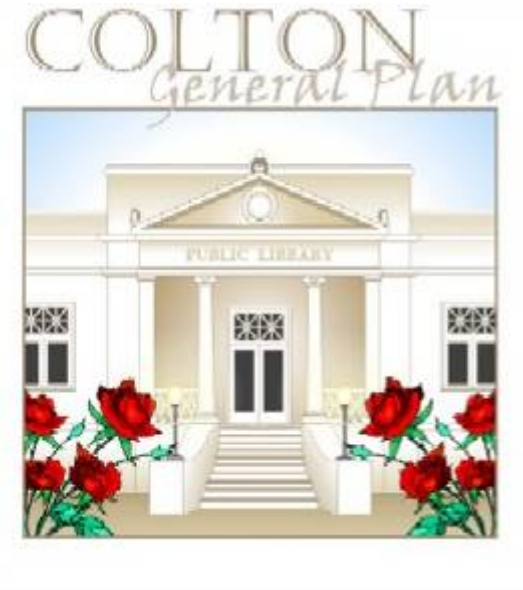

City of Colton General Plan

Mobility Element

Adopted by City Council on August 20, 2013
Resolution No. 61-13

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Framework for Mobility Planning

Mobility refers to all travel modes (cars, buses, shuttles, trucks, trains, bicycles, and walking) and the physical infrastructure (freeways, streets, rail lines, bicycle paths, trails, and sidewalks) used to move people and goods within and beyond the City of Colton. Moving people and goods efficiently and effectively contributes to an economically and physically healthy community.

This Mobility Element establishes long-term goals and policies designed to improve the local transportation system and create options for residents to move about the City. The Element balances the need for efficient traffic operations with the desire to maintain Colton as a safe and attractive community, one with walkable neighborhoods, successful business districts, and distinctive streets. Key transportation corridors—such as Mount Vernon Avenue and Valley Boulevard—must be able to accommodate new development and complement regional transportation while meeting local mobility needs. Policies in the Mobility and Land Use Elements together shape the overall physical structure and form of Colton.

Colton traces its beginnings to its founding as a railroad town. The original town of Colton, with its classic grid street network that is still evident today, was laid out when the Southern Pacific Railway (now Union Pacific) was constructed through the San Bernardino Valley on its way eastward from Los Angeles in 1875. The area around Colton was selected for a train stop instead of the City of San Bernardino due to the direct location of the town on the planned route. In fact, Colton was named for David Douty Colton, then Vice President of the Southern Pacific Railroad Company.

While the railroad defined the shape of early Colton, construction of Interstate 10 in 1957 bisected the City. Interstate 10 and later Interstate 215, opened in 1963, linked Colton by roadway to the region and the nation, but the freeways created divides that made it difficult for residents and employees of local businesses to move across town. With this Mobility Element, the City looks to re-establish connections to bind the community together again, even as large-scale improvements to rail lines and freeways proceed.

Our Vision for Mobility

Although rail lines and freeways historically have shaped urban form—and cars on the local street network have provided the primary means of local mobility—in the early 2000s the City turned its focus to developing future transportation systems that move beyond trains, trucks, and cars. Accommodations for bicyclists have been made via the bike path paralleling a former railroad line along Colton Avenue, with additional bike routes planned. The multi-use Santa Ana River Trail extends along the entire length of the Santa River within Colton. Sidewalks will be provided where they have long been missing. A bus rapid transit (BRT) line through Colton will link neighborhoods and employment centers to destinations in surrounding cities. Expansion of the successful Metrolink commuter rail line is to include a station in Colton.

How do we envision Colton as we look toward 2030 and beyond? How do we plan for efficient and safe street system and transportation alternatives for seniors and school children? What policies and programs do we put in place to attain a comprehensive circulation system that meets the needs of the Colton's diverse population? The Mobility Element provides the policy guidance to ensure that all anticipated circulation needs will be addressed and accommodated consistent with growth allowed by the Land Use Element.

Colton will accommodate circulation and mobility options beyond the automobile. In all infrastructure and development planning decisions, we will:

- *Provide for the integration of automobiles, transit, bicycles, and pedestrians within our established street network using the Complete Street system,*
- *Provide greater connectivity and reduce congestion on our street network,*
- *Promote efficient and high-quality transit use, including bus rapid transit routes and Metrolink stations in Colton, and*
- *Accommodate freight train operations that serve businesses in the City while striving to protect residential neighborhoods from the impacts of rail operations.*

Mobility Priorities

The Mobility Element establishes the vision and priorities for transportation improvements in Colton. The basis for the goals and policies reflect the following priorities expressed by Colton residents and businesses during General Plan workshops and discussions.

- **A Complete Street System.** Colton streets will be designed and built to accommodate safe and convenient access and travel for all users and modes of mobility, including motorists, bicyclists, pedestrians, transit riders, children, older adults, the mobility impaired, and transporters of commercial goods. The key to a system of Complete Streets is that the overall street system provides an integrated network that connects all parts of the City by all transportation modes, and that allows all users to move safely and conveniently.

- **Provide an efficient transportation network by increasing roadway connectivity and reducing congestion.** Rail lines, the Santa Ana River, freeways, and local topography can limit and impede connectivity. New roadway connections, selected widening of bridges and roadways, and fewer at-grade railroad/street crossings will create a more convenient and efficient street network for Colton residents and businesses.

- **Increase multi-modal transportation choices for transit, bicycling, and walking.** The Mobility Element plans for convenient access to transit and accommodation of the latest bus technologies, provides for a complete bicycle network, and enhances routes for pedestrians. These multiple transportation modes will connect many types of destinations: neighborhoods, schools, parks, employment centers, community and civic facilities, and retail and commercial centers. All neighborhoods will be within easy reach of transit service and the bicycle network. Priority includes requiring sidewalks within new developments, safe routes to schools, and improved crosswalks and an overall enhanced street environment for pedestrians.

- **Colton will build on bicycle improvements to make bicycling easier and safer within the City.** Bicycle facilities will be integrated with new development to include lockers and bike racks. Additional bike paths, lanes, and routes will be added and improved, creating a comprehensive bicycle network that connects all areas of Colton, including established trails along the Santa Ana River.

- **Create a healthy community by reducing the impacts from rail operations.** Although railroads have long been an integral economic and transportation component of Colton, the presence of rail lines and rail yards adjacent to and through residential neighborhoods has created concerns regarding noise, air pollution, and personal safety. This Element provides long-term policy guidance so that Colton residents and businesses are not impacted negatively by train operations.

Mobility Context

To understand the underlying issues and general transportation infrastructure context in Colton, this section identifies key mobility issues, as well as specific transportation-related regulations and agencies that influence mobility decisions the City makes.

Mobility Issues to Address

Primary mobility issues to be addressed through 2030 are:

- **Impacts of railroad operations on residential neighborhoods.** Rail lines run east-west and north-south through Colton. Trains waiting for other trains to cross can block intersections and create traffic congestion. Idling trains and automobiles increase air pollution. The sounds of train engines and trains horns can create significant noise impacts to residential neighborhoods in close proximity to railroad tracks.

- **Traffic delays associated with at-grade railroad crossings.** The two major rail lines that cross the City—as well as the many still-active spurs—were built at grade before the City's road network was well established and heavily used. Over the years, significant traffic delays have increased at the at-grade crossings. The City addressed the most problematic locations by reconstructing C and N Streets to dip under the railroad. With completion of the Colton Crossing and Rail Quiet Zone projects described below, additional conflicts will be avoided. However, continued increased use of the rails due to increases in regional port activity means that additional separations may be needed over time to ensure optimal operation of the road network.

- **Industrial truck traffic around residential neighborhoods.** In Colton, particularly along historical rail lines that support industrial uses, many residential properties abut industrial uses, either sharing property lines or facing on opposite street frontages. Many industrial uses involve substantial truck traffic which can adversely impact the adjoining residential properties.

- **Transportation connectivity.** Freeways, railroad lines, the Santa Ana River, and hilly topography pose connectivity barriers to the transportation network, particularly for pedestrian and bicyclists.

- **Traffic bottlenecks due to constrained capacities.** Narrow, outdated bridge designs (for example, Mount Vernon Avenue over the Santa Ana River and the Fogg Street undercrossing of the Burlington Northern-Santa Fe rail line) constrict traffic movement.

- **Pedestrian circulation.** Some commercial areas and neighborhoods lack sidewalks or have sidewalks in poor condition. These circumstances limit the ability of people—particularly folks who have personal mobility challenges—to walk in comfort and security.

- **Low-density residential neighborhoods cannot support transit.** Some of Colton's low-density residential neighborhoods do not have the population density necessary to support regular and frequent transit service.

- **Reducing vehicle trips.** Reducing vehicle trips results in positive impacts on local air quality, traffic congestion, noise, and energy consumption. Methods to reduce vehicle trips involve the arrangement and density of land uses, the appropriate location of park-and-ride facilities adjacent to freeways, and offering other convenient modes of travel.

- **Limited bicycle network.** Although Colton has several bicycle paths and routes that connect a portion of the City, overall Colton lacks a comprehensive bicycle system. Bicycle connections along major roadways and corridors are still needed. Major employment areas and commercial centers also lack basic bicycle facilities such as bicycle racks.

Transportation Projects as the City Moves forward from 2012

The City's plan for mobility works in concert with the Land Use Element. Roadway capacities will support the levels of vehicular traffic anticipated from long-term growth and community enhancement. Transit routes will serve the more densely populated areas and business districts. Bikeways and pedestrian facilities will provide improved neighborhood connections. The movement of goods by rail and road will be optimized to avoid conflicts with residential areas.

In 2012, the planning and implementation of several long-envisioned transportation-related projects got underway, and their ultimate completion are critical to achieving the mobility objectives of this Element and supporting complementary goals in the Land Use Element.

Colton Crossing

Colton Crossing is a major project to eliminate the freight bottleneck at the Union Pacific Railroad (UPRR) and Burlington Northern-Santa Fe Railway (BNSF) lines that intersect each other at grade. As trains idly wait for other trains to clear the crossing, streets along the rail lines are regularly blocked by waiting trains, thus backing up road traffic and resulting in temporary inaccessibility into residential neighborhoods. With the Colton Crossing project, the UPRR east-west tracks are to be elevated for their length through Colton, allowing BNSF trains to run underneath. Specific project objectives include:

- Improve regional rail mobility and efficiency by eliminating the conflicting train movements at the Colton Crossing.
- Relieve congestion by removing idling trains that block local streets around Colton Crossing.
- Discourage a shift in goods movement from rail to truck because of conflicting train movements that cause delays and inefficiencies in rail traffic through the Colton Crossing.
- Support regional passenger rail service by minimizing delays at the Crossing, thus improving the operation and efficiency of passenger rail.

The elevated UPRR mainline will extend from Rancho Avenue to Mount Vernon Avenue and support two UPRR mainline tracks and a maintenance road. The long-existing southerly mainline track will remain operational at grade to provide local access between the West Colton Yard and East Colton Yards, and for local connecting trains between BNSF and UPRR.

Colton Crossing railroad intersection before construction of the elevated UPRR line (2011)

Quiet Zone

To alleviate the impacts of train horn noise on residents in neighborhoods near rail lines, the City, in concert with the State Public Utilities Commission and the affected railroad companies, has implemented a quiet zone strategy for north-south bound trains on the BNSF line. Quiet zones are sections of the railroad corridor where train crews are not required to sound the horn at railroad crossings. The City will eliminate road crossings at D, E, and H Streets. These street crossing closures will divert through vehicular traffic to C Street, where a grade crossing provides access to areas west of Downtown, and Laurel Street.

As part of the quiet zone project and to compensate for the road closures, the San Bernardino Associated Governments (SANBAG) plans for the construction of a bridge at

Laurel Street to separate vehicles and pedestrians from rail traffic along the BNSF railroad tracks.

Railway/Roadway Interface

Mount Vernon Avenue Bridge Widening

The widening of the Mount Vernon Avenue bridge over the UPRR lines will ease congestion associated with freeway access to south Colton. The widening project involves the stretch of Mount Vernon Avenue between the 1-10 freeway ramp and M Street, with the bridge width to increase from two lanes to four. This project will significantly improve traffic congestion in this area to due to the limited roadway connectivity over the I-10 freeway, Santa Ana River, and UPRR lines.

Hunts Lane Grade Separation Project

The construction of a grade separation over the UPRR tracks is planned at Hunts Lane in the cities of Colton and San Bernardino. The project will provide a bridge over the railroad tracks that cross Hunts Lane to eliminate the need for motorists to wait for trains. The new bridge will accommodate two traffic lanes and a sidewalk in each direction, and will raise the height of Hunts Lane from just south of Riverwood to north of Oliver Holmes Road.

Freeway Improvements

Freeway Widening and Related Improvements

Planned improvements by the California Department of Transportation (Caltrans), Southern Californian Association of Governments (SCAG), and SANBAG to the I-10 and I-215 freeways include the following:

- **Interstate 10.** Addition of High Occupancy Vehicle (HOV) lanes on each direction of I-10 freeway, improvements to the interchange at Rancho Avenue, La Cadena/9th Street, Pepper Street, and widening of the Mount Vernon bridge crossing of the Santa Ana River

- **Interstate 215.** Addition of HOV lanes and additional mixed flow lanes on each direction of the I-215 freeway between the Riverside County line and Orange Show Road

Mount Vernon/Washington Street Bridge Widening

The Washington Street/Mount Vernon Avenue interchange with the I-215 freeway has long been inadequate in terms of design and capacity. A proposed new interchange will relieve traffic delays in this heavily traveled area, which includes a large concentration of retail centers, restaurants, and recreational vehicle dealerships. The interchange provides access to Colton, Grand Terrace, and Loma Linda. Because of the regional importance of this interchange, SANBAG has advanced this project to coincide with the I-215 Bi-County High Occupancy Vehicle (Carpool Lane) Gap Closure Project. The project will replace the Washington/Mount Vernon interchange to allow for future widening of the freeway. This

work will involve realigning the on-ramps, off-ramps, and local streets, plus improve traffic flow by allowing higher traffic volumes on the new bridge and ramps.

