

6 CONNECTED CITY

Promote an efficient and integrated circulation system by enhancing the vehicular, biking, walking, and transit networks.

Community members desire a diversified transportation system that ensures efficiency, mobility, and safety for all modes. The General Plan seeks to provide choices in mobility that include vehicular, biking, walking, mobility devices (wheelchairs, scooters, etc.), and transit alternatives. Connectivity within the city's networks will be improved as well as connectivity to regional networks.

Vehicular travel will be improved with safer and widened roadways, intelligently managed traffic, timed signals, a transportation demand program, and adequate parking. Bicycle travel will be enhanced through a connected network of bicycle routes with features such as buffered and dedicated bike lanes, and places for bike storage. The pedestrian environment will be improved through an expanded and connected network of sidewalks, complete with streetscaping and adequate lighting. Transit will be enhanced through improved bus service and a new rail service. And all of these modes will be connected in a layered transportation network that links employment hubs, neighborhoods, schools, parks, the University of Redlands, and Downtown.

Measure U Policies

Guiding Policies: Standards for Traffic Service

- 5.20a Maintain LOS C or better as the standard at all intersections presently at LOS C or better.
- 5.20b Within the area identified in GP Figure 5.3, including that unincorporated County area identified on GP Figure 5.3 as the “donut hole”, maintain LOS C or better; however, accept a reduced LOS on a case by case basis upon approval by a four-fifths (4/5ths) vote of the total authorized membership of the City Council.
- 5.20c Where the current level of service at a location within the City of Redlands is below the Level of Service (LOS) C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing level of service at that location except as provided in Section 5.20b.

Implementing Policies: Circulation Network and Classification

- 5.30g Establish the alignment of San Timoteo Canyon Road in the vicinity of Barton Road at the common boundary between Redlands and Loma Linda so that San Timoteo Canyon Road connects to California Street at Barton Road.
- 5.30i Establish and maintain traffic circulation patterns that protect the character of residential neighborhoods.
- 5.30j Design major infrastructure improvements to accommodate regional traffic needs in a manner which discourages traffic flows through residential neighborhoods, encourages traffic flow to existing freeway systems and assures prudent use of federal and local taxpayer dollars.
- 5.30k In order to assure that the circulation policies established by the Redlands General Plan as set forth in Table 5.2 are implemented, including without limitation establishment of California Street as a major arterial, the City Council shall coordinate with SANBAG, the IVDA, and the City of San Bernardino with regard to all Santa Ana River crossings, except the Orange Street crossing, to assure the development of California Street/Mountain View Avenue as a major arterial providing access to the San Bernardino International Airport.

Guiding Policies: Collector and Local Streets

- 5.32a Design residential collector streets and implement traffic control measure to keep traffic on collectors at 3,000 vehicles per day or less, where possible.
- 5.32b Design local residential streets and implements traffic control measure to keep traffic below 500 vehicles per day.

6.1 LAYERED, MULTI-MODAL NETWORK

Principles

- 6-P.1 Maintain a cohesive circulation system through a “layered networks” approach that promotes complete streets and mobility for all modes while prioritizing specific transportation modes to specific corridors and geographic areas. (Staff recommendation)
- With its diverse development patterns, history, and terrain, Redlands needs a multi-modal network to meet its future transportation needs. The layered networks approach is a synergistic and complete system that considers various transportation modes and the entire network as a whole. Such an approach does not mean that every street will support all modes, but that the network as a whole would be designed to accommodate all modes.*
- 6-P.2 Use the layered network to identify, schedule, and implement roadway improvements as development occurs in the future, and as a standard against which to evaluate future development and roadway improvement plans. (1995 General Plan; changed Circulation Network to layered network)
- 6-P.3 Review the layered network with neighboring jurisdictions and seek agreement on actions needing coordination. (1995 General Plan; changed Circulation Network to layered network)
- 6-P.4 Support transportation infrastructure improvements such as safer street crossings and attractive streetscapes to encourage bikers, walkers, and users of mobility devices. (GPSC recommendation)
- 6-P.5 Manage the city’s transportation system to reduce traffic, improve flow, and improve air quality. (Staff recommendation)
- 6-P.6 Support public health by promoting active living and supporting safe walking and biking throughout the city. (Staff recommendation)
- 6-P.7 Minimize emergency vehicle response time and improve emergency access. (Staff recommendation)
- 6-P.8 Ensure the safety of the transportation network by preventing excessive speeding of vehicular traffic and promoting safe sharing of the network by all transportation modes. (Staff recommendation)
- 6-P.9 Design a transportation network for individuals of all ages and abilities including seniors and youth. (Staff recommendation)
- 6-P.10 Require developers to construct or pay their fair share toward improvements for all travel modes consistent with the layered network. (Modified from 1995 General Plan)
- 6-P.11 Implement standards for pavement design and roadway and intersection striping so that streets are accessible by all users and all modes. (Staff recommendation)
- 6-P.12 Develop and implement a comprehensive wayfinding program that serves all modes of transportation. (Staff recommendation)

