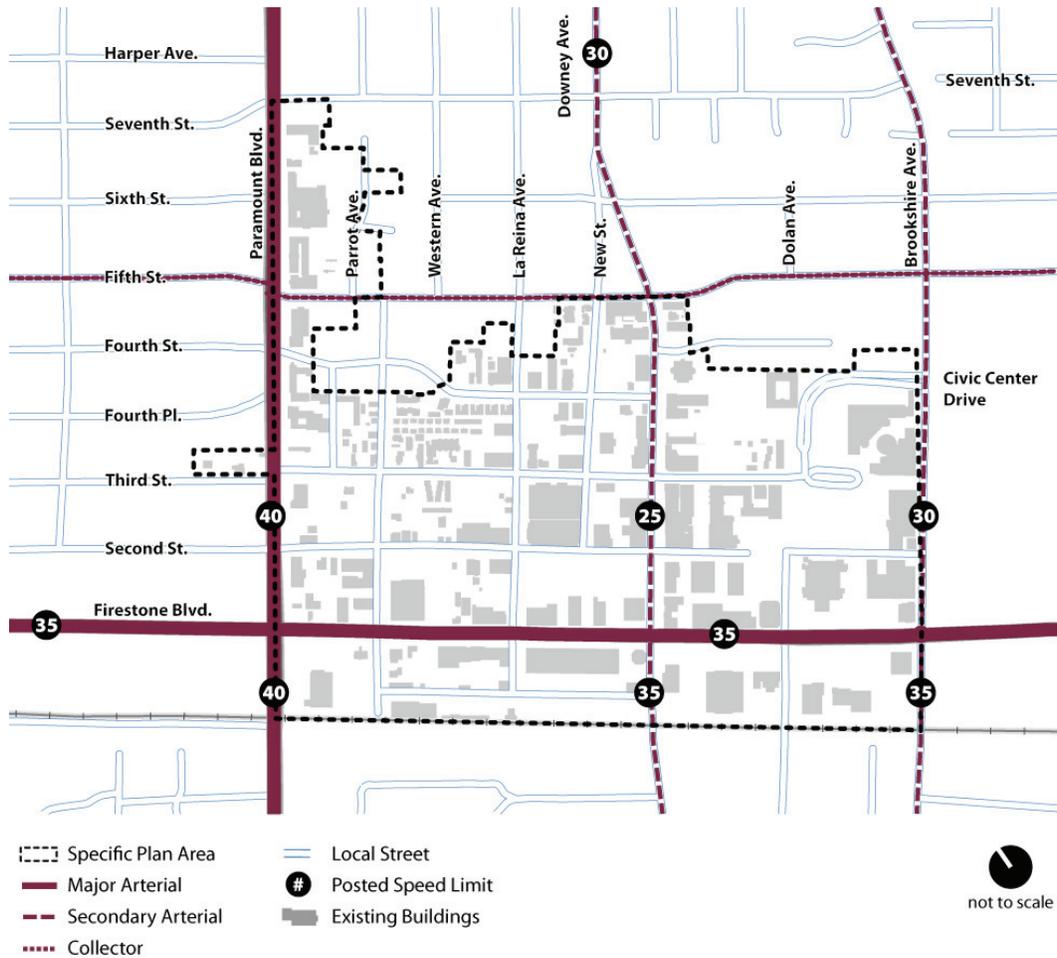
Downey Avenue Revitalization Project, which included both pedestrian and roadway improvements to the Avenue. In an effort to make Downey Avenue more pedestrian-friendly, the Revitalization Project included narrowing of the roadway and expanding the pedestrian sidewalks on both sides of the street, adding diagonal parking, street trees, landscaping and other pedestrian amenities.

In addition to Downey Avenue, a number of key roadways for Downtown access and circulation have been examined. Additional information on key intersections analyzed as well as existing traffic flow and level of service information, is provided, under separate cover, in *The Downtown Downey Specific Plan Traffic Study*. Key roadways in the Specific Plan area include Firestone Boulevard, Paramount Boulevard, Brookshire Avenue, Downey Avenue, Third Street and La Reina Avenue. Exhibit 4.2 illustrates the established roadway network within the Specific Plan area.

Exhibit 4.2 Established Roadways with Speed Limits

Section 4 Mobility Plan

Exhibit 4.2: Established Roadways with Speed Limits



4.3 Street Sections

4.3.1 Major Arterials

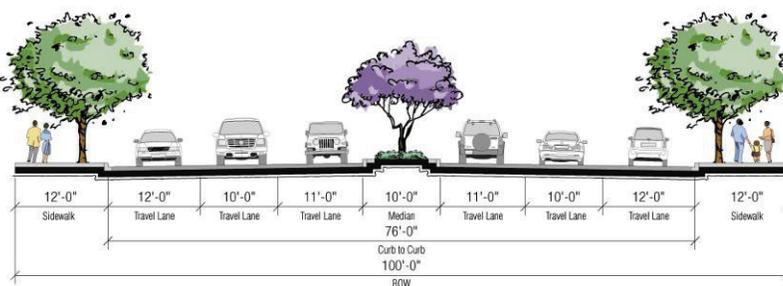
Within the Specific Plan area are two roadways designated as Major Arterial in the Circulation Element of the General Plan: Firestone Boulevard and Paramount Boulevard. Firestone Boulevard is a six-lane east west roadway with a center median, running centrally through the City and Downtown, providing access to both I-605 and I-710. Firestone Boulevard is a key commercial corridor, with businesses fronting the street, on-street parking, and access to the Stonewood Shopping Center, the Downey Medical Center and larger national chain retailers. As shown in Exhibit 4.2, Firestone Boulevard is a major access route to Downtown with speed limits reaching 35 miles per hour.

Similarly, Paramount Boulevard is a four-lane roadway with a center turning lane. It is also designated as a Major Arterial in the City of Downey General Plan Circulation Element. As a Major Arterial, Paramount Boulevard provides north

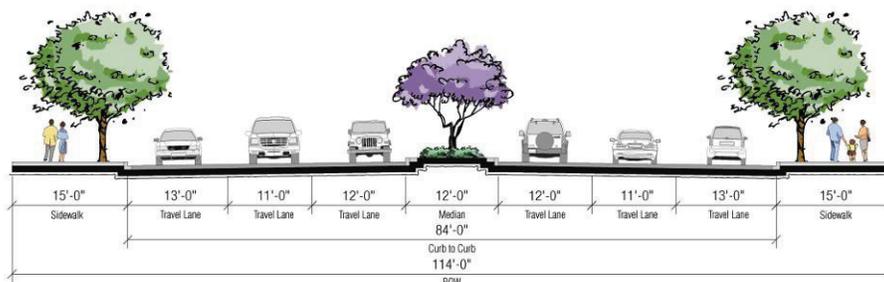
south access across the City and Downtown from I-5 and I-105. Paramount Boulevard, in contrast to Firestone, primarily serves residential neighborhoods, with some professional buildings and smaller commercial spaces fronting the street. Along Paramount Boulevard, through Downtown, speed limits reach a maximum of 40 miles per hour.