Regulations and Agencies Affecting Transportation Decisions

Regional Transportation Plan

The Regional Transportation Plan (RTP) is a 25-year plan prepared by SCAG. The RTP provides a vision for transportation investment in Southern California. Updated every four years to address changing conditions in the southland, the RTP is developed with active participation from local agencies throughout the region, elected officials, the business community, community groups, private institutions and private citizens. The RTP sets broad goals for the region and provides strategies to reduce problems related to congestion and mobility. All of the following RTP goals are relevant to Colton:[1]

1. Maximize mobility and accessibility for all people and goods in the region.
2. Ensure travel safety and reliability for all people and goods in the region.
3. Preserve and ensure a sustainable regional transportation system.
4. Maximize the productivity of our transportation system.
5. Protect the environment, improve air quality and promote energy efficiency.
6. Encourage land use and growth patterns that complement our transportation investments and improve the cost-effectiveness of expenditures.
7. Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

SANBAG

The San Bernardino Associated Governments, or SANBAG, is the council of governments and transportation planning agency for San Bernardino County. SANBAG is responsible for cooperative regional planning and furthering an efficient multi-modal transportation system countywide. As the County Transportation Commission, SANBAG supports freeway construction projects, regional and local road improvements, train and bus transportation, railroad crossings, call boxes, ridesharing, congestion management efforts, and long-term planning studies. SANBAG prepares and implements the Congestion Management Plan, described below, and administers Measure I, the half-cent transportation sales tax approved by County voters in 1989.

SANBAG's mission is to enhance the quality of life for all residents in San Bernardino County by:

- Improving cooperative regional planning
- Developing an accessible, efficient, multi-modal transportation system

[1] Southern California Association of Governments (SCAG) 2004 Regional Transportation Plan. May 2008.

- Strengthening economic development efforts
- Exerting leadership in creative problem solving

San Bernardino County Congestion Management Plan (CMP)

Urbanized areas such as San Bernardino County are required by State law to adopt a Congestion Management Plan (CMP). The goals of the CMP are to reduce traffic congestion and provide a mechanism for coordinating land use development and transportation improvement decisions. Local agencies are required to establish minimum level of service (LOS) thresholds in their general plans, and to conduct traffic impact assessments on individual development projects. Deficiency plans must be prepared when a development project would cause LOS F on non-exempt CMP roadway segments. The deficiency plans outline specific mitigation measures and a schedule for mitigating the deficiency. [2]

To help fund regional transportation system improvements identified in the CMP, SANBAG has established a Development Mitigation Program. Developers are required to pay impact fees to fund their "fair share" of improvements per formulas adopted by SANBAG.

Measure I Strategic Plan

Measure I, which is administered by SANBAG, is San Bernardino County's half-cent transportation sales tax. In 2004, over 80 percent of voters approved the extension of Measure I to allow for funding through 2040. Measure I funds provide monies for ongoing street maintenance, bike lane improvements, road widening, paving, landscaping, and bridge replacement. Specific improvement projects in Colton funded through Measure I include:

- I-10 widening (adding high-occupancy vehicle lanes) on I-10 through Colton
- I-215 widening (adding general purpose lanes) through Colton
- Improvements to I-10 interchanges at Pepper Avenue and Mount Vernon Avenue
- Road improvements on Riverside Avenue, Valley Boulevard, La Cadena Drive, Mount Vernon, Fairway Drive, San Bernardino Avenue, C Street, Mill Street, Washington Street, Barton Road, and Reche Canyon Road
- Rail and street grade separation projects at Hunts Lane, Olive Street, Mount Vernon, and Valley Boulevard
- Metrolink line improvements through Colton
- Potential bus rapid transit (BRT) route through Colton
- Discount bus fare for seniors and persons with disabilities
- Programs such as traffic signal synchronization, ride-share for commuters, and Freeway Service Patrols [3]

[2] San Bernardino Associated Governments (SANBAG) 2007 Congestion Management Project for San Bernardino County. December 2007.
[3] San Bernardino Associated Governments (SANBAG) Measure I Strategic Plan. April 2009.

Level of Service Criteria for Measuring Performance

To describe how a roadway or intersection functions in terms of moving traffic, traffic conditions are typically rated using the concept of Level of Service, or LOS. The LOS expresses the relationship between the capacity of a given street and the amount of traffic that the street carries (volume-to-capacity Ratio). Levels of service describe a range of roadway or intersection operating conditions from LOS A (excellent conditions) to LOS F (very poor conditions). Table M-1 indicates the conditions associated with each service level.

Table M-1:
Level of Service Descriptors

Level of Service (LOS)	Level of Service Description	Volume to Capacity Ratio
A	**Excellent Operation.** All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	<0.600
B	**Very Good Operation.** Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized, and traffic queues start to form.	0.601 - 0.700
C	**Good Operation.** Occasionally drivers may have to wait more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 – 0.800
D	**Fair Operation.** Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900
E	**Poor Operation.** Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901 – 1.000
F	**Forced Flow.** Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	Over 1.001

These performance standards may require, but are not intended to mandate, the widening of roadways and/or intersections. They represent goals used to monitor traffic conditions and to assess traffic impacts of development projects. Because LOS standards apply only to vehicular mobility and do not account for enhanced pedestrian movement or other modes, the City will not use them as the sole criteria for judging transportation system performance. Pedestrian convenience, neighborhood and district character, transit access and operations, urban aesthetics, and other factors will be considered.

Circulation Plan: Streets

Complete Streets

The Complete Streets initiative was made into law in California in 2008. Modeled on federal policies aimed at reinventing the function and form of city streets to accommodate multiple mobility modes, State regulations require jurisdictions to change the approach to designing and using roadways. Streets are no longer considered the sole domain of the car. Streets can be designated, designed, and re-purposed to have primary functions as a car corridor, a transit corridor, and bike corridor, or some symbiotic combination. Successful long-term implementation of Complete Streets is intended to result in:

- More options for people to go from one place to another
- Less traffic congestion and reduced greenhouse gas emissions
- More walkable communities (with healthier, more active people)
- Fewer barriers for older adults, children, and people with disabilities

The City of Colton's Complete Streets plan provides direction for the design and operations of the entire street system to enable access for all users regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network more accommodating for drivers, transit users, pedestrians, and bicyclists.

Circulation Plan

Colton's Circulation Plan consists of two key components: the Street Typology exhibit (Figure M-1) and the Street Classification exhibit (Figure M-2). The Street Typology exhibit identifies the primary function of select streets as they relate to the adjacent land uses and modes (e.g., walking, biking, transit, and automobile) that each will primarily accommodate. The Street Classification System exhibit identifies the planned physical design of all streets.

Street Typology

To ensure a balanced, multi-modal transportation network, the Mobility Element organizes streets and other transportation facilities according to typologies that consider the context and prioritize different travel modes for each street. Together, the typologies provide a network of Complete Streets to accommodate all types of local transportation modes. These typologies will guide the development of standards to ensure transportation plans and improvements consider relationships to surrounding land uses, appropriate travel speeds, and the need to accommodate multiple travel modes and

various users. The following typology definitions apply to the streets and other facilities shown in Figure M-1. The specific configuration for each individual street may be slightly different due to the unique needs and surrounding land uses on each street, and the standards established by the Street Classification Plan.

- Transit Street
- Bicycle Street
- Pedestrian Street
- Multi-Modal Connector Street
- Local Street
- Regional Access Roadways

Transit Street

Transit Streets are primary routes intended for local bus routes and a future bus rapid transit (BRT) system. Signal preemption for BRT (where red lights are shortened and switched to green as a bus approaches), dedicated bus lanes, and BRT stations are provided. Other travel modes—including automobiles, trucks, and bicycles—are accommodated on a Transit Street, but if there are conflicts, transit has priority. These streets accommodate moderate to high volumes of through traffic within and beyond the City. As most transit trips also involve some walking, pedestrians are accommodated with ample sidewalks on both sides of the street, and pedestrian amenities are enhanced around transit stops.

Bicycle Street

Bicycle Streets are through routes for bicycles, providing continuous access and connections to the local and regional bicycle route network. Local automobile, truck, and transit traffic are accommodated in the roadway, but in the event of conflict, bicycles have priority. Neighborhood traffic management strategies can be implemented to slow and calm automobile and truck traffic. Pedestrians are also accommodated.

Pedestrian Street

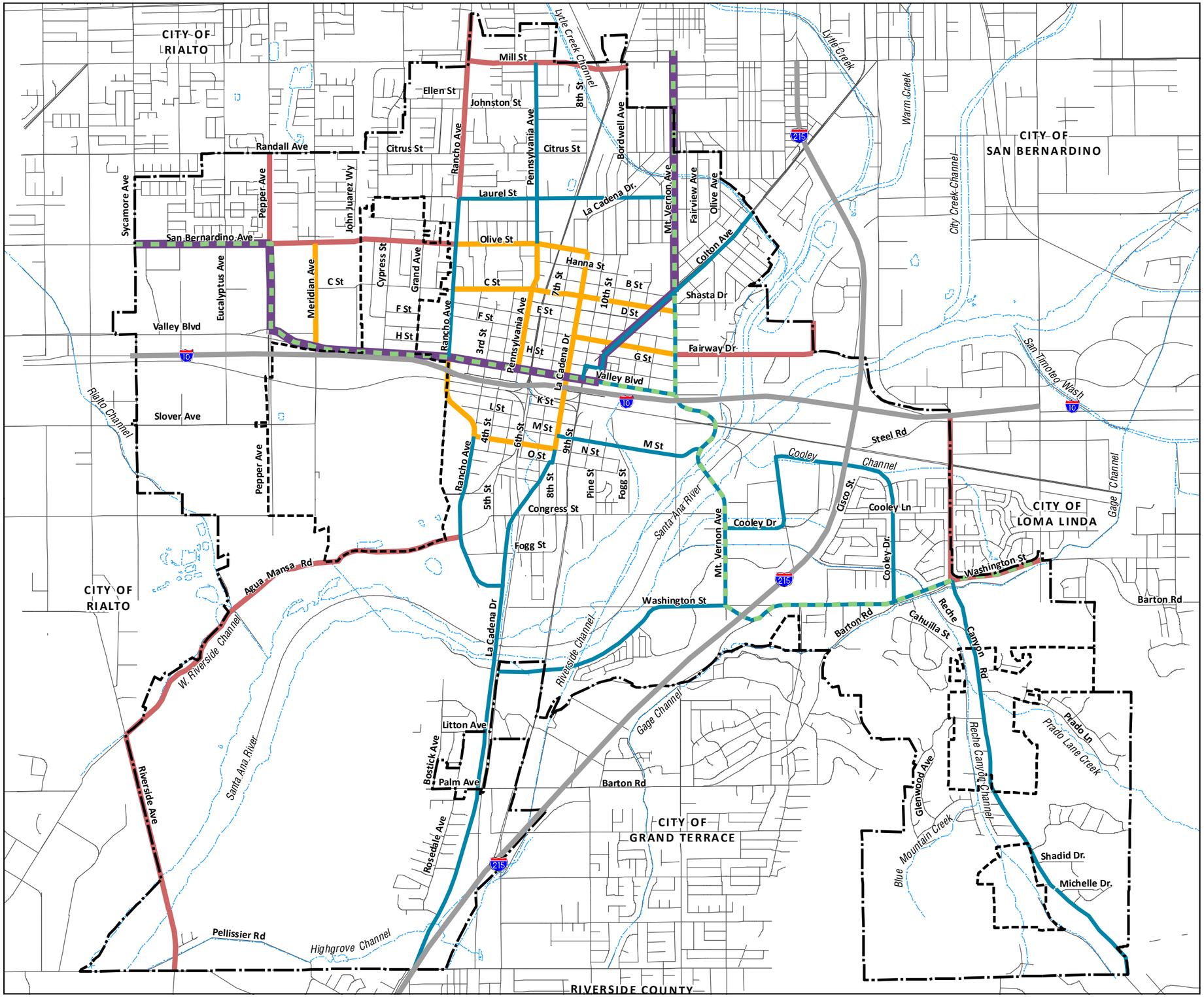
Pedestrian Streets are streets on which exceptionally high volumes of pedestrian traffic are encouraged. Pedestrian streets are located primarily in Downtown Colton. Sidewalks may be wider with ample pedestrian amenities. Building frontages provide a high level of pedestrian interest, and pedestrian crossings have a high priority at intersections. In some locations, well-protected mid-block crosswalks may be appropriate. These streets also discourage high-volume and high-speed vehicular traffic, adding to pedestrian comfort and convenience. In the event of conflicts, pedestrians have priority.

Multi-Modal Connector Street

Automobiles, transit, bicycles, and pedestrians are accommodated equally on a Multi-Modal Connecter Street. Some transit options may also be provided. These streets accommodate moderate to high volumes of through traffic within and through the City. Pedestrians are accommodated with sidewalks. Bicycle lanes are provided where feasible.

Figure M-1:

Roadway Typology



Roadway Typology

- MultiModal
- Transit Street
- Bicycle Street
- Pedestrian Street
- Regional Access Roadways

Boundaries

- City Boundary
- Sphere of Influence
- Railroad Tracks
- Watercourse

Date: October 20, 2012
Prepared by: Hogle-Ireland, Inc.
Source: San Bernardino County Assessor, 2010 and City of Colton, 2011.

0 2,000 4,000 6,000 8,000 Feet

Back side of Figure M-1: Roadway Typology

Local Street

Automobiles, bicycles, and pedestrians are accommodated equally on a Local Street. Transit use, if any, is incidental. These streets accommodate low volumes of local traffic and primarily provide access to abutting properties. Through-traffic is discouraged, and truck traffic is prohibited. Neighborhood traffic management strategies can be implemented to slow and discourage through automobile and truck traffic, as appropriate. Pedestrians are accommodated with sidewalks.