Actions

Mode Design

6-A.1 Design streets to accommodate various modes according to roadway classification. (Staff recommendation)

For example, automobiles might be prioritized along major corridors, transit and walking might be prioritized near rail stations and Downtown, and a variety of modes might be prioritized as appropriate in neighborhoods.)

6-A.2 Ensure that streets are designed to accommodate bicyclists per the Bicycle Master Plan. (Staff recommendation)

6-A.3 Strengthen active transportation circulation routes within Downtown and the Transit Villages, and to and from adjacent neighborhoods. (Staff recommendation)

Network Design

6-A.4 Maintain and update design standards for each functional roadway classification per Figure 5-2. These standards are for a typical midblock application. Additional turn lanes may be needed at some intersection approaches. Different standards may govern in Specific Plan areas and variations are permitted given site conditions and right-of-way availability. (1995 General Plan modified)

6-A.5 Integrate complete streets and a layered networks approach into all City streets, traffic standards, plans, and details.

6-A.6 Ensure that new street design and potential retrofit opportunities for existing streets minimize traffic volumes and/or speed as appropriate within residential neighborhoods without compromising connectivity for emergency vehicles, bicycles, pedestrians, and users of mobility devices. This could be accomplished through:

- Management and implementation of complete street strategies, including retrofitting existing streets to foster biking and walking as appropriate;
- Short block lengths, reduced street widths, and/or traffic calming measures; and
- Providing pedestrians and bicyclists with options where non-motorized transportation is prohibited. (Staff recommendation; OCCSI Complete Streets Report)

6-A.7 Consider innovative design solutions that improve mobility, efficiency, connectivity, and safety such as traffic calming devices, roundabouts, curb extensions at intersections, separated bicycle infrastructure, high visibility pedestrian treatments and infrastructure, and signal coordination. (Staff recommendation)

6-A.8 As part of street redesigns, consider the needs of different modes – such as shade for pedestrians, lighting at pedestrian scale, mode-appropriate signage, transit amenities, etc. (Staff recommendation)

6-A.9 Add bike and pedestrian facilities on roads with excess capacity. (Staff recommendation)

- 6-A.10 Add new streets to create a finer-grained, pedestrian-scaled road network, connecting residential areas to parks and transit village cores. Ensure that the street system in Transit Villages supports development of connected and accessible communities. (Staff recommendation; Transit Village Handout)
- 6-A.11 Manage travel speeds in Downtown, at Transit Villages, and near schools, parks, and the University to enhance safety. (Staff recommendation)
- 6-A.12 Adopt a “vision zero” approach to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. (Staff recommendation)
- 6-A.13 Ensure safe railway crossings along the passenger and freight rail corridors. (Staff recommendation)
- 6-A.14 Use public outreach to encourage alternative modes of travel and inform the community about the benefits of participation in new programs, approaches and strategies. (Staff recommendation)
- 6-A.15 Engage the community and neighborhoods in street design and re-design. (Staff recommendation)
- 6-A.16 Establish a funding system that will enable completion of the network before the projects that require them are occupied. (1995 General Plan)

6.2 PEDESTRIAN, BICYCLE, AND VEHICULAR MOVEMENT

PEDESTRIAN MOVEMENT

Principles

- 6-P.13 Provide a safe, direct, and healthful pedestrian environment through means such as providing separate pedestrian-ways in parking lots, avoiding excessive driveway widths, and providing planting strips between sidewalks and streets where feasible. (1995 General Plan)
- 6-P.14 Encourage creative walking paths pursuant to City planning codes, local, State, and federal laws. (GPSC recommendation)

Actions

For a map of trails and multi-use paths, see [Figure 5.x](#).