As identified in the General Plan, major arterial roadways are anticipated to have a typical right-of-way width between one hundred and six and one hundred and fourteen (106-114') feet. The desired typical mid-block curb-to-curb width for a Major Arterial is eighty-four (84') feet. Most of Firestone Boulevard (generally the area west of Dolan Avenue) and all of Paramount Boulevard through Downtown consist of a 100-foot-wide right-of-way, with a curb-to-curb width that varies between seventy-six and eighty (76-80') feet. Firestone Boulevard east of Dolan Avenue is slightly wider, with a 110-foot-wide right-of-way, and a curb-to-curb width of eighty-eight (88') feet. Although, the portions of Firestone Boulevard and Paramount Boulevard in the Specific Plan area are not at their ultimate General Plan build-out, the *Downtown Downey Specific Plan Traffic Study* has identified that a sufficient level-of-service can be maintained to serve the Specific Plan area.

Typical Right-of-Way for Major Arterial Streets (Existing)



Typical Right-of-Way for Major Arterial Streets (Recommended)



Although, expanded roadway improvements have been identified in the Downtown Downey Specific Plan Traffic Study to meet above satisfactory level-of-service such improvements are not necessarily consistent with the overall goal of creating a vibrant, pedestrian and bicycle friendly Downtown. The design of roadways within the Downtown Downey Specific Plan will play a major role in both accommodating automobiles and alternative modes of transport. Recommended cross-sections that are appropriate for the Downtown have been

Street Sections:
Existing and recommended street sections for Major Arterials

developed that reflect the need to balance the amount of space dedicated to the automobile against the needs of various other roadway uses.

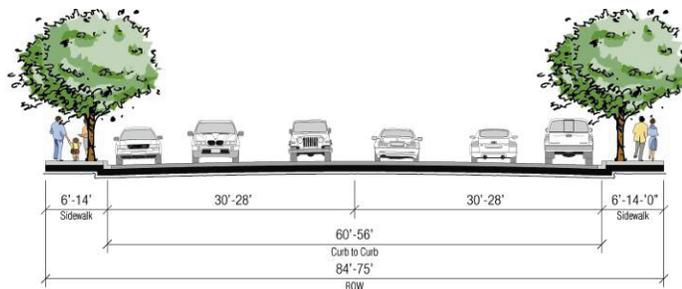
Generally, the recommended cross-sections for roadways within Downtown allow for wider sidewalks and narrower travel lanes. A sufficient level-of-service can also be accomplished through implementation of a program to monitor conditions at specific intersections and roadway segments and potentially funding alternative improvements such as traffic signal coordination, ridesharing, transit information kiosks or improvements to the infrastructure for alternative modes of transport (walking, bicycling, NEVs). The street section exhibits, below, illustrate typical existing street dimensions and the Specific Plan recommendations for a typical major arterial roadway.

4.3.2 Secondary Arterials

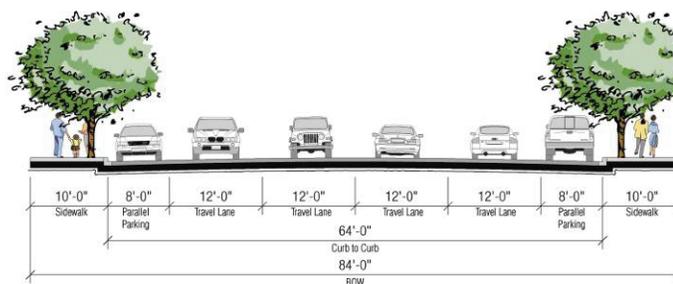
Within the Specific Plan area are two roadways designated as Secondary Arterials in the Circulation Element of the General Plan: Downey Avenue and Brookshire Avenue. As Secondary Arterials, Downey Avenue and Brookshire Avenue are intended to provide access to destinations within the City. Downey Avenue underwent improvements as part of the Downey Avenue Revitalization Project and is considered a prominent roadway in the Specific Plan area. As part of the Revitalization Project, the City established traffic calming measures, reduced the street from four lanes to two, adding wider sidewalks and angled parking on the west side of the street. Along Downey Avenue in Downtown, one- and two-story buildings, with primarily retail businesses and restaurants, front the tree-lined avenue and speed limits allow for a maximum of 25 miles per hour while speed limits along Brookshire Avenue range between 30 to 35 miles per hour.

Street Sections:
Existing and recommended street sections for Secondary Arterials

Right-of-Way for a Typical Secondary Arterial (Existing)



Right-of-Way for a Typical Secondary Arterial (Recommended)



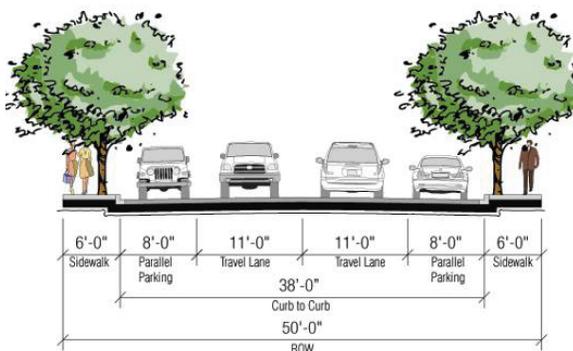
The recommended mid-block configuration for a Secondary Arterial consists of a 64 foot curb-to-curb width within an overall right-of-way width of eighty-four (84') feet. Brookshire Avenue is currently constructed to this standard. Downey Avenue has a variable right-of-way width within Downtown, ranging between seventy-five and eighty-four (75- 84') feet. The curb-to-curb cross section also varies extensively through the Specific Plan area, as Downey Avenue has been extensively reconstructed to provide a more traditional "downtown" ambience, with diagonal parking in some areas, curb "bulb-outs" at intersections, and the occasional use of sidewalk or parkway extensions (for instance, in the vicinity of Fourth Street). Street section exhibits for Secondary Arterials are shown above. As shown above, the recommended cross-section allows for wider sidewalks and narrower travel lanes to promote walkability within the Downtown.

4.3.3 Collector/Local Streets

Dolan Avenue from south of Firestone Boulevard, and Fifth Street through the Specific Plan area, are both designated as a Collector Street in the General Plan Circulation Element. A Collector Street consists of a forty-four (44') foot-wide curb-to-curb section (two-lane roadway with parking) within a sixty (60') foot-wide right-of-way width. Dolan Avenue currently conforms to the adopted Circulation Element standard for a Collector roadway Except for the segment of Dolan north of Second Street and south of Third Street which is vacated. In contrast, the right-of-way width along Fifth Street varies between fifty and sixty (50-60') feet, while the curb-to-curb cross section is generally forty (40') feet wide.