Regional Access Roadways

These are roadways that have priority treatment to accommodate higher-speed regional motor vehicle traffic and commerce such as delivery trucks and long-haul trucks. Bicycle and pedestrian travel are typically de-emphasized, but safe pedestrian access should continue to be provided on sidewalks. These roadways provide connections to nearby destinations and the region.

Table M-2:
Roadway Typology and Travel Mode Priorities

General Roadway Typology	Transit	Pedestrians	Bicyclists	Vehicles	Trucks
Transit Street	●	○	○	○	○
Bicycle Street	◘	○	●	○	◘
Pedestrian Street	○	●	○	○	◘
Multi-Modal Connector Street	○	○	○	○	◘
Local Street	◘	○	○	○	◘
Regional Access Roadways	○	○	◘	●	●

●=Dominant, ○=Accommodated, ◘=Incidental

Street Classification System

The Street Classification System Plan, illustrated in Figure M-2, identifies the various roadway classifications based on traditional functional roadways classifications:

- Freeways
- Major Arterials
- Secondary Arterials
- Collector Streets
- Local Streets

These traditional classifications can correlate to the different roadway typologies and have been expanded to incorporate the multi-functional nature of a Complete Streets network.

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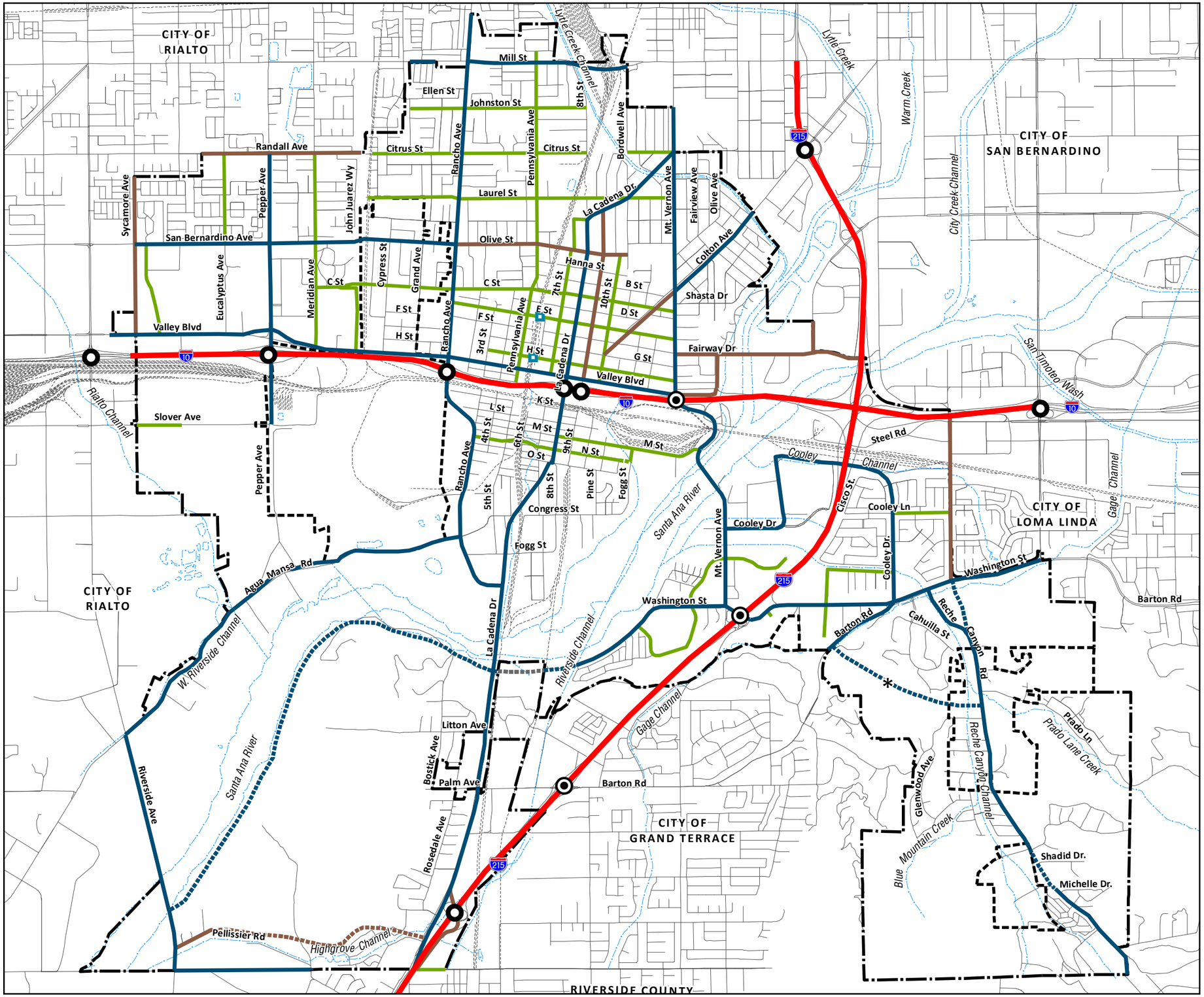
Figure M-2:

Street Classification Plan



Circulation Plan

- Freeway
- Major Arterial
- Planned Arterial
- Secondary Arterial
- Planned Secondary
- Collector Street
- Planned Collector
- Planned Roadway Located in Another City

* Conceptual roadway location. Final roadway location to be determined on proposed subdivision design.

Freeway Interchanges

- Interchanges
- Interchanges with Planned Improvements

Street Closure

- Street Closure (BSNF Quiet Zone Project)

Boundaries

- City Boundary
- Sphere of Influence
- Railroad Tracks
- Watercourse

Date: January 5, 2012
Prepared by: Hogle-Ireland, Inc.
Source: San Bernardino County Assessor, 2010 and City of Colton, 2011.

0 2,000 4,000 6,000 8,000 Feet

Backside of Figure M-2: Circulation Plan

Freeways

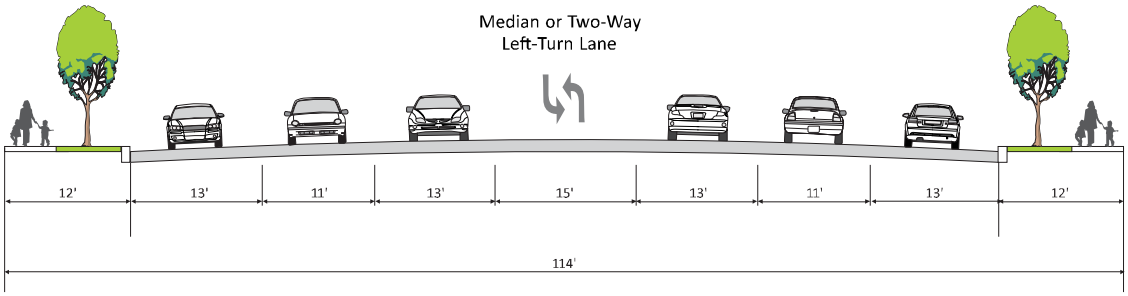
Freeways are multi-lane, limited access, high-volume, high-speed roadways constructed for regional and interregional vehicular travel. Access to these facilities is restricted to interchange ramps at selected roadways. Freeways are under the jurisdiction of the California Department of Transportation. Two freeways traverse Colton: Interstate 10 and Interstate 215.

Major Arterials

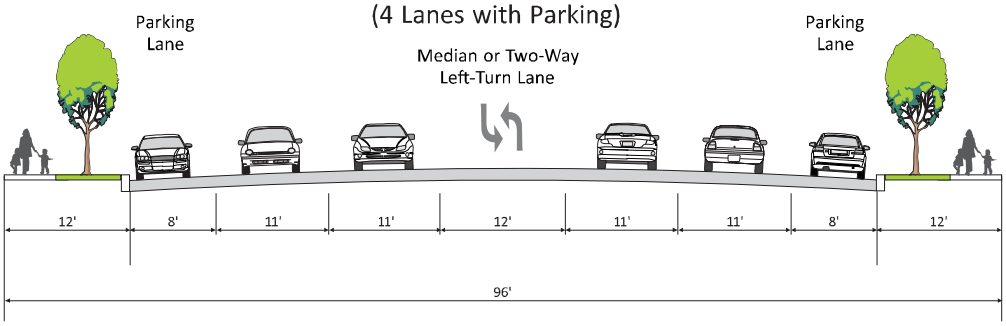
Major Arterials are roadways designed to move large volumes of traffic, linking freeways with local streets and providing access between cities and subregions. They carry high traffic volumes and are designed for high speeds, and provide routes for regional transit. Major Arterials may also serve as primary truck routes. On-street parking may be prohibited during peak periods or continuously to allow the street to perform as planned.

Major Arterials: Pepper Avenue, San Bernardino Avenue, Rancho Avenue, La Cadena Drive, Mill Street, Mount Vernon Avenue, Colton Avenue (east of Mount Vernon Avenue), Valley Blvd, Washington Street, Barton Road, and Reche Canyon Road

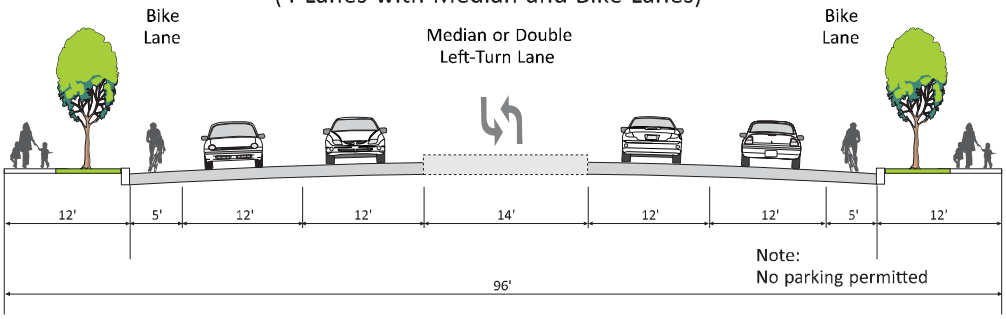
Major Arterial - Six-Lane



MajorArterial - Type A
(4 Lanes with Parking)



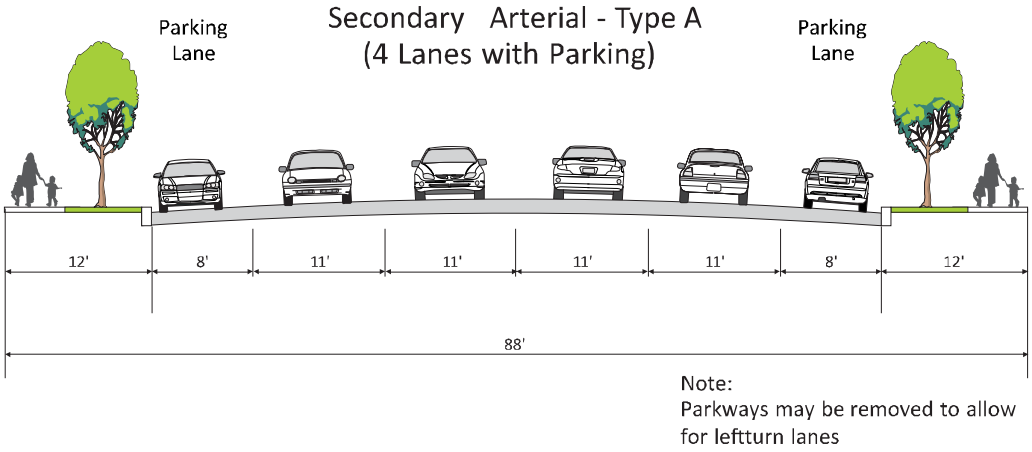
Major Arterial - Type B
(4 Lanes with Median and Bike Lanes)

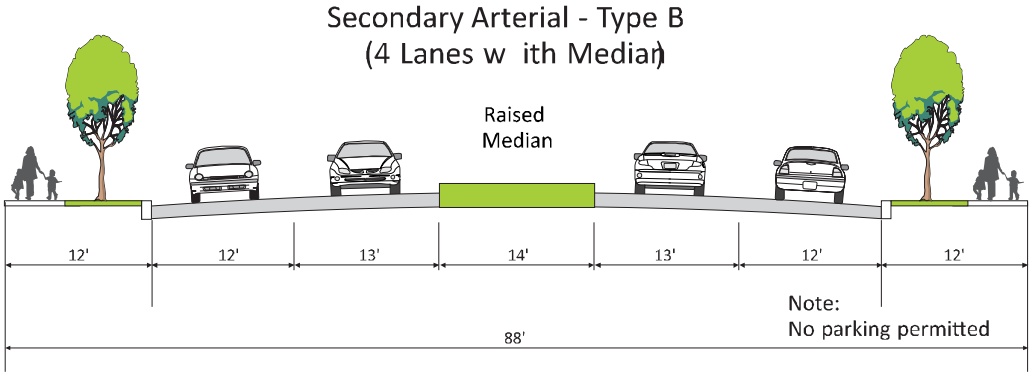


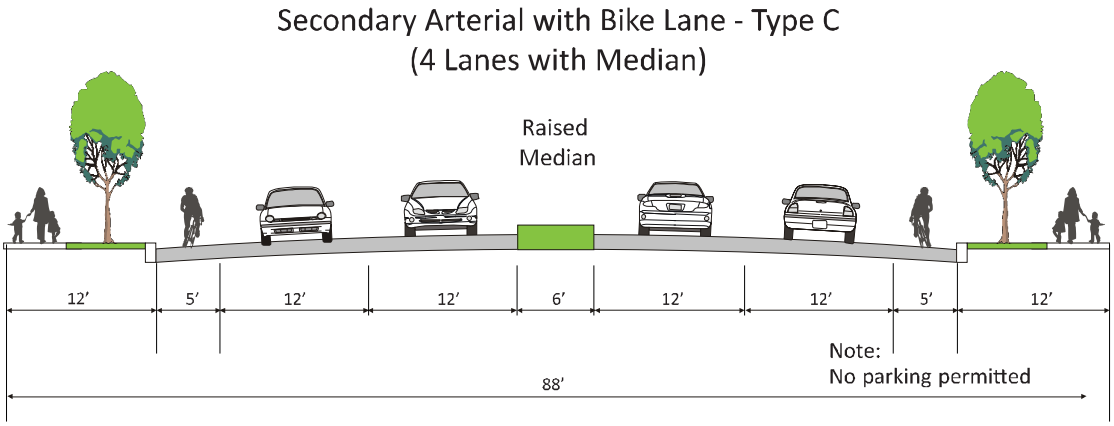
Secondary Arterials

Secondary Arterials provide access within the City, connecting traffic to districts and neighborhoods in Colton. Designed for intermediate speeds, Secondary Arterials accommodate on-street parking during most of the day.