For policies on street design – including tree canopy and street lighting – see Chapter 2: Distinctive City.

- 6-A.17 Continue implementing the Safe Routes to School program, and develop a Safe Routes to Transit program, focusing on pedestrian and bicycle safety improvements near local schools and transit stations. (Staff recommendation)
- 6-A.18 Create appropriate enhancements to pedestrian crossings at key locations across all major boulevards, with a target of providing pedestrian crossings no further than 600 feet apart. (Staff recommendation)

- 6-A.19 Provide pedestrian routes between offices, neighborhoods, and Downtown. (Staff recommendation; Transit Village Handout)
- 6-A.20 Strengthen trail connections to Downtown (Orange Blossom Trail, Lugonia Trail, Citrus Avenue, Church Street). (Staff recommendation; Transit Village Handout)
- 6-A.21 Enhance street lighting for pedestrians. (Staff recommendation)
- 6-A.22 Include amenities such as shade trees, transit shelters and other transit amenities, benches, trash and recycling receptacles, bollards, public art, and directional signage that can enhance the pedestrian experience. (Staff recommendation)

BICYCLE MOVEMENT

For bikeway designations, see Figure 5.4. For more detailed bicycle movement policies, improvements, and priorities, see the Redlands Bicycle Master Plan, which is published and maintained separate from the General Plan.

Principles

- 6-P.15 Establish and maintain a comprehensive network of on- and off-roadway bike routes to encourage the use of bikes for both commuter and recreational trips. (1995 General Plan)
- 6-P.16 Develop bike routes that provide access to rail stations, downtown, schools, parks, and the University. (Modified from 1995 General Plan)

Actions

- 6-A.23 Use the City's Bicycle Master Plan as the primary vehicle to plan for and implement bikeway improvements. (Staff recommendation)
The Bicycle Maser Plan, adopted in 2015, proposes an extensive network with over 100 additional miles of bicycle facilities. The plan should be updated as needed to reflect the updated General Plan, including proposals for new streets and connections in the Transit Villages.
- 6-A.24 Implement bicycle and trail improvements that provide strong east-west connections between Transit Villages and in the city's wider bicycle network. Routes would include the Orange Blossom Trail, the Mission Creek Zanja Trail, routes on Colton Avenue and Citrus Avenue, and the San Timoteo Canyon Trail. (Staff recommendation; Transit Village Handout)
- 6-A.25 Implement bicycle and trail improvements that provide strong north-south connections, especially with major east-west trails, including routes on Mountain View Avenue, Nevada Street, Alabama Street, Texas Street, New York Street, Orange Street, Church Street, and Wabash Avenue. (Staff recommendation)
- 6-A.26 Seek assistance from major employers in providing support facilities to encourage use of bikes for commuter purposes. (1995 General Plan)
- 6-A.27 Incorporate end-of-trip facilities into TDM plans at employment sites and public facilities, depending upon distance from bikeways. Provide well-located, secure bike storage facilities at

employment sites, shopping and recreational areas, and schools in order to facilitate bike use. Major employers should provide shower and changing facilities or assist in funding bicycle transit centers in nearby locations. (1995 General Plan, revised)

- 6-A.28 Implement bicycle route improvements that provide inter-city and regional connections, connecting to trail systems in Loma Linda, Highland, Yucaipa, and the Santa Ana River Trail. (Staff recommendation)

VEHICULAR MOVEMENT AND STANDARDS FOR TRAFFIC SERVICE

For a map of Roadway designations, see Figure 5.1.