Within the Specific Plan area are many local streets; however La Reina Avenue and Third Street are key roadways. Third Street is a two-lane east-west roadway, while La Reina Avenue includes two-lanes oriented north-south. As Local Streets, Third Street and La Reina Avenue are designed to provide access to properties fronting the street and access to adjacent neighborhoods. Local Streets are intended to be narrow with slower traffic speeds. Speeds on Local Streets, within Downtown, range between 25 to 30 miles per hour allowing for safer pedestrian movement and a local downtown feel.

The General Plan Circulation Element does not specify a typical right-of-way or curb-to-curb width for Local Streets. Recommended cross-sections that are appropriate for the Downtown have been developed that reflect wider sidewalks and the need to balance the amount of space dedicated to the automobile against the needs of various other roadway uses. As shown below, the existing right-of-way widths for Local Streets in Downtown range between thirty and sixty (30-60') feet, while the existing curb-to-curb widths vary between approximately twenty-four and forty-two (24-42') feet. Parking is generally limited to one side of the street on the narrowest local streets (e.g. Myrtle Street, between Third and Fourth Streets.)



Street Sections:
Typical Right-of-Way (50') for Local Streets with parking on both sides of the street.

Street Sections: Typical 50-Foot Street sections for Local/ Collector Streets

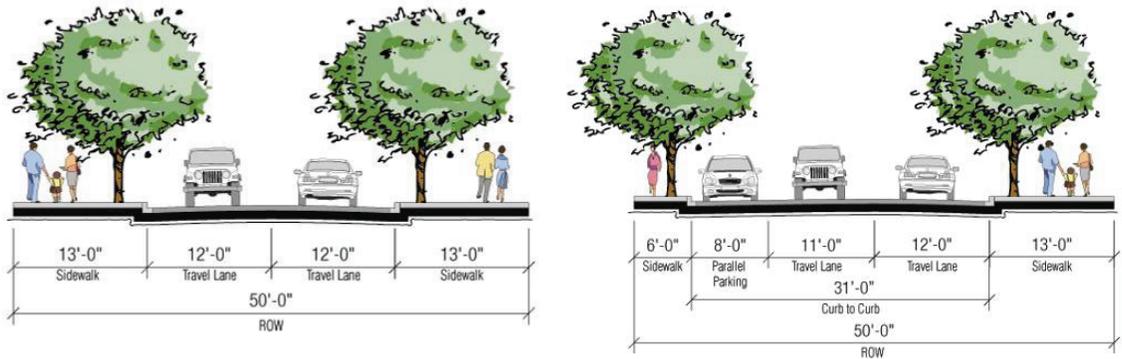


Image (left): Typical Right-of-Way (50') for Local Streets with no parking.

Image (right): Typical Right-of-Way (50') for Local Streets with parking on one side of the street.

Street Sections: Typical 60-Foot Street sections for Local/ Collector Streets

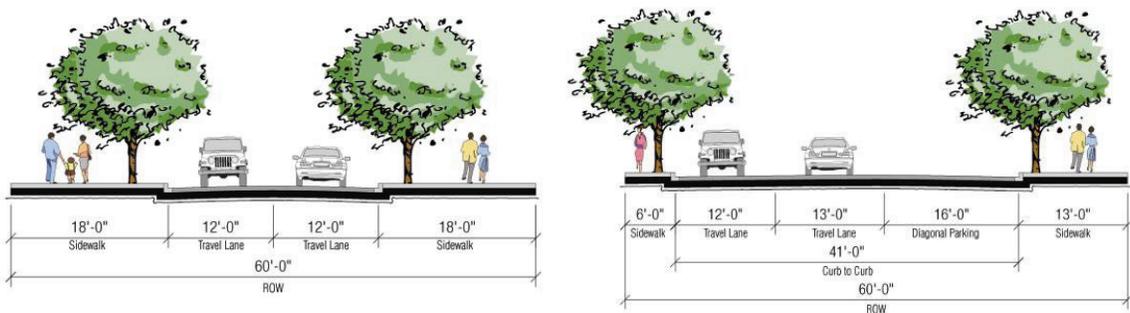


Image (left): Typical Right-of-Way (60') for Collector/Local Streets with no on-street parking

Image (right): Typical Right-of-Way (60') for Collector/Local Streets with diagonal parking on one side of the street

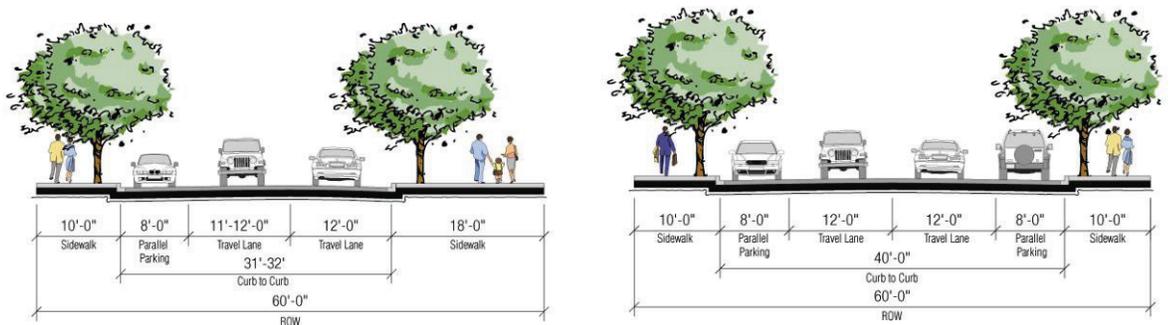


Image (left): Typical Right-of-Way (60') for Collector/Local Streets with parking on one-side

Image (right): Typical Right-of-Way (60') for Collector/Local Streets with parking on both sides of the street

4.4 Public Transportation

Within the City are several well-established public transportation options that provide access and connectivity between Downtown Downey and surrounding areas. Exhibit 4.3 shows the Metro bus and rail system that is maintained by the Los Angeles County Metropolitan Transportation Authority. Both local and rapid line services are available from the Downey Depot transit center, which is located in the southern portion of the Specific Plan area along Nance Street. The 266, 265, 115 and the 127 bus lines are all easily accessible from stops in or near the Specific Plan area. Bus services currently provide access from Downtown to the Metro Green Line (light rail service) from both the Lakewood and Norwalk stations; however access is limited and indirect.