Secondary Arterials: Olive Street, 9th Street, Colton Avenue (west of Mount Vernon Avenue), Randall Avenue, Fairway Street, Meridian Avenue, Sycamore Avenue, and Hunts Lane





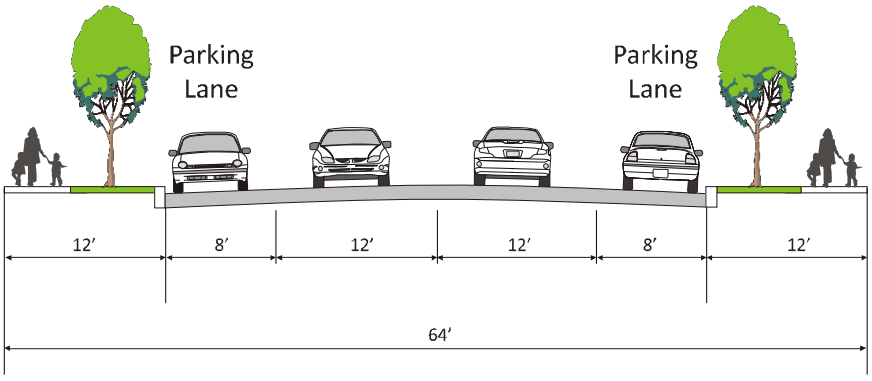


Collector Streets

Collector Streets provide a transition between local streets and higher-speed arterial roadways. These roadways are often designed for low speeds and generally provide on-street parking.

Collector Streets Examples: Citrus Street, Laurel Street, C Street, E Street, H Street, M Street, N Street, Pennsylvania Avenue, 7th Street , N Street, M Street, and 10th Street

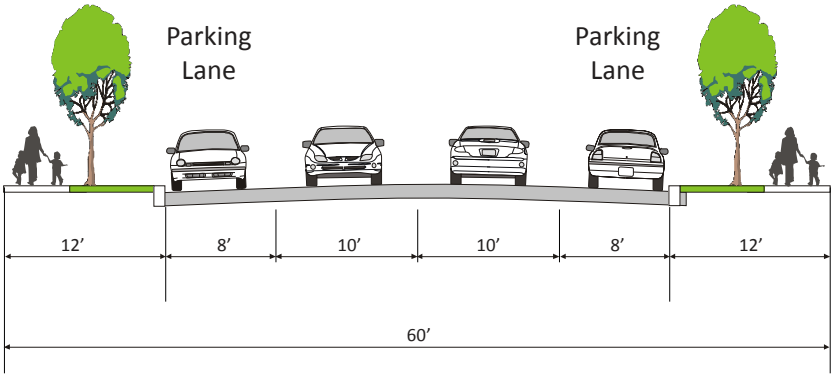
Collector Street
(2 Lanes with Parking)



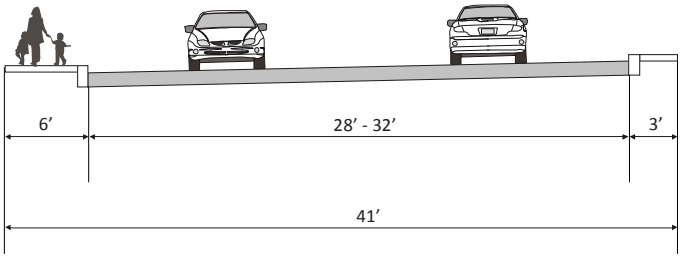
Local Streets

Local streets are neighborhood roadways designed to provide vehicular, pedestrian, and bicycle access throughout the City. They are intended to carry low volumes of traffic at low speeds and allow on-street parking. Traffic-calming measures can be implemented to discourage or prevent through traffic. All unclassified roads on the Circulation Plan are designated as a Local Street. In hillside areas, the City has adopted a separate standard for Local Streets.

Local Street
(2 Lanes with Parking)



Hillside Local Street
(2 Lanes)



Special Roadway Considerations

Colton has an extensive street network connecting neighborhoods and districts. The typologies and roadway classifications presented above are meant to establish consistent standards for the design, construction, and maintenance of the City roadways. There are several streets that serve special functions with unique design characteristics that must be enhanced or protected. Each has a unique history and role in the formation of Colton and will continue to provide connectivity throughout the City. The following provides a description of the long-term priorities for the special roadways.

Valley Boulevard

Valley Boulevard is a major east-west roadway paralleling I-10 and connecting Colton westerly to Rialto, Fontana, and Ontario. Valley Boulevard is classified as a Major Arterial. Along particular segments, Valley Boulevard serves as a Transit Street, recognizing its cross-city connector function and potential to accommodate BRT lanes. On the west side of Colton between the western City limits and Rancho Avenue, Valley Boulevard will primarily carry transit and cars. Between Pennsylvania Avenue and 10th Street, Valley Boulevard will transition into a pedestrian-friendly roadway as it traverses Downtown Colton. The key objective for Valley Boulevard is to accommodate multiple modes of transit.

Valley Boulevard at Pepper Avenue, near the I-10 freeway interchange

Mount Vernon Avenue

Mount Vernon Avenue is a north-south roadway that moves traffic from I-10 and Valley Boulevard north through Colton into the City of San Bernardino. South of Valley Boulevard, Mount Vernon crosses the Santa Ana River and connects to I-215. With planned improvements to the bridge and the interchange, Mount Vernon will be able to provide improved north-south mobility. Thus, it is identified as a Transit Street between Colton Avenue and the northern City limits, as it could accommodate future BRT. The entire roadway is designated a Major Arterial.

North of I-10, the City has invested in street landscaping, classic-style street lamps, and other enhancements to create a more attractive streetscape. Mount Vernon Avenue along this stretch is envisioned as a Transit and Pedestrian corridor that serves pedestrian-scale land uses and higher-density residential uses near La Cadena Drive. With the presence of the community college at the north end (just outside of the City limits) and opportunities along the street for neighborhood-serving commercial uses, Mount Vernon can be transformed to a much more walkable and enjoyable corridor for the neighborhoods the street directly serves.

Mount Vernon Avenue north of I-10

La Cadena Drive

La Cadena Drive is the historic spine of Colton, connecting Downtown Colton to south Colton and to the southern residential neighborhoods bordering the La Loma Hills.

North La Cadena Drive, between Valley Boulevard and C Street, is envisioned as a pedestrian-oriented street serving Downtown Colton. The long-term goal for this street section is to return the street to its “Main Street” function in Downtown Colton, with wider sidewalks and pedestrian amenities, including street furniture and enhanced street crossings. The street design will reinforce the Mixed Use-Downtown land use designation, which emphasizes pedestrian comfort and convenience. Vehicular and transit vehicles will also be accommodated, but at a lower priority than pedestrians. Design components will be established in the Downtown Colton Specific Plan.

South La Cadena Drive, from Valley Boulevard to the southern City limit, will have the primary purpose of moving vehicles efficiently and safety. Pedestrian improvements will be provided as needed to serve the abutting commercial properties and to allow safe pedestrian crossing of this busy street.

To meet the goal of improving the pedestrian environment of La Cadena Drive and also accommodating vehicles along this street, traffic improvements include adding additional traffic signals at intersections where signals are warranted, between Valley Boulevard and C Street.

North La Cadena Drive just north of Valley Boulevard

Colton Avenue

Colton Avenue traverses diagonally across the east edge of Downtown and links Colton to retail shopping centers in San Bernardino. A portion of the Colton Avenue right-of-way previously included a Southern Pacific rail line. The former rail line now accommodates the Colton Avenue Bike Path, a Class I bicycle route. (See the Bicycle Plan section of this Element for descriptions for the various bike route classifications.) The street is identified in Figure M-1 as a Bicycle Street. Between 10th Street and Mount Vernon, Colton Avenue will accommodate BRT. This roadway and bicycle path can provide bicycle, vehicle, and potential transit mobility from the northeast residential neighborhoods into Downtown Colton. To make bicycle and pedestrian mobility more desireable and reduce vehicle speeds on Colton Avenue, the City will investigate appropriate and effective traffic-calming approaches consistent with adopted traffic-calming policies.

Bike path located along the Colton Avenue right-of-way

San Bernardino Avenue/Olive Street

Through western San Bernardino County cities, San Bernardino Avenue serves as a cross-town arterial route. As it passes into Colton, it becomes Olive Street and functions more as a local street, serving residential neighborhoods north of Downtown. Between the western City limits and Pepper Avenue, San Bernardino Avenue may become part of a countywide BRT system. In Colton, this will provide an important commuter tie to the Arrowhead Regional Medical Center and mixed-use developments within the West Valley Specific Plan area. The key objective for the San Bernardino Avenue corridor is to accommodate transit, vehicles, and pedestrians as development occurs within the West Valley Specific Plan.

Pepper Avenue

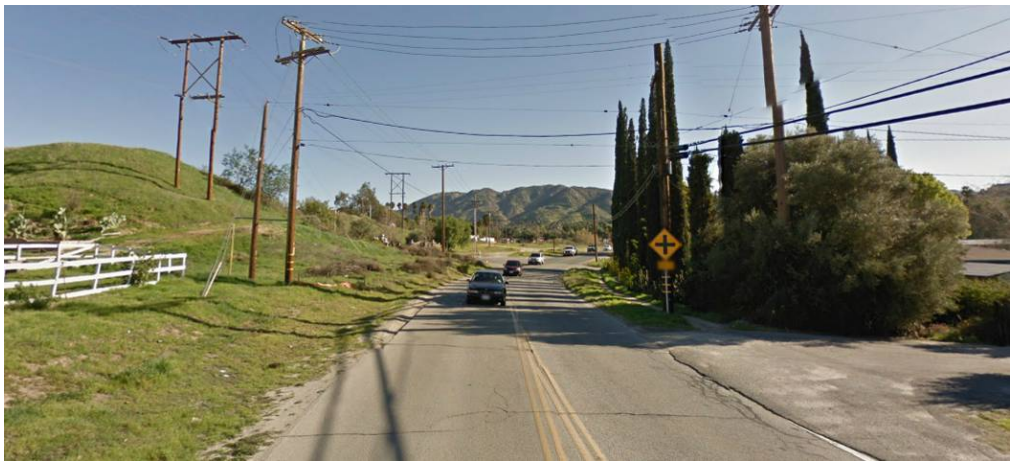
Pepper Avenue Pepper Avenue is a Major Arterial that provides north-south access in west Colton to the I-10 freeway, between Randall Avenue and Slover Avenue. The portion of Pepper Avenue between San Bernardino Avenue and Valley Boulevard will be part of the BRT system. Objectives for Pepper Avenue are to accommodate vehicles, transit, and pedestrians north of the I-10 freeway. Over the very long term, the City will investigate whether a more southerly extension of Pepper Avenue is warranted based on traffic flows.

Rancho Avenue

Rancho Avenue is a major north-south roadway primarily intended to move traffic between I-10 and South La Cadena Drive, where it serves industrial uses along this corridor. Because of the economic importance of the industrial district to Colton, the City is interested in ensuring that the Rancho Avenue/I-10 interchange works efficiently to move trucks and other vehicles to and from industrial uses in south Colton and the Agua Mansa Road industrial district. The key objective for Rancho Avenue south of I-10 is to continue to move vehicular traffic through western Colton safely and efficiently, while serving industrial uses within this area.

Reche Canyon Road

Reche Canyon Road is a specialized regional roadway that connects Colton to Moreno Valley in Riverside County. Segments of this roadway, as the road winds through the canyon, have an almost rural character. Although Reche Canyon Road has long been a two-lane road, the City's long-term objective is to provide four travel lanes in a manner sensitive to the neighbor character. The design should not allow Reche Canyon Road to become a high-speed bypass, but the road should better accommodate demand for inter-county connections. The priority is to move vehicles safely and efficiently. Low priority will be given to pedestrian and transit accommodations. Bike routes may be provided where feasible. Where Reche Canyon Road terminates at Barton Road, a new wishbone configuration road design will provide more efficient traffic movements. Also, a second connection to Barton Road to the west will be explored in conjunction with land division applications.



Reche Canyon Road near Peppertree Lane

Washington Street/Barton Road

Washington Street and Barton Road are Major Arterials that serve southeast Colton. Two critical improvements are planned for Washington Street: 1) extending Washington Street west to La Cadena Drive and 2) reconfiguration improvements to the Washington Street and Mount Vernon/I-215 freeway interchange. This interchange provides connectivity to areas east of I-215 within Colton and to Barton Road. Barton Road provides connectivity between Grand Terrace and Loma Linda via Colton. Extension of Washington Street is critical to improve east-west connectivity.

Long-Term Roadway Improvements

Over time, as properties develop that align with the Land Use Element, roadway improvement projects will be necessary to alleviate traffic congestion and improve the overall mobility of the community. The City will pursue two primary courses of action to improve mobility: 1) implement physical improvements (street widening, realignment, or adding new connections) to improve intersections and street segments, and 2) implement technological solutions (intelligent transportation systems) to improve mobility.