Principles

- 6-P.17 Limit vehicular congestion to portions of the layered network that have the least impact on the city’s neighborhoods, neighborhood retail areas, and mixed-use districts, to the greatest extent feasible. (Staff recommendation)
- 6-P.18 Strive to maximize the efficiency of the existing vehicular infrastructure and manage the major boulevards and avenues so that they provide shorter travel times than parallel minor avenues or neighborhood streets, consistent with the layered network. (Staff recommendation)
- 6-P.19 Discourage the use of City streets as alternatives to congested regional highways. (Staff recommendation)
- 6-P.20 Review and coordinate circulation requirements with Caltrans as it pertains to the freeways and state highways. (1995 General Plan)

Actions

- 6-A.29 Monitor traffic service levels and implement roadway improvements prior to deterioration in levels of service below the stated standard. (1995 General Plan)
Development approvals should require demonstration that traffic improvements necessary to serve the development without violating the standard will be in place in time to accommodate trips generated by the project.
- 6-A.30 Avoid adding traffic to streets carrying volumes above the standards and consider traffic control measures where volumes exceed the standard and perceived nuisance is severe. (1995 General Plan)
- 6-A.31 Prioritize “closing the gap” in new street construction in areas where the full road section is not built out.
- 6-A.32 Utilize transportation demand management strategies, non-automotive enhancements (bicycle, pedestrian, transit, train, trails, and connectivity), and traffic signal management techniques as part of a long-term transportation solution and traffic mitigation strategy. (Staff recommendation)
- 6-A.33 Allow for flexibility and creativity in the roadway standards, where appropriate, to preserve historic features, specimen trees and significant landscaping, accommodate turn lanes, wider

sidewalks, bike paths, turnouts for buses, public art, and landscaped medians. (Staff recommendation).

- 6-A.34 Encourage the use of car share and car hire services within Redlands to provide vehicular transportation alternatives. (Staff recommendation).

Freeways

- 6-A.35 Work with State, regional, and federal transportation agencies in the continued improvement of freeways and interchanges within the city. (Staff recommendation)
- 6-A.36 Work with the California Department of Transportation (Caltrans) to achieve timely construction of freeway and interchange improvements. (1995 General Plan)
- 6-A.37 Support proposed Caltrans I-10 and I-210 improvement projects. (1995 General Plan)

Boulevards and Arterials

- 6-A.38 Provide adequate capacity on boulevards and arterials to meet LOS standards, and to avoid traffic diversion to local streets or freeways. (1995 General Plan; added boulevards)
- 6-A.39 Locate high traffic-generating uses so that they have direct access or immediate secondary access to arterials or boulevards. (1995 General Plan; added boulevards)
- 6-A.40 Maximize the carrying capacity of arterials and boulevards by controlling the number of driveways and intersections, limiting residential access where applicable, and requiring sufficient on-site parking to meet the needs of proposed projects. (Staff recommendation)

Additional guidelines for arterial and boulevard access include providing smooth ingress/egress to fronting development. This entails designing parking areas so that traffic does not stack up on the arterial roadway, combining driveways to serve small parcels, and maintaining adequate distance between driveways and intersections to permit efficient traffic merges. Implementation of these guidelines is especially important along Alabama Street, San Bernardino Avenue, and Redlands Boulevard.

Collector and Local Streets

- 6-A.41 Discourage through-traffic on local streets. (1995 General Plan)
- 6-A.42 Avoid adding traffic to collector and local streets carrying volumes above capacity, and consider traffic control measures where volumes exceed the standard and perceived nuisance is severe. (Staff recommendation)
- 6-A.43 Ensure an integrated network of collector and local streets in new districts. Ensure that cul-de-sacs have pedestrian/bike connections at the terminus. (Staff recommendation)
- 6-A.44 Provide for a network of collectors in the northwest and northeast areas to minimize traffic levels on San Bernardino Avenue, Lugonia Avenue, and Orange and Texas streets. (1995 General Plan)
- 6-A.45 Adopt design standards for hillside and rural streets. (Staff recommendation)
- 6-A.46 Sunset Drive is at or near capacity. Therefore, significant additional traffic loads shall not be placed on this roadway until a comprehensive traffic study and model is undertaken to include all

the connector streets into the downtown area and freeway interchanges. and that the study shows the additional load can be accommodated with no section of the model performing below Level of Service C. (1995 General Plan, Southeast Area Plan)