Image: Metro Rapid Line bus picking up passengers at the Downey Depot

Exhibit 4.3: Metro Bus and Metro Rail System Map – Downey Area



Exhibit 4.3 Metro Bus and Metro Rail System Map



In addition to the Metro-operated bus and rail lines, the City of Downey also provides a local bus shuttle known as the Downey Link. There are four established routes within the City, each covering a different quadrant. The Downey Link provides crucial access to all areas of the Specific Plan area, from the center of Downtown to Paramount or Brookshire or Firestone. The presence of the Downey Link serves to decrease the need for automobiles and parking in Downtown. Each route, as shown in Exhibit 4.4, begins and terminates at the Downey Depot located on Nance Ave and travels through Downtown as it starts its route. Transit service connectivity would be greatly enhanced by providing a direct connection to the Metro Green Line via one or more of the Downey Link Bus Routes.

Exhibit 4.4: Downey Link Bus Routes

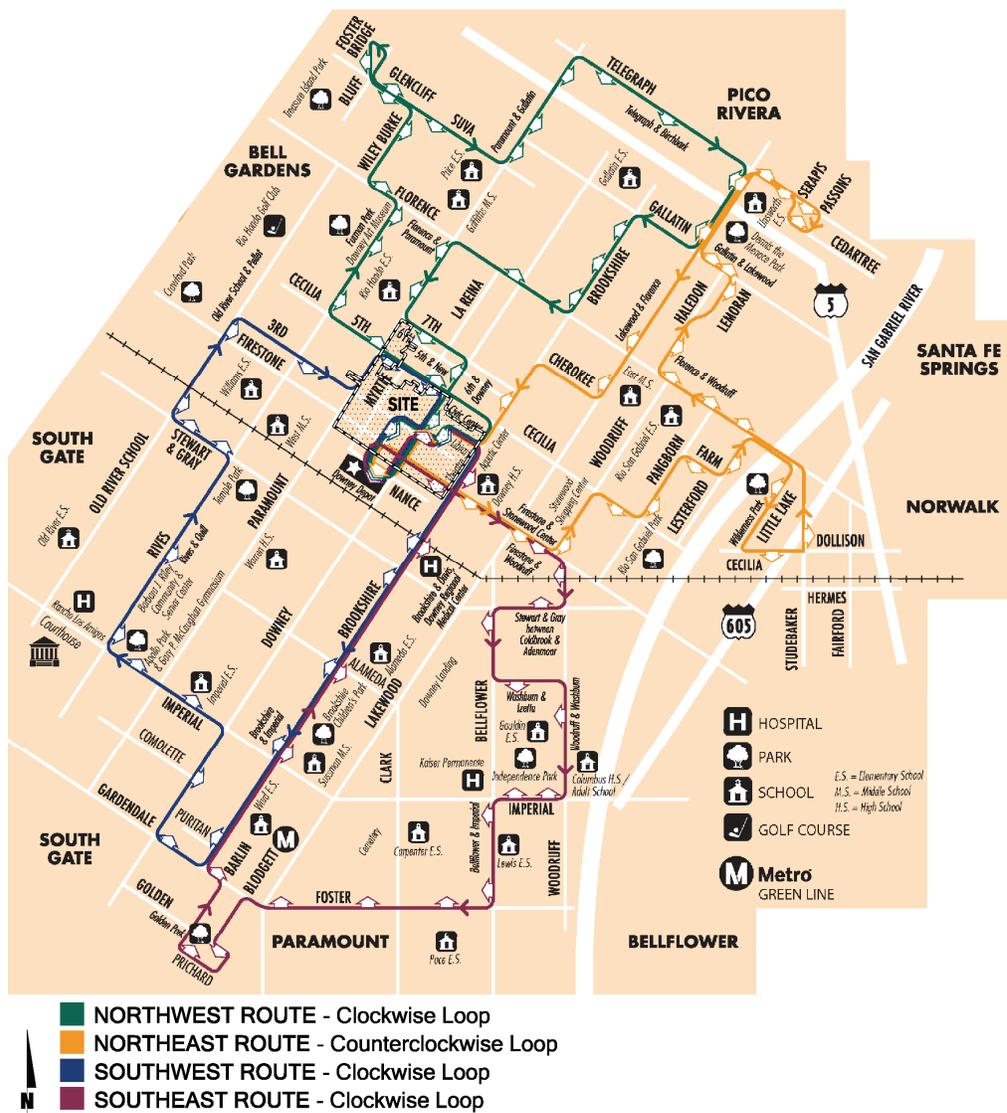


Exhibit 4.4
Downey Link Bus Routes
Section 4 Mobility Plan

4.5 Pedestrian Mobility

Alternative modes of transport generally provide a more efficient, less costly method of providing for the mobility needs of the residents and workers of a community. It is necessary to provide both adequate facilities and a carefully considered (planned) mix and density of land uses to maximize the efficiency of the transportation system. The following recommendations address the needs of a variety of alternative transportation modes that can increase mobility and reduce potential environmental impacts.

Exhibit 4.5: Street Design Features



Exhibit 4.5 Street Design Features

Section 4 Mobility Plan

Pedestrian facilities should be provided throughout Downtown. A comprehensive sidewalk system promotes pedestrian safety and access to help ensure that the community will be a safe, convenient, and attractive place to walk. Providing sidewalks along all of the roadways within Downtown and through the Civic Center area establishes a pedestrian network emphasizing safe routes to school and connections to transit. The routes include walkways that connect schools, parks, neighborhoods, and commercial districts throughout Downtown. Exhibit 4.5 presents the recommended street features for Downtown Downey. These features provide specific large-scale infrastructure improvements that can enhance mobility throughout the project area.

Exhibit 4.5 identifies two key pedestrian corridors, Downey Avenue and Third Street. Sidewalks along these routes should be maximized or augmented to reinforce their role as “people spaces” that encourage vibrant, mixed-use activities. Downey Avenue’s current design already reflects this type of emphasis. Exhibit 4.5 also identifies regional and local transit corridors, indicating the current location of the transit center from the southern edge of the Downtown Downey Specific Plan area to a more central/accessible location near the Civic Center. Consequently, roadways identified as regional transit corridors should be designed to accommodate Metro buses, while the local transit corridors should be designed to accommodate the vehicles used by the Downey Link system.

Street design features to calm traffic, identified in Exhibit 4.5, are illustrated in Exhibit 4.6. Sample measures include intersection curb extensions and raised crosswalks. Intersection curb extensions are recommended at most of the roadway intersections within Downtown. These extensions both promote pedestrian activity (by reducing the crossing distance at intersections) and also serve as traffic calming devices (by reducing the width of the roadway). Raised crosswalks can also enhance pedestrian safety and reduce vehicular speeds. Raised crosswalks are recommended on Second Street and Third Street between Myrtle Street and La Reina Avenue, as the distance between cross streets is long and the roadways in question are within the Downtown Core.

Recommendation:
Raised crosswalks are recommended on Second Street and Third Street between Myrtle Street and La Reina Avenue

Exhibit 4.6: Detailed Street Design Features

Image (right): To promote safe pedestrian crossing at major intersections in the Specific Plan area, sidewalk bulb-outs will be incorporated into sidewalk design and crosswalk lines will be added to communicate to drivers that pedestrians have the right-of-way.