Planned road widening and extension projects, shown on Figure M-3, designed to minimize traffic impacts from new development and address long-existing congestion/mobility issues include:

- Agua Mansa Road widening from the Rialto Channel to Rancho Road
- Mill Street widening from Bordwell Avenue to Rancho Avenue
- Widening of Fogg Street under the UPRR bridge
- Washington Street western connection to La Cadena Drive and to Riverside Avenue
- N Street connection to Fogg Street
- Key Street/Pellisier Road extension to La Candena Drive
- Reche Canyon Road realignment at Washington Street and Hunts Lane
- Reche Canyon Road realignment near Shadid Drive
- Reche Canyon Road connection to Barton Road

Where widening of streets is not appropriate—such as La Cadena Drive, Colton Avenue, or segments of Washington Street—the City may implement intelligent transportation systems (ITS) technologies. ITS applies advanced technologies of electronics, communications, computers, and sensors within the transportation system in order to improve safety, efficiency, and service through transmitting real-time traffic information. For example, to move vehicles through a major roadway in Colton, the City can synchronize street signals so that vehicles can pass through mostly green lights when driving at the appropriate speeds. ITS improvements such as enhanced signal coordination can provide nominal improvements to traffic flow.

Gateway Treatments

Aesthetic improvements to street parkways and medians will include gateway treatments identified in the Land Use Element. Also, with the planned reinvention of Downtown Colton, providing easily identifiable routes to Downtown from the I-10 freeway ramps will be critical. Plans for the widening of I-10 do not provide for changes to the 9th Street and La Cadena Drive ramps. However, the City will pursue with Caltrans and SANBAG configuration, signage, and landscaping enhancements that facilitate traffic flow into and out of Downtown, and that provide quality aesthetic treatments of the underpasses.

Level of Service Objectives

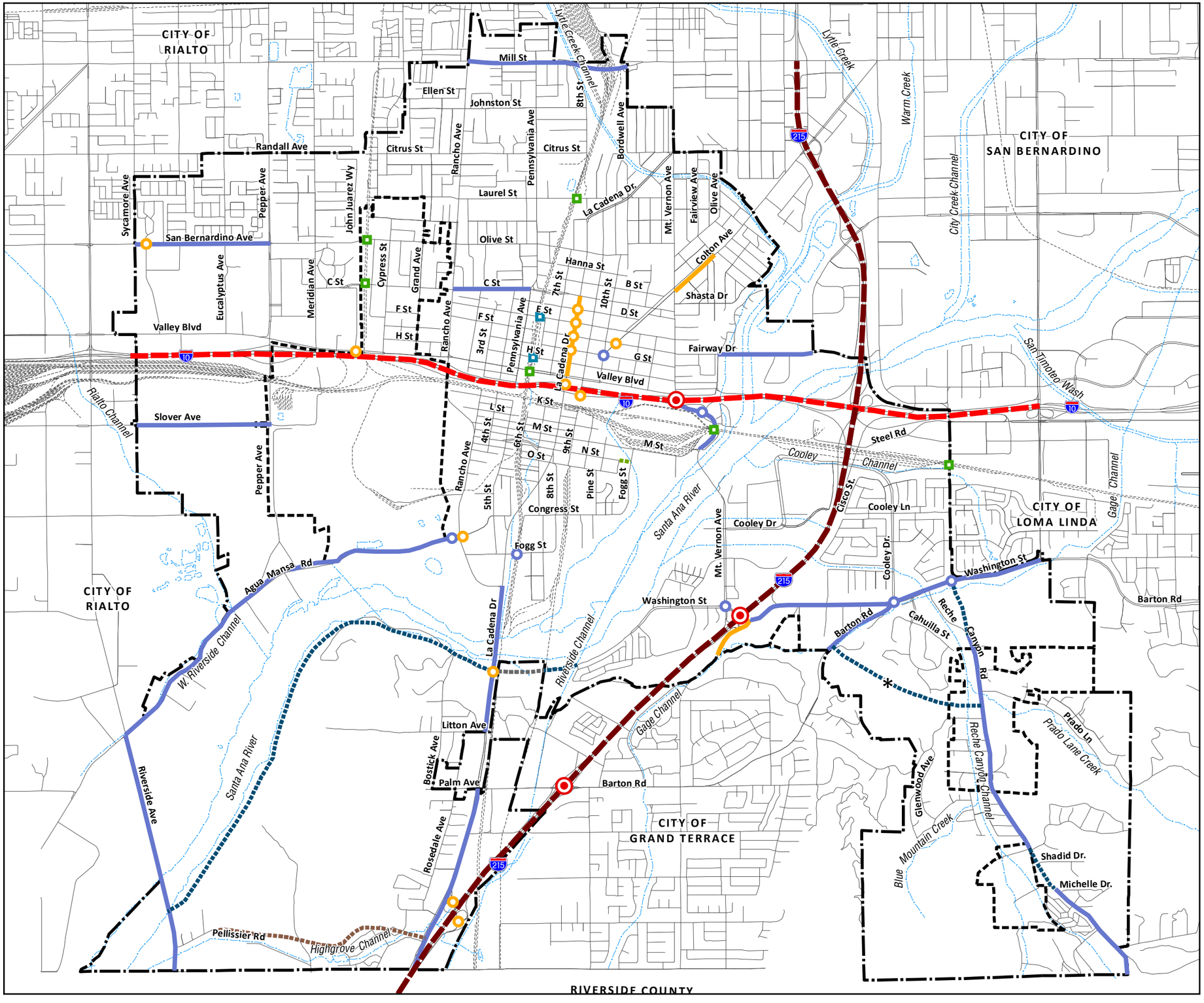
Colton's goal is to ensure mobility within and through the City by maintaining LOS D or better along most roadways and at signalized intersections. LOS D has been used in project-level review by the City of Colton. Establishment of the LOS D standard recognizes that some congestion will occur during peak hours, but that roadways will function at much better levels of service during the balance of the day.

At certain locations, such near freeway interchanges, LOS D may not always be practical because street widening would take too much land from the urban fabric of the adjacent commercial areas, negatively impact the pedestrian environment in mixed-use districts, and be cost prohibitive. Where feasible, the City will strive to maintain intersection traffic flows at Level of Service of D during peak hours for all roadways in Colton (see Policy M-3.5).

Where it is not feasible to achieve roadway cross sections that meet these LOS objectives, the City will consider other methods of improving roadway operations, such as implementing parking restrictions, driveway consolidation, and other operational measures.

Figure M-3:

Long-Term Roadway Improvements



Freeway Improvements

- New HOV or Express Toll Lanes in Each Direction
- New HOV and General Purpose Lanes in Each Direction
- Freeway Interchanges with Planned Improvements

New Roadway Extension or Realignment

- Planned Arterial
- Planned Secondary
- Planned Collector
- Planned Roadway Located in Another City

* Conceptual roadway location. Final roadway location to be determined on proposed subdivision design.

Planned/Proposed Street Segment Improvements

- Widen
- Advance Corridor Signal Synchronization

Planned/Proposed Intersection Improvements

- Turn Lane/Widen Intersection
- Add Traffic Signal

Street Closures and Grade Seperations

- Street Closure (BSNF Quiet Zone Project)
- Grade Seperation at Railroad

Boundaries

- City Boundary
- Sphere of Influence
- Railroad Tracks
- Watercourse

Date: October 16, 2012
Prepared by: Hogle-Ireland, Inc.
Source: KOA Corporation, 2012; SANBAG Development Mitigation Nexus Study, Nexus Study Attachment 1 (Arterial Project List).

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Backside of Figure M-3: Long-Term Roadway Improvements

Neighborhood Traffic Safety and Congestion

As traffic in Colton and the region increases and through traffic tends to seek alternative routes, these alternative routes may indirectly or directly impact local neighborhoods. This occurs when drivers divert from congested arterial roadways to local and collector roads. The City is committed to the preservation of its residential neighborhoods, and has established policies that will contribute to lessening traffic impacts.

Certain residential neighborhoods in Colton experience significant traffic impacts, including speeding, excessive volumes, truck traffic, and cut-through traffic during peak hours of the day. In addition, local streets directly adjacent to schools experience traffic impacts as well, such as cut-through traffic (vehicles and buses) and speeding, and pick-up and drop-off trips during morning and mid-afternoon hours. Parents shuttling children to school significantly increase traffic on local streets that surround the schools. Student parking for Colton High School can encroach into surrounding residential neighborhoods, creating traffic and parking impacts. In south Colton, errant truck traffic on M Street impacts residential neighborhoods.

A key way to control the movement of traffic through an area is through the use of traffic-calming techniques. The Public Works Department has prepared a traffic-calming policy document to guide decisions and approaches to addressing speeding, traffic volumes on local streets, and high incidents of vehicle collisions. Figure M-4 illustrates common traffic-calming measures and the driver behavior they aim to address.

Figure M-4:
Traffic-Calming Approaches

Speed Humps

Description:
A speed hump is a rounded traffic calming device used to reduce vehicle speed and volume on residential streets. Humps are placed across the road to slow traffic. They are typically located generally mid-block between intersections.

Addresses:
Speeding and vehicle volume

Bulb-Outs

Description:
Curb extensions to physically reduce the road's width at intersections. Used to provide both physical and visual narrowing of the roadway to force drivers to slow down and to shorten the crossing distance for pedestrians.

Addresses:
Speeding and pedestrian safety

Chicanes

Description:
A series of bulb-outs or curb extensions that narrow the street and inserts curvature in an otherwise straight stretch of roadway.

Addresses:
Speeding and cut-through traffic

Medians and Median Islands

Description:
Medians and median islands located near the center portion of the street can be used to:

- Narrow lanes
- Introduce horizontal deflection as part of a chicane configuration in conjunction with bulb-outs
- Provide a visual line-in sight interruption on a straight street by placing landscaping and trees in what was the middle of the street
- Provide a pedestrian refuge

Addresses:
Speeding and pedestrian safety

Radar Speed Signs

Description:
Driver feedback signs that use radar to provide motorists with an instant message, displayed on a reader board, telling them how fast they are driving and to encourage drivers to slow down and drive the posted speed.

Addresses:
Speeding

Turn Restriction Signs

Description:
Signs may be installed which prohibit certain movements at an intersection, e.g., "No Left Turn". This measure is applicable on streets where cut-through traffic exists. This method can be tailored to be applicable during the most problematic times by defining a time-period for the restriction.

Addresses:
Cut-through traffic

Roundabouts

Description:
A roundabout is a circular, raised island with deflector islands that form a hub for the traffic that flows around it and the streets that shoot off it. Traffic circulates within roundabouts in a counter-clockwise direction and exits the roundabout by turning right onto the desired street. The drivers select gaps in the traffic to enter the roundabout from each approaching street without having to stop but having to yield to vehicles already engaged in the roundabout.

Addresses:
Speeding and accidents

Regional Circulation

Transportation planning cannot be considered separately from the regional context. It is important that local transportation decisions are made in the context of regional transportation planning plans and projects.

Colton is strategically located in the Inland Empire, with excellent access to regional transportation facilities in San Bernardino and Riverside counties, including freeway, arterial roadways, and freight and passenger rail connections. The City is served by two regional freeways: Interstates 10 and 215. I-10 traverses east to west through the Colton, and I-215 runs north to south along the City's eastern edge.

In addition to the freeways, major roadways connect Colton regionally, including Reche Canyon to Moreno Valley; Barton Road to Loma Linda and Redlands; Valley Boulevard to the cities of Rialto, Fontana, and Ontario; Agua Mansa Road to Riverside; and Mount Vernon Avenue to San Bernardino.

Transportation plans prepared by SANBAG, San Bernardino County, and the San Bernardino County Transportation Commission focus on the regional transportation system. Other plans have also been prepared to locate future routes for mass transit, including rail and express bus service. The best way to maximize transportation choice in Colton's future is to integrate local transportation planning with regional efforts, and for the City to participate actively in regional mobility planning initiatives.

Transit, Biking, and Walking

Transit, biking, and walking are grouped together because a successful trip may include these modes to finish or start a trip. Getting to or departing a bus or train may require walking. Many buses and certain train cars include bike racks, allowing a transit rider to a bike several miles then easily board a bus or train for the remainder of the trip. These modes are also combined because they are alternatives to the automobile, and using these modes reduces vehicle trip and greenhouse gases.

To achieve efficient and effective travel within Colton, policies should not just focus on strategies to improve traffic flow, but also on ways to encourage the use of alternative mobility options. A balanced transportation system includes transportation strategies and programs aimed at reducing congestion, in turn allowing for the safe and efficient movement of people, goods, and services throughout the City.

Transit Mobility

To achieve a balanced and integrated transportation system that responds to complete streets, policies in this Mobility Element focus on ways to encourage transit use. Transit options are important because they provide alternatives to the automobile, particularly for Colton populations (children, seniors, and the physically disabled) who do not have access to a vehicle.

Public transit takes many forms, including heavy rail, bus, shuttle, and paratransit. San Bernardino County has a limited transit network managed by various agencies. With Colton focusing on alternative modes of transportation, creating easier access to all types of transit is a key goal. While public transit is provided and maintained by other agencies, the City can greatly influence ridership through land use and zoning decisions, connectivity to other modes (including biking and walking), and improving traffic operations within key corridors to facilitate bus headways. The City can also dedicate rights-of-way for new BRT systems where appropriate and continue extensive consultation with various agencies to expand heavy rail (Metrolink) service and accessibility. Figure M-5 indicates the location of existing and planned transit routes and facilities.