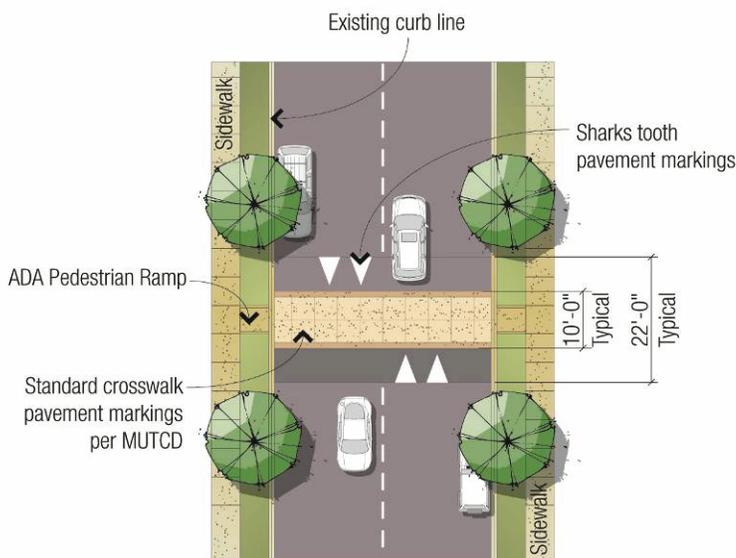
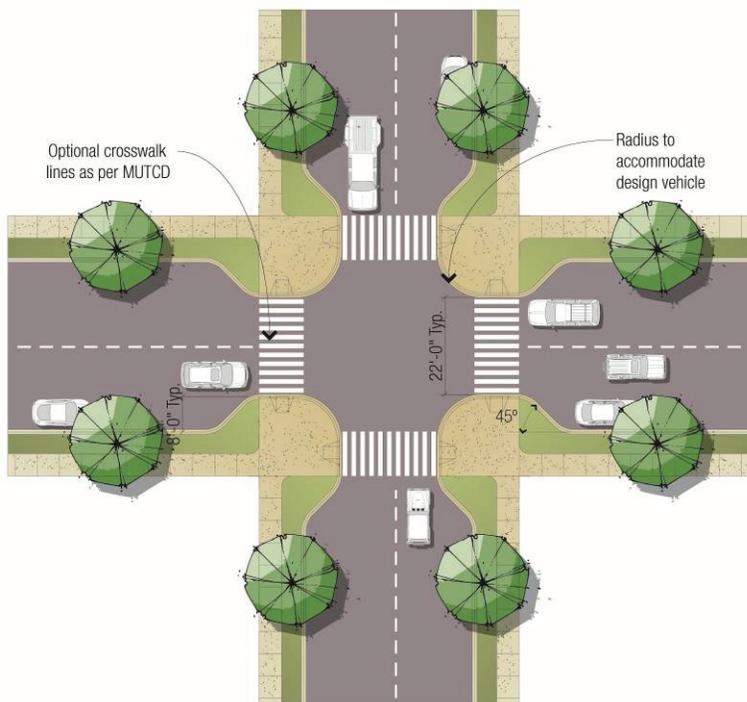


Image (left): To promote safe pedestrian crossing across roadways in the Specific Plan area, unique paving will be used to communicate to drivers that pedestrians have the right-of-way. Adding sharks tooth pavement markings will serve to notify drivers of the location of crosswalks and service as a traffic-calming device.

Exhibit 4.6 Detailed Street Design Features

Section 4 Mobility Plan

4.6 Bicycle Mobility

Bicycle use in Southern California generally has been limited to recreational and exercise use, however an increasing number of residents are beginning to commute to work by bike. Exhibit 4.7 illustrates the existing bicycle trail system within the region, which includes the Rio Hondo River trail and San Gabriel River trail.