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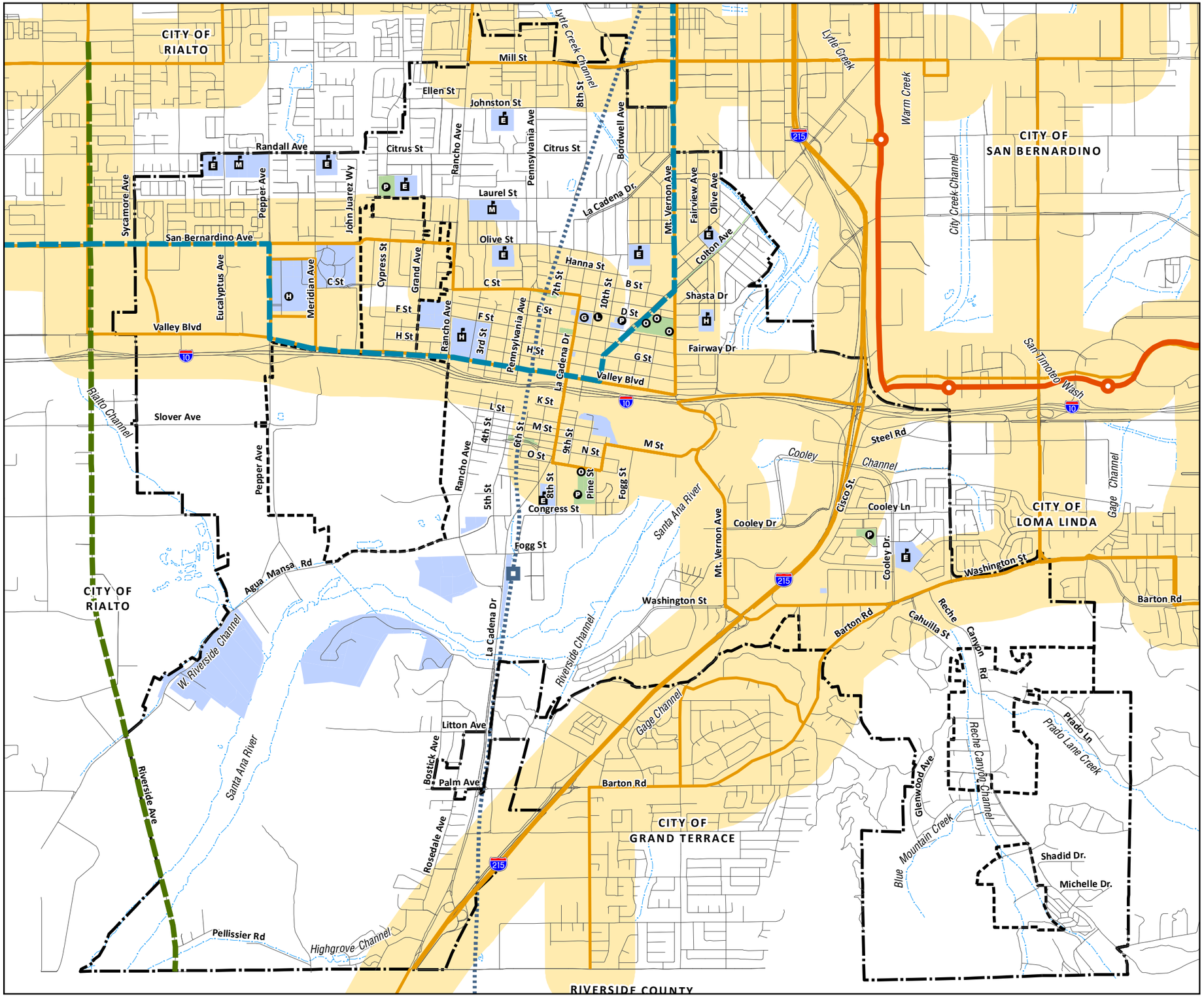
Figure M-5:

Transit Plan



Transit Lines and Facilities

OmniTrans

- OmniTrans Bus Routes (Routes Subject to Change)
- Quarter Mile Walking Distance to Bus Route

Bus Rapid Transit (BRT)

- sbX - "E" Street Line
- Holt Line (Planned)
- Riverside (Planned)
- BRT Stations

Metrolink

- Metrolink
- Potential Station Location

Parks and Schools

Land Use

- Open Space - Recreation
- Public/Institution

Public Facilities/Institutions

- Elementary School
- Middle School
- High School
- Community Center
- City Hall
- Hospital (Private)
- Library
- Parks

Base Map

- City Boundary
- Sphere of Influence
- Watercourse

Date: January 5, 2012
Prepared by: Hogle-Ireland, Inc.
Source: San Bernardino County Assessor, 2010 and City of Colton, 2011.

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Backside of Figure M-5: Transit Plan (11x17)

Bus

Omnitrans is the primary public bus transit provider in Colton and the San Bernardino region. Omnitrans operates two services: a fixed-route bus service with several routes and a demand-responsive bus pickup service called Omnilink. These two services generally provide residents and businesses with access to bus transit. Given the suburban environment and low densities in Colton neighborhoods, bus transit is not as frequent as compared to an urbanized area, such as downtown Los Angeles. Therefore, City planners and decision makers must work with Omnitrans staff to identify areas in Colton where transit is more responsive to the populations needs. Schools, higher density residential uses, Downtown Colton, the emerging West Valley mixed-use district, major corridors, and commercial activity areas are locations where transit options become essential.

In addition, where the Land Use Element projects housing and employment growth, such as the West Valley Specific Plan and Downtown Colton areas, efforts must be made to incorporate these areas into the long-term transit plans for the future.

ParaTransit

Omnitrans also provides seniors and persons with physical or cognitive disabilities specialized transit service through its Dial-A-Ride program. This is a service designed to meet the requirements of the Americans with Disabilities Act (ADA), and is demand/response service.

Bus Rapid Transit

Bus rapid transit, or BRT, is a transportation system that uses buses to provide faster, more efficient service than an ordinary bus line. Often this is achieved by making improvements to existing infrastructure, vehicles, and/or scheduling. The goal of these systems is to approach the service quality of rail transit while still enjoying the cost savings and flexibility of bus transit.

The BRT system is similar to a bus route, but with improved infrastructure to move the bus faster along its route. These improvements include bus stations rather than stops and designated bus-only lanes. BRT gets traffic priority signalization, and GPS tracking informs riders then the next bus is approaching. Buses stop at stations that allow people to board the bus quickly, including those on wheelchairs. Some buses may include interior bike racks.

According to SANBAG long-range plans and the Measure I Strategic Plan, one BRT line is planned for Colton to connect to other BRT lines in Rialto and San Bernardino. The San Bernardino Avenue BRT line is planned for San Bernardino Avenue, Pepper Avenue, Valley Boulevard, 10th Street, Colton Avenue, and Mount Vernon Avenue. This continuous line will include three stations in Colton. The line is anticipated to end at a transit center on the E Street BRT line. The BRT system will be owned and operated by Omnitrans.

Passenger Rail

Both Amtrak and Metrolink passenger rail services utilize existing rail lines in Colton to get to and from stations in the cities of Riverside and San Bernardino. The Metrolink trains and Amtrak's Southwest Chief also use the Burlington Northern Santa Fe track through Colton Crossing, while Amtrak's Sunset Limited uses the Union Pacific Railroad tracks.

The San Bernardino Metrolink and Amtrak stations are located at the Santa Fe Depot near the intersection of Mount Vernon Avenue and 3rd Street in the City of San Bernardino, approximately three miles from Downtown Colton. The Riverside Station (Amtrak) and Riverside-Downtown Station (Metrolink) are located in Downtown Riverside off of Vine Street, approximately eight miles from Downtown Colton.

As Metrolink service demand increases, a planned station in south Colton will provide additional boarding capacity. Given the location along La Cadena Drive in an economically healthy industrial district, the City does not anticipate providing for transit-oriented development (TOD) approaches at this location in the near term. The station will largely serve a commuter function. However, the City will continue to explore opportunities to create a second or alternative Metrolink station in or closer to Downtown Colton, where a true TOD might be achieved.

Bicycle Mobility

To support physical activity and alternative modes of transportation, Colton residents should be able to easily cycle to work, school, parks, libraries, and other local destinations using convenient routes. Continuing to allow bicycles on buses and providing secure bicycle parking facilities will further encourage bicycling. The opening of the 2.2-mile bike path that runs along Colton Avenue north to G Street in the City of San Bernardino illustrates the bicycle opportunities in the City.

Bicycle facilities, illustrated in Figure M-6, are classified as follows:

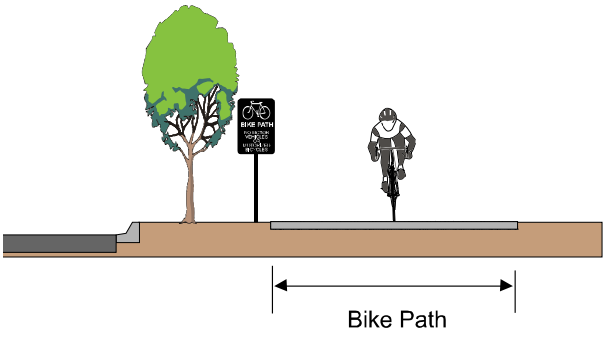
- Class I (Bicycle Path) – Intended for the exclusive use of bicycles. While it may parallel a roadway, a Class I bike facility is physically separated by distance or a vertical barrier.

- Class II (Bicycle Lane) – Shares the right-of-way with a roadway or walkway. Class II facilities are indicated by a bikeway pictograph on the pavement and a continuous stripe on the pavement, or are separated by a continuous or intermittent curb or other low barrier.

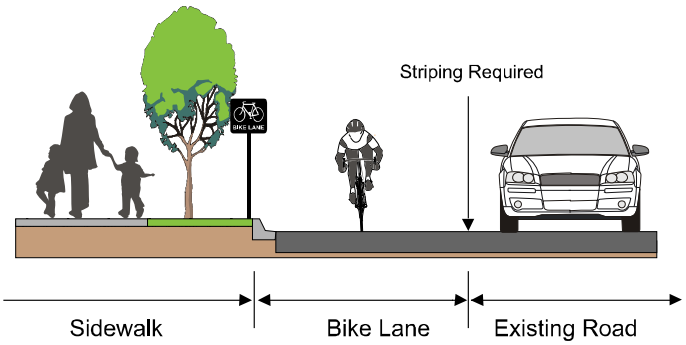
- Class III (Bike Route) – Shares the right-of-way with a roadway or walkway. Not indicated by a continuous stripe on the pavement or separated by any type of barrier, a Class III facility is instead identified as a bikeway with signage.

Figure M-6:
Bikeway Classifications

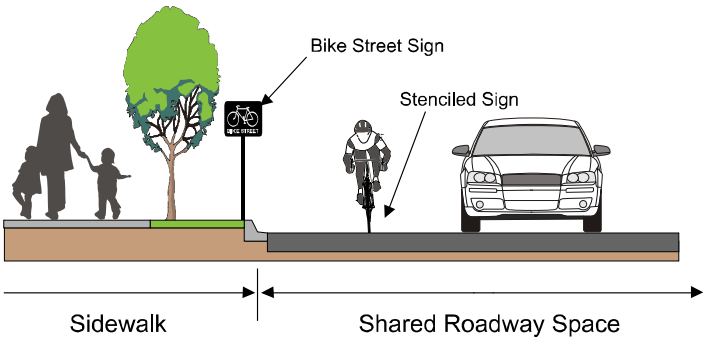
Class I (Bike Path)



Class II (Bike Lane)



Class III (Bike Route)



The Bicycle Plan illustrated on Figure M-7 promotes a safe and efficient network of bikeways for recreational and commuter use within the City. The planned bike network is not a contiguous network, and efforts should be made to expand the network to provide continuity within the City, and to the networks of adjacent jurisdictions and existing bicycle amenities.

Santa Ana River Trail

The Santa Ana River Trail spans the City of Colton for over six miles between the Riverside County line on the west and the City of San Bernardino on the east, paralleling the Santa Ana River. The trail provides the Colton community a welcome recreational amenity. The City supports enhanced access to this trail at locations within Colton.

Walking in Colton

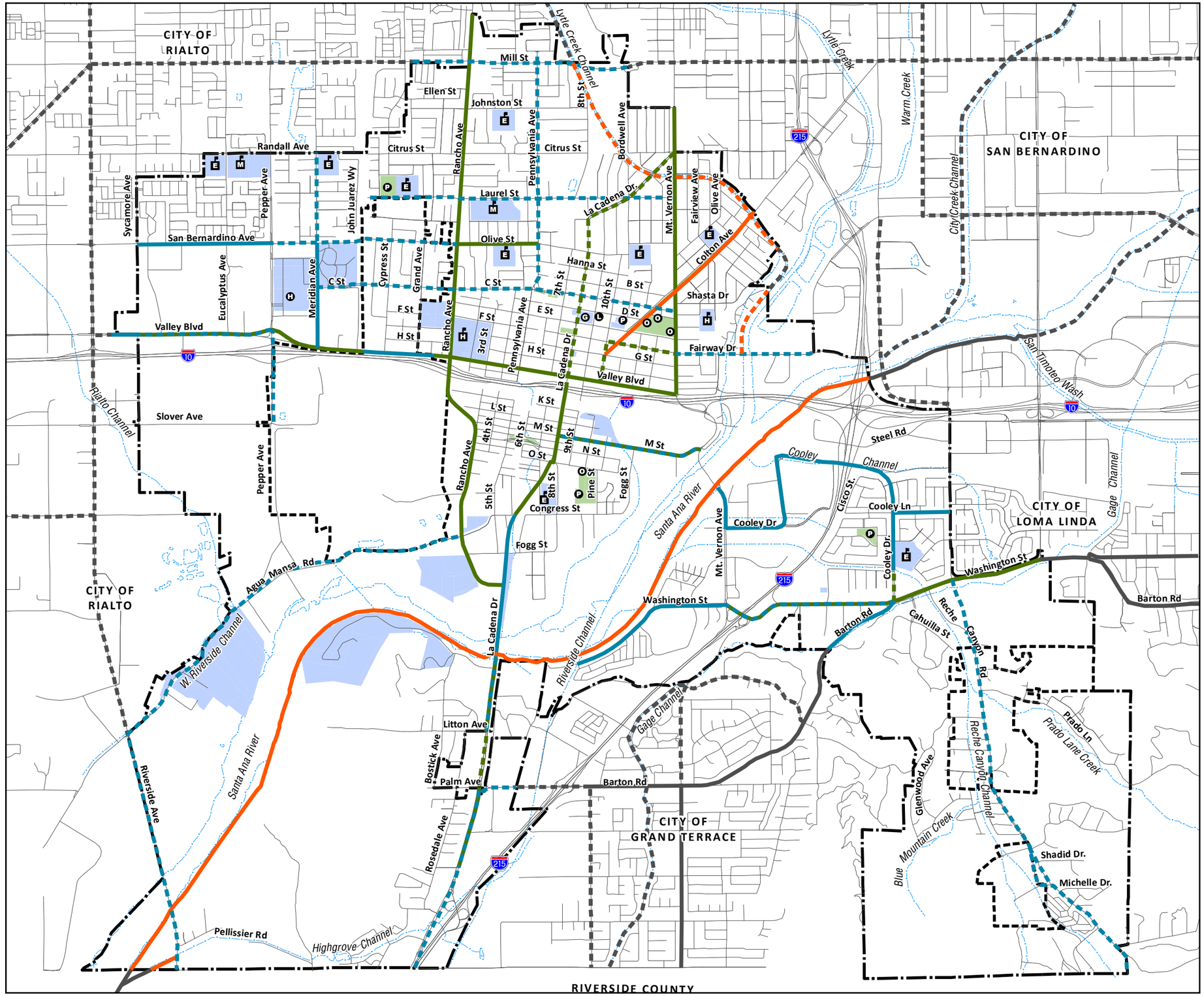
Most trips begin and/or end with a person walking to/from a destination, at least for a short distance. Thus, the walking environment is one of the most basic elements of public space. The pedestrian network in Colton consists primarily of sidewalks provided along most roadways in commercial districts and residential neighborhoods. Sidewalks vary in width and physical conditions, making some more attractive to walking than others. Sidewalks also provide a primary transportation mode for mobility-impaired population groups such as youth, seniors, and disabled persons. In addition, Class I bicycle paths are designed as multi-use trails that pedestrians can also use.