Exhibit 4.7: Regional Bicycle Trails and Connections

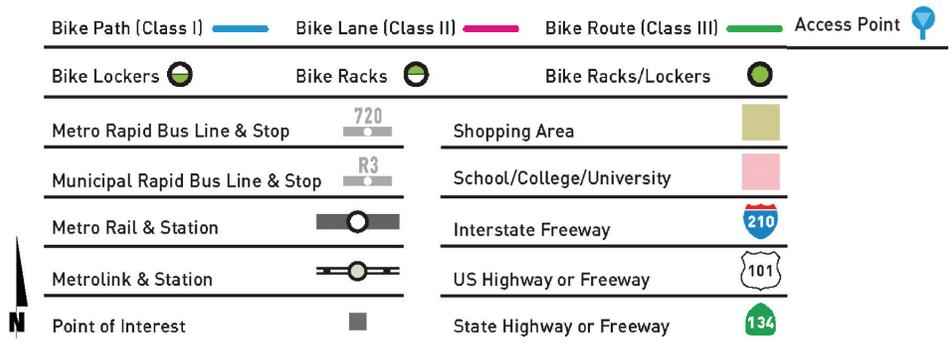
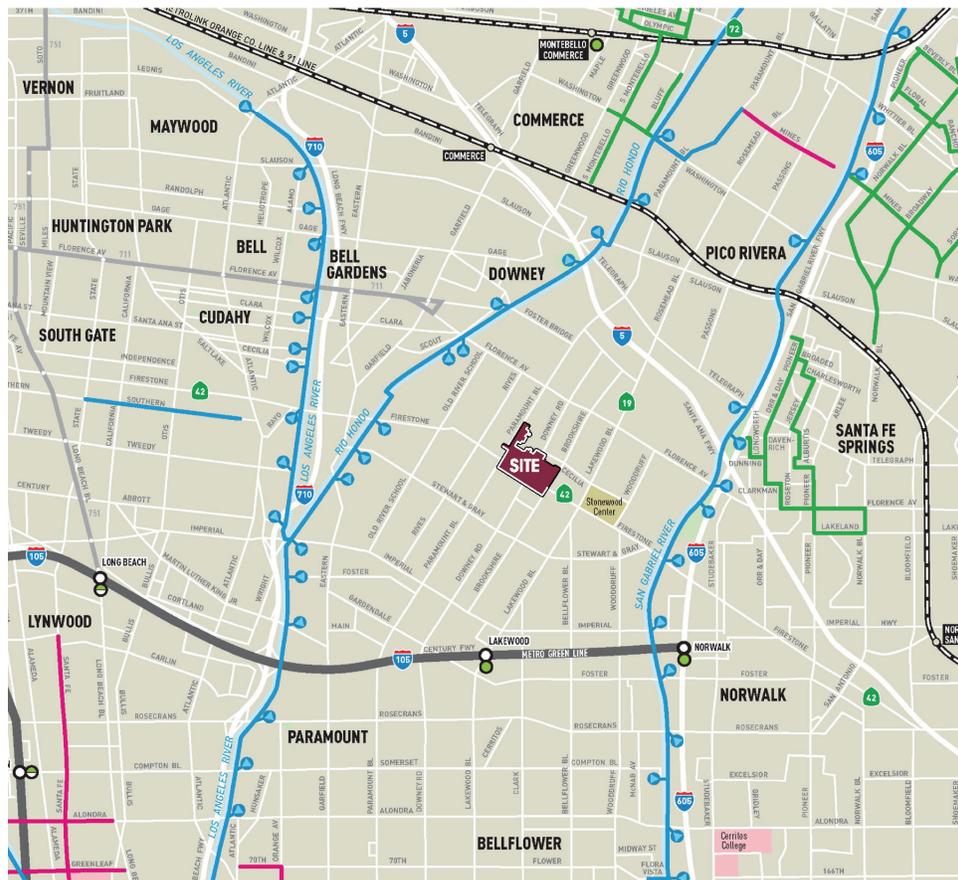
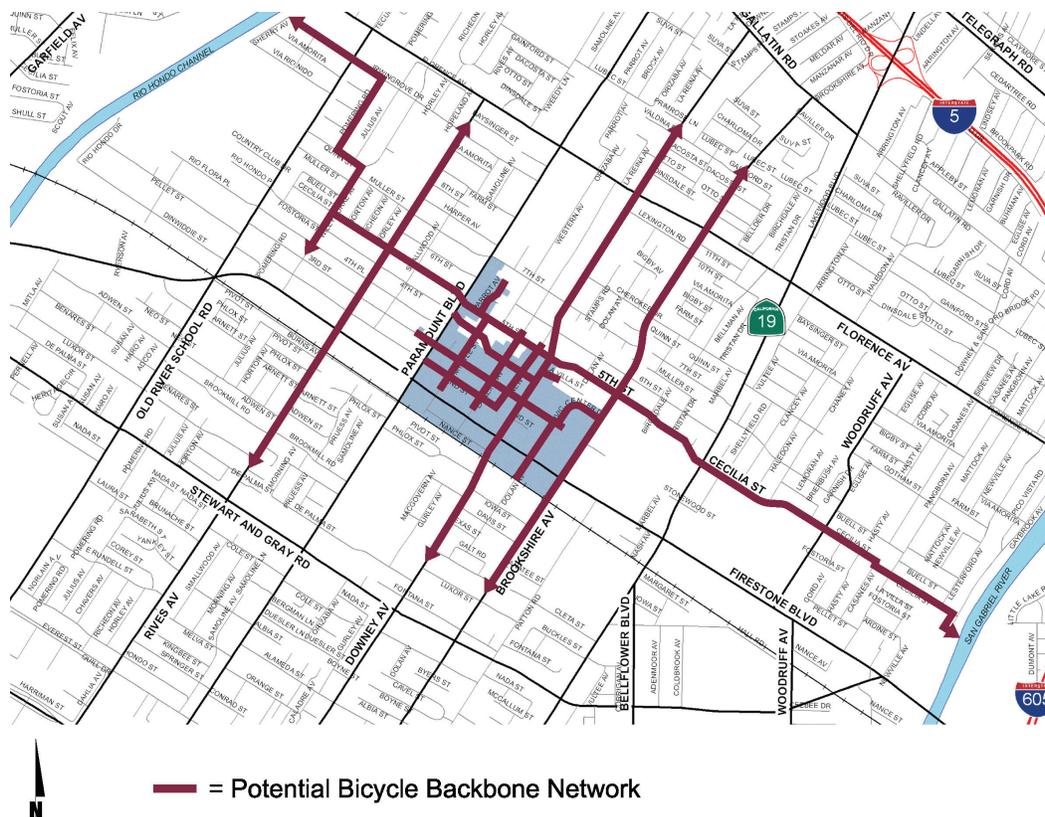


Exhibit 4.7 Regional Bicycle Trails and Connections Section 4 Mobility Plan

Although the City of Downey has not developed a bicycle master plan, the Downtown Downey Specific Plan can serve as a catalyst for creating such a plan. Exhibit 4.8 depicts a recommended bicycle backbone network that would provide access from the greater City of Downey community into the Downtown. Bicycling is an economical and healthy alternative mode of transportation. The mild local climate and relatively flat topography makes the bicycle an attractive alternative for local residents and visitors.

Exhibit 4.8: Proposed Downtown Bicycle Network



Design standards for bikeways are primarily based upon guidelines established by Chapter 1000 – "Bikeway Planning and Design" of the Caltrans Highway Design Manual. The Caltrans manual includes the following types of bikeways:

- ▶ Class I Bikeway: Provides for bicycle travel on a paved right-of-way completely separated from streets or highways. Often referred to as an off-street bike trail.
- ▶ Class II Bikeway: A striped on-street bike lane for one-way bicycle travel within the roadway.
- ▶ Class III Bikeway: An on-street bike lane for one-way bicycle travel within the roadway that is identified solely by signage and allow for bicyclists to use streets jointly with motor vehicle traffic.

Exhibit 4.8
Proposed Downtown Bicycle Network
Section 4 Mobility Plan

Image:
Bicycle lanes
incorporated
into an urban
neighborhood

The majority of the routes depicted on Exhibit 4.8 are Collector/Local Streets, and treatment as Class III (signed) bike routes is expected to provide adequate safety for all road users. Bicycle routes along Downey Avenue and Brookshire Avenue would benefit from more visible identification and control measures. The most prevalent and traditional method of accommodating bicyclists on this type of roadway is through providing an explicit (striped) Class II bike lane. However, alternatives such as the concept of "shared space" which has been implemented by the City of Long Beach and includes additional pavement markings that emphasize the shared nature of the roadway, are also worthy of consideration within and around the Specific Plan area. The east-west facilities depicted along Fifth Street and Cecilia Street east and west of Downtown are intended to provide access to the Class I facilities along the San Gabriel River and Rio Hondo Channel.



Image:
Bicycle lanes
incorporated
into a suburban
area

Bicyclists vary significantly in their skill level, comfort with cars and traffic, reasons for bicycling, and common destinations. All of these factors can affect what facilities a cyclist will use and value, and how a cyclist will use those facilities. The following definitions help to describe and assess the different needs of the cycling public; however, most bicyclists have attributes of multiple types of bicyclists.



▶ **Casual Bicyclist.** Includes those who feel less comfortable negotiating traffic, often bicycle shorter distances than experienced riders, and may be unfamiliar with many of the rules of the road. Casual bicyclists benefit from route markers and way finding signage, bicycle lanes, wider curbs, and educational programs.

▶ **Commuter Bicyclist: Employee.** Bicycle commuters who ride to work, making their entire commute by bicycle or by using their bicycle to link with other modes of transportation including buses, trains, or carpools and rideshares. Commuter bicyclists value direct

routes between residential and employment areas, safe and secure

bicycle parking facilities, and locker and shower facilities at their place of employment.

- ▶ **Commuter Bicyclist: Student.** Bicyclists who travel to and from their home and their grade school, college, or university. Grade school bicycle commuters typically commute less than five miles to school, cross few arterials, and often use the sidewalk. College and university students are likely to bicycle less than five miles as well, but may travel as long as ten to fifteen miles. Like employee commuters, student commuters are likely to value direct routes, and may be more likely than employee commuters to prefer routes with less traffic and arterial crossings.

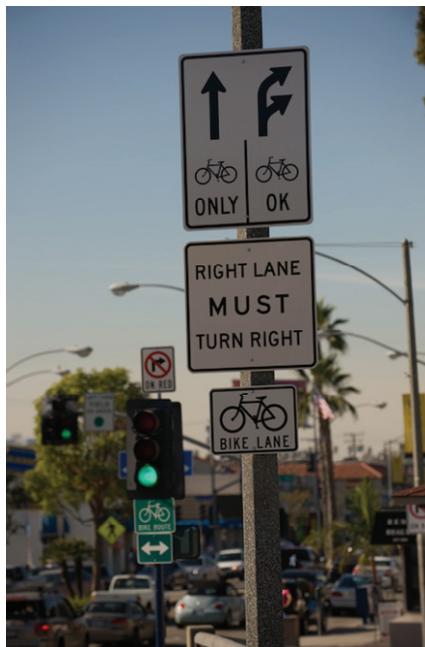


Image:
Signage directing drivers and bicyclists

- ▶ **Experienced Bicyclist.** Includes those who prefer the most direct route between origin and destination and prefer riding within or near the vehicle travel lanes. Experienced bicyclists negotiate streets in much the same manner as motor vehicles, merging across traffic to make left turns, and avoiding bicycle lanes and shoulders that contain gravel and glass. Experienced bicyclists benefit from wider curb lanes and bicycle-actuated loop detectors at signals.

- ▶ **Recreation Bicyclists: Casual Bicyclist.** Casual recreational cyclists are those who generally want to ride on off-street bikeways and cover shorter trip distances at slower speeds. Casual cyclists will tend to take trips of less than 10 miles in length, and may ride as a family group with children. Recreational destinations are also important for casual cyclists, as they provide a place to stop and get off the bike. To this end, having secure bicycle parking at destinations is important.

- ▶ **Recreational Bicyclists: Road Bicyclist.** Road cyclists bicycle almost exclusively on roadways, which accommodate higher speeds, longer distances, and few conflicts with other recreational users. Typical trip distances for the road cyclist can range from 10 miles to over 50 miles. While the average road cyclist would likely prefer to ride on roads with little or no traffic, they are generally comfortable riding in traffic if necessary. To this end, a road cyclist will tend to ride in a manner similar to a motor vehicle (e.g., when approaching traffic signals or making left turns). Road cyclists are typically not seeking a recreational destination along the route, as a ride itself is the recreation.

Bicycle amenities are physical items provided to serve the bicycling community and enhance safety and enjoyment. Bicycle amenities include landscaping, lighting, rest stops, and end-of-trip facilities. The following definitions are used to describe the types of amenities recommended within Downtown:

- ▶ **Class I Bicycle Parking Facilities.** Class I bicycle racks are stationary storage racks designed to secure the frame and both wheels of the bicycle, where the cyclist supplies only a padlock. Additionally, enclosed bicycle lockers, staffed bicycle "barns" or bicycle parking lots, unstaffed bicycle "barns" or lots that are accessible only to an exclusive set of users, or any other facilities with a locking mechanism that is not provided by the bicycle user are also considered Class I bicycle parking facilities. Class I bicycling parking facilities are recommended at the Downey Depot and the near Civic Center.
- ▶ **End of Trip Facilities.** Includes bicycle lockers, bicycle racks, and locker rooms and shower rooms that bicyclists may require at their destinations. End of trip facilities are especially important to bicycle commuters and are usually provided by employers.
- ▶ **Rest Amenities.** Includes drinking fountains, benches, picnic tables and lawn areas that directly serve users of the on-street or off-street bikeway system. Rest amenities are important for less experienced bicyclists, families bicycling with children, walkers, joggers, and seniors using the bikeway to network. These facilities should be provided within the various park and open space amenity areas.



Image (left): A Bike Station offering bicycle storage, showers and other end of ride facilities

Image (right): Bicycle lockers for storage while at work, school or in between rides

4.7 Neighborhood Electric Vehicles

An innovative alternative mode of transport recommended for consideration for Downtown is the neighborhood electric vehicle (NEV). Section 385.5 of the California Vehicle Code (CVC) defines a Low Speed Vehicle (LSV) as a motor vehicle, other than a motor truck, having four wheels on the ground that is capable of propelling itself at a lowest maximum speed of 20 miles per hour and a highest maximum speed of 35 miles per hour, on a paved level surface. Because only electric-powered LSVs are sold in California, all LSVs in California are also referred to as "Neighborhood Electric Vehicles."



Image: The GEM Peapod Neighborhood Electric Vehicle made by Chrysler

As shown in Exhibit 4.2, all roadways in the Specific Plan area, with the exception of Paramount Boulevard, have a maximum identified speed of 35 miles per hour or less. Consequently, the Specific Plan is an opportunity for the City to encourage and develop a NEV network that allows for electric vehicles to travel around the Downtown area by right. A potential NEV backbone network is illustrated in Exhibit 4.9.