A safe pedestrian system that links commercial, residential, and open spaces areas offers several economic and environmental benefits: improved health for those who walk, reduced vehicle emissions and congestion, and decreases in greenhouse gases. To improve pedestrian safety and encourage walking, specific improvements can be made based on site-specific issues:

- Widening of sidewalks
- Use of special paving or markings at pedestrian/vehicle interfaces
- Improve signal phasing and pedestrian flow patterns at intersections
- Provide sidewalk curb cuts for the physically challenged
- Use auditory cross walk signals for the hearing impaired
- Increase the number of street trees with large canopies along sidewalks to provide shade
- Provide for safe, well lighted rest areas such as shaded benches or planter boxes

Figure M-7:

Bicycle Plan



Bicycle Classifications

- Class I
- Planned Class I
- Class II
- Planned Class II
- Class III
- Planned Class III
- Outside City of Colton
- Planned Outside City of Colton

Parks and Schools

Land Use

- Open Space - Recreation
- Public/Institution

Base Map

- City Boundary
- Sphere of Influence
- Watercourse

Public Facilities/Institutions

- Elementary School
- Middle School
- High School
- Community Center
- City Hall
- Hospital (Private)
- Library
- Parks

Date: January 5, 2012
Prepared by: Hogle-Ireland, Inc.
Source: San Bernardino Association of Governments, March 2011.

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Back Page: Figure M-7: Bicycle Plan (11x17)

Pedestrian Connections

Walkability, access, and connections are essential components of a circulation system that easily and specifically accommodates pedestrians. Walkability includes wide sidewalks, safe street crossings, features that encourage cautious driving, and a pleasant and safe walking environment. Walkways, well-designed pedestrian crossings, pathways, and pedestrian short-cuts allow people to get from one destination point to another with ease. Dedicated pedestrian paths can provide access between residential and activity areas, especially if streets do not connect. Pedestrian connections should be provided primarily to and from activity centers such as Downtown Colton, to parks and commercial areas within south Colton, to businesses along Mount Vernon Avenue and Valley Boulevard, within Cooley Ranch, and to neighborhood schools. Handicapped access strategies should also be incorporated into all street and pathway plans.

Walkability Improvements and Pedestrian Amenities

Pedestrian systems must easily and efficiently connect people to their desired destinations within the City. To feel secure, walkways and other public spaces should be open to public view. Pleasant and secure places have many houses, stores, and public spaces where we can know our surroundings.

Colton supports proactive integration of pedestrian-oriented improvements and amenities within the City's circulation system to improve walkability. Primary additional locations for incorporating these features include Valley Boulevard, La Cadena Drive, Colton Avenue, Mount Vernon, and Washington Street. Within the developing West Valley area, good pedestrian connections will be paramount to create an integrated mixed-use district. However, these principles should also be applied to other roadways within Colton, where feasible and appropriate.

Downtown Colton and the West Valley area, as described in the Land Use Element, are planned to transform into pedestrian-friendly activity centers. What does pedestrian friendly mean? Downtown's transformation will include denser development and some three- to four-story buildings that will accommodate residential, office and commercial uses. The design of these buildings will include creating a streetscape not only designed for automobiles, but for pedestrians as well. In the West Valley area, the proximity of complementary land uses will encourage walking. Improvements will include:

- Wider sidewalks
- Well-marked pedestrian crossings
- Buildings frontages directly along sidewalks
- Parking lots sited on the rear or side of the buildings
- Street-front entrances
- Pedestrian amenities, including benches, trees
- Sidewalk activity, including outdoor sidewalk seating (sidewalk cafes)
- Bus stops with shelters

These amenities and design features are meant to create a better experience for the pedestrian and those who use the sidewalk, and transit system.

Goods Movement

Freight or goods movement refers to goods transported by ship, plane, train, or truck. In Colton, only rail and truck modes apply. The benefits of moving goods, both locally (to and from Colton businesses) and regionally (through Colton via rail and truck routes) are jobs and prosperity for businesses. Goods movement has fueled thousands of jobs locally and regionally.

With the growth of the Ports of Los Angeles and Long Beach, Colton will continue to see heavy rail traffic. The Colton Crossing improvement project will in part alleviate the increased congestion and conflicts. However, the proximity of industrial businesses to residential neighborhoods (as described in the Land Use Element) exposes local residents to the impacts of many rail lines and trucks traffic that serve the industries.

Freight Rail Lines

The City is served by two freight railroad lines and operators that utilize multiple rail corridors within the City: the UPRR and BNSF (see Figure M-8). Both railroads have large transfer yards within or close to the City, and both have the same primary destinations of the Los Angeles metro area, port facilities of Los Angeles and Long Beach, and inland ports in the Cajon Pass, high desert (Victor Valley), and low desert (Coachella Valley). Also, both railroads have small rail spur lines that serve local industrial businesses.

The UPRR has a major east-west track along the south side of the I-10 freeway and north-south lines located east of Meridian Avenue within Colton. The tracks that parallel along I-10 include a major transfer yard referred to as the West Colton yard. BNSF operates lines that run north-south through the City, along a corridor between Pennsylvania Avenue and 6th Street. A BNSF transfer yard partially lies within Colton near 8th Street and Mill Street.

As described above, Colton is the site of Colton Crossing, one of the busiest at-grade railroad crossings in the United States. The main transcontinental trunk lines of UPRR and BNSF cross at this point. As traffic on each line has soared since the mid-1990s, fueled largely by the vast increase in imports passing through the ports of Los Angeles and Long Beach, the primitive crossing has become a serious bottleneck. The crossing was installed in August 1882 by the California Southern Railroad to cross the Southern Pacific Railroad's tracks while building northward from San Diego. Colton Crossing will improve train efficiency for both UPRR and BNSF within this area, but also reduce vehicular traffic delays at street crossings caused by slow-moving or stopped trains. Fewer idling trains also will improve local air quality.

Freight Rail Impacts

Neighborhoods and residential areas abutting the rail lines are impacted by the noise, vibration, and air quality impacts caused by the trains. There are sites throughout Colton where single-family homes are adjacent to the train tracks. In some instances, the distance between a residence and train track is less than 50 feet.

Around Downtown Colton, some homes have side yards or back yards facing the BNSF rail lines along E Street, D Street, C Street, and Oak Street. In south Colton, houses on K Street back to the UPRR rail lines. Homes along this street will be subjected to the impacts of the Colton Crossing project construction. Farther south, homes along Walnut Street, Maple Street, and Stephen Street also back to the BNSF rail lines.

Efforts to reduce some of these impacts include a planned Laurel Street and BSNF underpass, the removal of the 9th Street railroad spur, and a quiet zone through Colton (closure of E and H streets and improved train gates and City streets). Trains blowing their horns are a huge annoyance for residential areas near train and street crossings. These efforts will greatly reduce train noise within this area.

Truck Routes

The delivery of goods directly to and from Colton businesses is primarily provided by trucks on surface streets. The State of California Vehicle Code has established regulations on the use of local roads by trucks and other heavy vehicles. To protect residential neighborhoods from the impacts of the high volumes truck traffic, certain streets have been designated as truck routes by local ordinance. The City strives to connect local truck routes with other cities' truck routes to form an integrated regional network for the movement of goods.

Routes are designated based on the industrial districts served, access to freeways, industrial, and connector streets, and avoidance of residential neighborhoods. Identifying truck routes is important not just to preserve dedicated routes to serve industrial districts and reduce land use conflicts, but also to allow for proper street construction and maintenance, given that heavy truck traffic impacts physical street conditions more quickly than automobile traffic.

Truck routes will continue to be defined by ordinance via the Municipal Code and will require City Council approval for modification. Truck routes are subject to change based on vehicular traffic, changes to surrounding city truck routes, enforcement, and trucking demand through Colton. At a minimum, the following roadways will continue to serve as truck routes to support industrial business activity:

- Valley Boulevard
- Pepper Avenue
- Mount Vernon Avenue
- Colton Avenue
- Fairway Drive
- La Cadena Drive
- Rancho Avenue (south of Valley Boulevard)
- Washington Street

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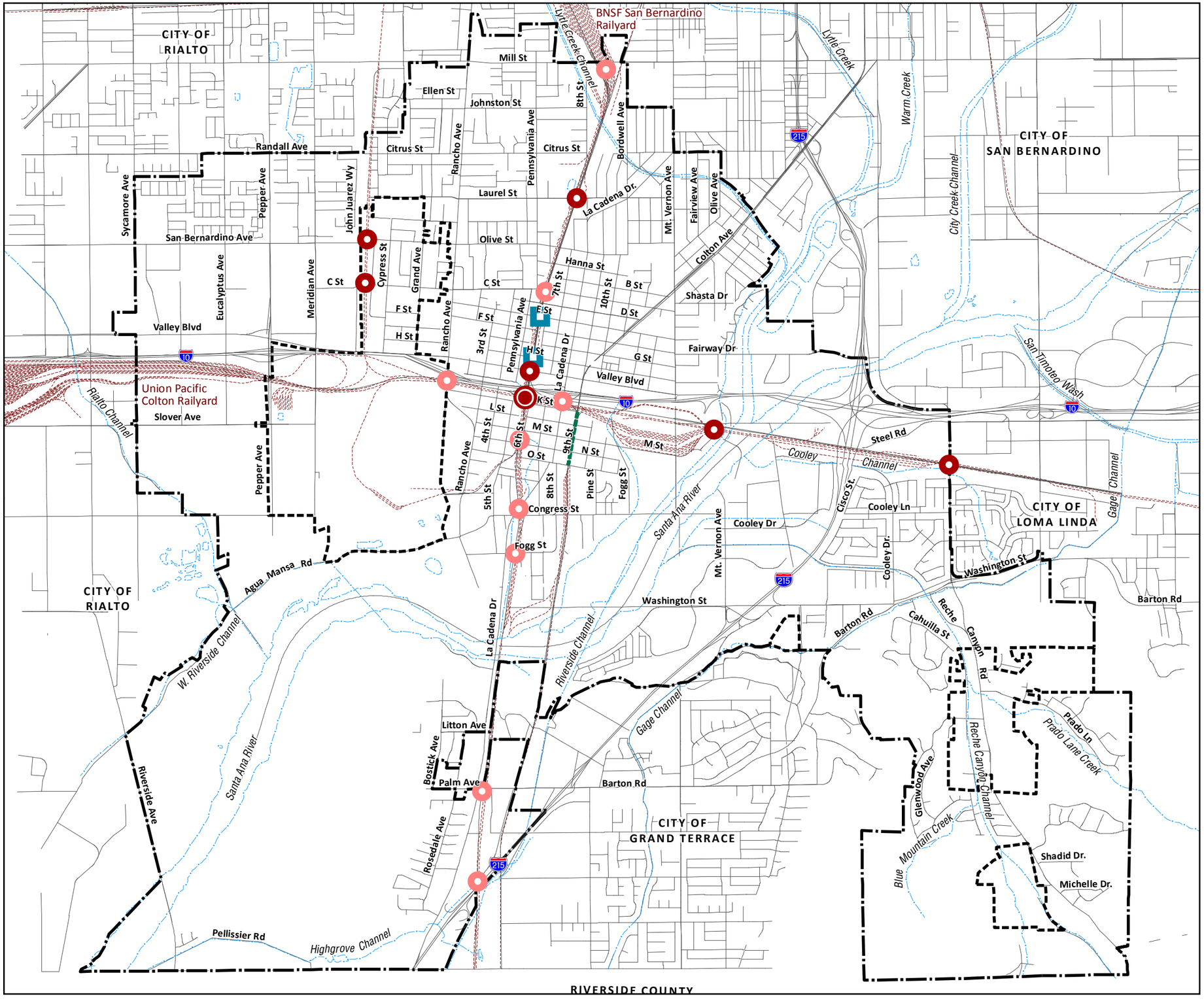
Figure M-8:

Goods Movement



Rails/Street Grade Seperation and Rail Projects

- Colton Crossing (Rail/Rail Grade Separation)
- Grade Separation Projects (Rail/Street Grade Separation)
- Existing Grade Separation (2012)
- Street Closure (BSNF Quiet Zone Project)
- 9th Sreet Rail Spur Removal
- Railroad Tracks

Note: Designated truck routes are not shown. They are adopted by ordinance based on the criteria set forth in the Mobility Element.

Boundaries

- City Boundary
- Sphere of Influence
- Watercourse

Date: January 5, 2012
Prepared by: Hogle-Ireland, Inc.
Source: San Bernardino County Assessor, 2010 and City of Colton, 2011.

0 2,000 4,000 6,000 8,000 Feet

Backside of Figure M-8: Goods Movement (11x17)

An effective and efficient goods movement system is essential to the economic livelihood of all districts in the city. Policies for goods movement address all transportation facilities' abilities to accommodate the effective and efficient movement of goods, while balancing the needs of other travel modes.

Truck Impacts

Like residential uses abutting railroad tracks, there are also many instances where residential uses are abutting industrial uses that utilize trucks. Some residential areas may be experiencing a disproportionate adverse, negative health impact from heavy truck and truck traffic volumes. Trucks making deliveries to businesses in Colton are not subject to the truck routes.

To lessen truck impacts in residential neighborhoods, enforcing truck routes is important, but for those trucks arriving to destinations in Colton, traffic-calming measures applied pursuant to adopted City policies may provide some relief to certain neighborhoods.

Truck Routes Performance Criteria

Designated truck routes are not included in this Element, as they may change over time to reflect changing land use patterns and to provide the best interests of businesses, truck drivers, and residential neighborhoods. When revising the designation of truck routes in Colton, as adopted by ordinance, routes must adhere to the following performance criteria:

- Truck routes must avoid unnecessary intrusions into residential neighborhoods to limit noise, vibration, and air quality impacts.
- To the extent feasible, truck routes will not be provided on local streets and on streets with mostly residential frontage.
- Truck routes must be located on roadways that provide direct and convenient access between Major Arterials and freeways (I-10 and I-215) and industrial and commercial businesses.
- Truck routes must be located on roadways with the design and construction capacity to accommodate truck traffic.

Goals and Policies

A safe and convenient circulation system is critical to support the variety of land uses in Colton, and to manage traffic that originates in and is destined for locations outside the City. Six major issues are addressed by the goals and policies of the Mobility Element: 1) providing Complete Streets 2) the use of alternative modes of transportation, 3) an efficient street system, 4) efficient and safe freight movement, 5) meeting parking needs, and 6) working with regional partners to meet regional transportation needs.

Complete Streets

Complete streets are essential in Colton for providing safe and efficient connections for vehicles, transit, bicyclists, and pedestrians along Colton's streets, bike paths, bus routes, sidewalks, and trails. The following goals and policies are aimed at implementing Complete Streets principles to provide more options for people; generate less traffic congestion; create walkable neighborhoods and districts; and remove transportation barriers for older adults, children, and people with disabilities.

Goal M-1:	**Provide an integrated and balanced multi-modal transportation network of Complete Streets to meet the needs of all users and transportation modes.**
Policy M-1.1:	Provide for the needs of drivers, public transportation vehicles and patrons, bicyclists, and pedestrians of all ages and abilities in planning, programming, design, construction, reconstruction, retrofit, operations, and maintenance activities of all streets.
Policy M-1.2:	View all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in Colton. Recognize bicycle, pedestrian, and transit modes as integral elements of the transportation system.
Policy M-1.3:	Require all new nonresidential, mixed-use, and large-scale residential development projects, through the development review process, to include public transit, bicycle, and pedestrian facilities.
Policy M-1.4:	Plan for multi-use recreation trails and paths that allow for physical activities, including running, walking, and bicycling.
Policy M-1.5:	Minimize vehicle emissions by encouraging land use patterns and multi-modal transportation improvements that reduce the need for automobile trips by making biking, walking, and use of public transit more convenient and available.

Transit, Bicycles, and Pedestrians

The City is committed to providing routes prioritized for transit, cyclists, and pedestrians to achieve mobility and community sustainability goals. These policies will also work toward compliance with State mandates regarding greenhouse gas reductions.

Goal M-2:	**Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.**
Policy M-2.1:	Work with Omnitrans to increase the use of public transit, establish or modify routes, and improve connectivity to regional services that respond to the needs of the Colton community.
Policy M-2.2:	Support Omnitrans' expansion of Bus Rapid Transit (BRT) into Colton. Support establishment of BRT stations near major activity areas, including the Arrowhead Regional Medical Center, Colton High School, and Downtown Colton.
Policy M-2.3:	Require that private development projects provide transit amenities, including bus stops that meet Omnitrans' bus stop design guidelines.
Policy M-2.4:	Work with Omnitrans and other regional transit operators to provide attractive, convenient, and modern bus stops that include shade/weather protection, seats, and timely transit information.
Policy M-2.5:	Work with Metrolink and the Southern California Regional Rail Authority to establish a Metrolink station in Colton along existing Metrolink rail lines.
Policy M-2.6:	Develop and maintain a citywide comprehensive bicycle network of off-street bike paths, on-street bike lanes, and bike streets to provide connections between neighborhoods, schools, parks, civic center/facilities, recreational facilities, and major commercial centers.
Policy M-2.7:	Improve and add amenities, such as staging areas, to the Santa Ana River Trail, as identified in the *Santa Ana River Trail Blue Ribbon Committee Trail Vision* document.
Policy M-2.8:	Add bicycle amenities and facilities to new projects and at existing activity centers.
Policy M-2.9:	Condition discretionary projects to require bicycle amenities such as bike racks and secure storage areas.
Policy M-2.10:	Provide pedestrian amenities such as benches, shade trees, and refuse cans on sidewalks along streets that are key pedestrian routes.
Policy M-2.11:	Pursue funding to create and maintain safe routes to schools, as well as similar access to parks and recreational facilities.

Policy M-2.12:	Develop a prioritization program that lists sidewalks that are missing and the level of importance of replacing the missing sidewalks.
Policy M-2.13:	Require that within Reche Canyon Specific Plan area, sidewalks be provided on one side of the street at a minimum.
Policy M-2.14:	Require that all new subdivision projects provide sidewalks on both sides of the street, except for subdivisions that create residential lots that are one acre or larger in size.

Efficient and Attractive Street System

Creating an efficient street system allows people and goods to reach their destinations conveniently by maintaining a well-designed, integrated circulation network. Streets are the backbone to Colton's circulation system. Streets should be considered as places with many functions, including moving people and goods, connecting neighborhoods, and as a statement of civic pride. Limiting congestion and improving the flow of vehicles is not only good for the environment and the air quality, but strengthens the economy and social structure of a community as goods and people move freely without impediments.

Goal M-3:	**Develop a safe, efficient, and attractive street system that provides capacity to meet existing and future demand.**
Policy M-3.1:	Apply General Plan roadway standards for roadways to the design and construction of future street improvements. Take into account not only automobiles, but also transit vehicles, bicycles, and pedestrians as identified by the Street Typology system.
Policy M-3.2:	Implement traffic-calming measures in Colton's residential neighborhoods that are severely impacted by speeding, excessive vehicular volumes, truck traffic, and/or cut-through traffic. Use the City's adopted traffic-calming policies to apply appropriate solutions.
Policy M-3.3:	Maintain the City's transportation infrastructure in good condition.
Policy M-3.4:	Develop and maintain adequate funding sources for the ongoing maintenance and upkeep of the local street network.
Policy M-3.5:	Maintain intersection traffic flows at Level of Service of D during peak hours for all roadways in Colton, except at those locations identified in this Mobility Element where peak-hour LOS E is allowed.
Policy M-3.6:	Restrict driveway entrances onto surrounding arterial, secondary and major streets when practical, and minimize through traffic on residential Collector streets.

Policy M-3.7:	Establish a periodic review schedule to assess the adequacy of traffic impact fees charged for new developments.
Policy M-3.8:	Require new developments of more than 100 employees (per building or per tenant/company) to develop Transportation Demand Management programs to minimize automobile trips and to encourage use of transit, ridesharing, bicycling, and walking.
Policy M-3.9:	Connect N Street to Fogg Street in south Colton to provide greater connectivity to the residential properties within this neighborhood.
Policy M-3.10:	Require new subdivision in Reche Canyon and Pellisier Ranch/La Loma Hills areas to provide adequate local and emergency connections to arterial roadways.
Policy M-3.11:	Reconfigure the Mount Vernon, Valley Boulevard, and I-10 freeway interchange to remove the five-legged intersection and improve the operations of this interchange.
Policy M-3.12:	Provide themed signage and related aesthetic enhancements at City gateways, as identified in Figure LU-6 (Land Use Plan) in the Land Use Element.
Policy M-3.13:	Maintain the Long-range Developer Impact Fee program to help fund the cost of transportation system improvements.

Goal M-4: Provide appropriate access, logical configuration, and adequate capacity at freeway interchanges, street and rail intersections, and at bridges.

Policy M-4.1:	Widen the Fogg Street bridge under the Burlington Northern Railroad in south Colton to allow for adequate vehicle access, including emergency vehicles.
Policy M-4.2:	Extend Washington Street westerly to connect to La Cadena Drive.
Policy M-4.3:	Study the La Cadena Drive and 9th Street and I-10 freeway interchanges to develop a better configuration that would allow traffic to be directed efficiently into Downtown Colton and avoid driver confusion.
Policy M-4.4:	Provide for the continuity of Washington Street with any interchange improvements at the Washington Street and I-215 freeway.
Policy M-4.5:	Require that the La Cadena Drive and I-215 freeway interchange improvements keep the entire interchange within the Colton city limits.
Policy M-4.6:	Ensure that all interchange reconfiguration projects, grade separation improvements, and bridge widening projects be designed and implemented in a manner that provides positive benefit to the City of Colton.

Policy M-4.7:	Work with Caltrans and the San Bernardino Association of Governments to replace the Mount Vernon Avenue bridge crossing of the Santa Ana River to alleviate congestion.

Goods Movement

The efficient movement of goods and freight support the economic success of the City and local and regional businesses. The transportation system needs to respond to the needs of businesses to easily access regional routes and access local commercial and industrial business. The designation of truck routes and maintained rail lines and spurs are central to these needs.

Goal M-5:	**Maintain an efficient network of goods and freight movement that supports the needs of Colton businesses while reducing truck and rail traffic impacts on residential neighborhoods.**
Policy M-5.1:	Work with railroad operators to limit the aesthetic, noise, vibration, traffic congestion, and air quality impacts of new projects on residential neighborhoods adjacent to railroad lines and railroad projects.
Policy M-5.2:	Ensure that Colton Crossing design, construction activities, maintenance, and railroad operations do not create negative adverse impacts to surrounding residential properties.
Policy M-5.3:	Maintain the Railroad Quiet Zones through Colton to limit locomotive horn blowing adjacent to residential neighborhoods.
Policy M-5.4:	Support the abandonment or the realignment of railroad spurs that no longer serve industrial-support services and that create pedestrian safety conditions.
Policy M-5.5:	Vigorously enforce established truck routes to discourage truck shortcuts through residential neighborhoods.
Policy M-5.6:	Ensure that the designated truck routes conform to the following performance criteria:

- Truck routes must avoid intrusions into residential neighborhoods to limit noise, vibration, and air quality impacts.
- To the extent feasible, truck routes will not be provided on local streets and on streets with mostly residential frontage.
- Truck routes must be located on roadways that provide direct and convenient access between Major Arterials and freeways (I-10 and I-215) and industrial and commercial businesses.
- Truck routes must be located on roadways with the design and construction capacity to accommodate truck traffic.

Parking

Although parking is considered a separate issue from vehicle circulation, the presence of on-street parking has a direct effect on roadway capacity. In addition, off-street parking deficiencies can cause vehicles to recirculate on a public street, which increases traffic volumes and congestion by reducing capacity for through traffic. The following goals and policies provide the guidance to maintain adequate parking in Colton.

Goal M-6:	**Ensure the provision of adequate, convenient, and safe parking for all land uses.**
Policy M-6.1:	Require that all new developments provide off-street parking to meet local needs and minimize congestion on streets.
Policy M-6.2:	Require that all new commercial and manufacturing developments provide adequate loading areas within off-street parking areas.
Policy M-6.3:	Develop neighborhood traffic control plans for residential neighborhoods experiencing spillover traffic and parking shortages from adjacent commercial and industrial areas.
Policy M-6.4:	Allow for joint use and the sharing of parking facilities in mixed-use developments and for other projects which demonstrate the benefits of alternative parking approaches.
Policy M-6.5:	Cooperate with Caltrans and the County of San Bernardino to provide sites and improvements for park-and-ride facilities serving transit projects.
Policy M-6.6:	Allow for a reduction in parking standards as an incentive for the provision of senior and affordable housing.

Regional Coordination

Coordination with regional transportation and planning agencies are important, as transportation projects are large, complex, and costly. Without coordination, projects can create adverse impacts to the circulation system that may be permanent or too costly to change. The following goals and policies ensure that Colton officials in continuous communication with and working with regional transportation agencies that are actively implementing projects in Colton and areas adjacent to the City.

Goal M-7:	**Coordinate with other jurisdictions and agencies on regional transportation projects.**
Policy M-7.1:	Actively pursue Federal, State, and regional funds for local and regional roadway improvements.
Policy M-7.2:	Require the provision of appropriate mitigation of traffic impacts in surrounding communities resulting from development in Colton. Work with surrounding communities to ensure that traffic impacts in Colton resulting from development outside the City are adequately mitigated.
Policy M-7.3:	Consult with Caltrans, SCAG, the South Coast Air Quality Management District, SANBAG, Omnitrans, San Bernardino County, Riverside County, and the cities of Rialto, San Bernardino, Loma Linda, Grand Terrace, and Riverside to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.
Policy M-7.4:	Continue to work with regional agencies in implementing Intelligent Transportation System measures and advanced traffic management technologies.