Exhibit 4.9: Proposed Neighborhood Electric Vehicle Network

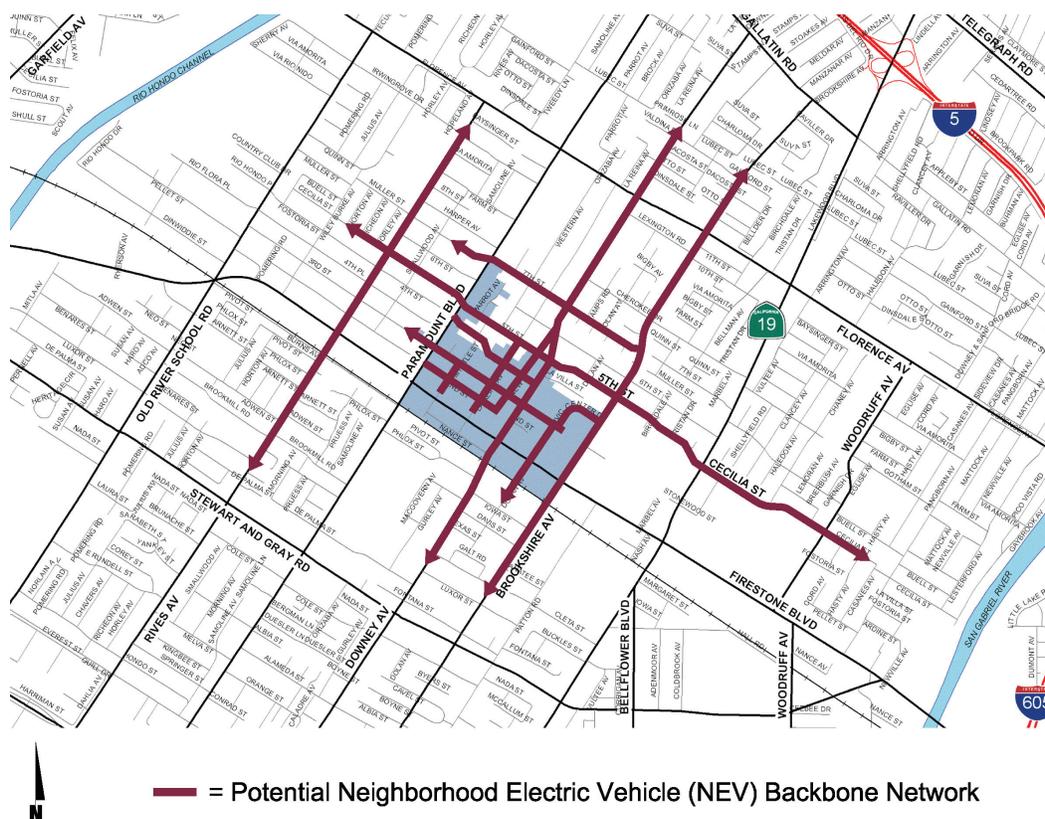


Exhibit 4.9

Proposed NEV Network

Section 4 Mobility Plan

4.7.1 State Regulations for NEVs

- ▶ **CVC Section 2160 (a)** notes that NEVs can be operated on any roadway with a speed limit of 35 miles per hour or less (unless allowed by separate legislative action). None of the backbone facilities shown on Exhibit 4.9 have a speed limit in excess of 35 MPH.
- ▶ **CVC Section 2160 (l)** allows NEVs to cross a roadway with a speed limit in excess of 35 miles per hour if the crossing begins and ends on a roadway with a speed limit of 35 miles per hour or less and occurs at an intersection of approximately 90 degrees. However, NEVs can only cross a state highway with the approval of the agency having primary traffic enforcement responsibilities.
- ▶ **CVC Section 21266 (b)** enables local law enforcement or the California Highway Patrol to prohibit the operation of NEVs on any roadway under its jurisdiction in the interest of public safety. Signs must be erected giving notice that NEVs are prohibited. Drivers of NEVs must hold a valid California Drivers License. NEVs must be registered and licensed with California State Department of Motor Vehicles
- ▶ **Assembly Bill No. 2353** was enacted in September 2004 to allow specified cities to develop "Neighborhood Electric Vehicle Plans" so that the NEVs could operate on public streets with speed limits greater than 35 miles per hour. Only two cities are currently named in AB 2353, the City of Lincoln and the City of Rocklin. NEVs operated on streets with speed limits greater than 35 mph must be operated in their own striped lane separate from general traffic. Jurisdictions that are interested in allowing NEVs to operate on streets with greater than 35 miles per hour limits (subject to a community NEV plan), must have legislative approval. Again, none of the backbone facilities shown on Exhibit 4.9 have a speed limit in excess of 35 MPH.

4.7.2 Benefits of NEVs

The NEV has the potential to be a valuable local transportation component within Downtown. It will offer residents the ability to circulate within Downtown and also to access Downtown from other parts of the City without having to start an internal combustion powered automobile engine. The NEV can be an enjoyable mode to reach nearby commercial and activity centers in Downtown, and to visit neighbors.

The benefits of NEVs include the following:

- ▶ Relatively inexpensive vehicle to own and operate
- ▶ Particularly well suited to trip lengths of 10 miles or less
- ▶ NEVs do not contribute to the air pollution caused by the cold-starts and operation of typical high speed autos

- ▶ NEVs achieve an "energy equivalent" of 150 mpg (based upon 2002 California Energy Commission report)
- ▶ By using solar or wind power to generate the electricity for these vehicles, they have potential to run fossil fuel free



In the future, there will be an expanded array of mobility options for residents to travel beyond the community. The NEV can play a central role in reaching the Downey Depot to conveniently access these mobility extensions.

The modern NEV can travel 30 miles between charges. They plug into any 110V outlet, in a garage, or at an outlet at a neighborhood commercial center. Any NEV parking site that would have NEVs parked for several hours would likely benefit from available charging infrastructure. It is recommended that new parking facilities in Downtown accommodate NEVs and provide for NEV infrastructure.

Image: The E-Car-01 Neighborhood Electric Vehicle made by Roketa offers many features of a regular car.

4.8 Mobility Recommendations

Recommendations have been developed to improve mobility in the Downtown Downey Specific Plan area. The roadway system should be enhanced in general through implementation of the cross-sections presented in Section 4.3 of this chapter. In addition, specific roadway improvements have been identified in the Downtown Downey Traffic Study and are recommended to maintain acceptable levels of service in conjunction with ongoing development. With regards to mobility in the Specific Plan area, the recommended improvements include:

- ▶ At the intersection of Paramount Boulevard and Firestone Boulevard, three through lanes should be implemented on the northbound, southbound, and eastbound approaches to the intersection. The through lanes will replace right turn lanes and will require elimination of parking. Parking restrictions could be restricted to peak hours of traffic flow.
- ▶ A traffic signal will be necessary at the intersection of Downey Avenue at Second Street to maintain acceptable levels of service at this location.
- ▶ At the intersection of Brookshire at Firestone Boulevard, a third southbound through lane should be implemented.
- ▶ Although the recommended improvements listed above are necessary to achieve an acceptable level of service, certain improvements are inconsistent with the broader goals of the Specific Plan. Therefore, the

Specific Plan should implement a program for monitoring conditions at the locations for recommended improvement and potentially fund alternative improvements such as traffic signal coordination, ridesharing, transit information kiosks, etc, or improve the infrastructure for alternative modes of transport (walking, bicycling, and neighborhood electric vehicles)

- ▶ A third eastbound through lane is required at the intersection of Downey Avenue at Firestone. This could be accomplished by eliminating parking. Parking restrictions could be restricted to peak hours of traffic flow and still achieve an acceptable level of service.

Several enhancements are also recommended with respect to the transit system serving the Downtown Downey Specific Plan area:

- ▶ The Downey Depot should be relocated from the fringe of the downtown area to a more centralized location in the vicinity of the civic center.
- ▶ Additional transit amenities in the form of bus shelters and turnouts should be provided for the bus routes that serve the downtown area.
- ▶ The Downey Link routes that serve the southern portions of the City of Downey should provide one or more direct connections to the Metro Green Line fixed rail service at the Lakewood at I-105 and / or the Norwalk at I-105 Green Line stations.