- 6-A.47 A comprehensive design study of Alessandro Road from Crescent Avenue to San Timoteo Canyon Road shall be undertaken to redesign Alessandro Road to accommodate the traffic projected by the development of the Southeast Area Plan, and to specifically address the currently inadequate narrow bridge, the curve approach to the bridge, the intersection with Sunset Drive, and the intersection with Crescent Avenue. (1995 General Plan, Southeast Area Plan)
- 6-A.48 Local roadways within the Southeast Area Plan shall be designed for relatively low speeds, shall follow the natural contours and shall avoid rather than cut through the inherent obstacles of nature. It is recognized that this may require that adjacent land uses be low to ensure that this slow speed/low volume system is not overloaded. (1995 General Plan, Southeast Area Plan)
- 6-A.49 Alessandro Road shall be realigned and upgraded, with specific attention to the Sunset Drive intersection and the San Timoteo Creek bridge crossing. (1995 General Plan, Southeast Area Plan)

Scenic Drives

- 6-A.50 Uphold the designation of the following streets within the city as scenic highways, drives, and historic streets. Special development standards have been adopted by Resolution for these streets. The streets are: (Modified from 1995 General Plan)

- Brookside Avenue, from Lakeside Avenue to Eureka Street
- Olive Avenue, from Lakeside Avenue to Cajon Street
- Center Street, from Brookside Avenue to Crescent Avenue
- Highland Avenue, from Serpentine Drive to Cajon Street
- Sunset Drive, from Serpentine Drive to Edgemont Drive
- Cajon Street
- Mariposa Drive, between Halsey and Sunset Drive
- Dwight Street, between Pepper Street and Mariposa Drive

In addition, designate the following roads as scenic drives within the community as neighborhood connectors as well as recreational routes for drivers and bike riders.

- Riverview Drive along the Santa Ana River Wash
- Live Oak Canyon Road
- San Timoteo Canyon Road

6.3 TRANSIT

Principles

- 6-P.21 Improve public transit as a viable form of transportation in Redlands. (Staff recommendation)
- 6-P.22 Support passenger rail as an alternative mode of regional transit. (Staff recommendation)

Actions

- 6-A.51 Work with Omnitrans to accommodate and adjust bus service as necessary to support future rail service. (Staff recommendation)
- 6-A.52 Work with Omnitrans to expand bus service to additional areas of the city, (GPSC recommendation)
- 6-A.53 Work with Omnitrans to plan for bus shelters, boarding areas, bus pads in the right-of-way, and bus turnouts. (GPSC recommendation)
- 6-A.54 Incorporate real-time information systems so that passengers will know when their bus or train is expected to arrive. (Staff recommendation)
- 6-A.55 Support investments in passenger rail by providing effective on-site circulation and multi-modal connections to transit stations. (Staff recommendation)
- 6-A.56 Develop station area plans to determine the appropriate modes of transportation to be accommodated at each passenger rail station, the inter connections between those modes, and the facilities to be provided to support each mode (Staff recommendation)
- 6-A.57 Upon completion of the passenger rail project, work with major employers, the University of Redlands, and major event organizers (such as Redlands Bowl) on a shuttle system to link transit and major destinations. (Staff recommendation)
- 6-A.58 Continue to collaborate with regional transit partners to achieve seamless transfers between systems, including scheduling, ticketing, and shared fare systems. (Staff recommendation)
Such technologies include online applications and changeable message signs at major bus stops.
- 6-A.59 Develop strategies to maximize off-peak use of transit. (Staff recommendation)
- 6-A.60 Coordinate with other agencies and private entities to investigate methods of improving service and enhancing safety along the passenger rail corridor. (Staff recommendation)
- 6-A.61 Encourage convenient and safe pedestrian linkages to and from transit service to provide better first-mile and last-mile connectivity. (Staff recommendation)

6.4 TRANSPORTATION DEMAND MANAGEMENT (TDM) AND PARKING

Principles

- 6-P.23 Adopt and implement a Transportation Demand Management Program. This program can include elements such as: (1995 General Plan)
- Telecommuting from home
 - Telecommuting from a satellite work Center
 - Compressed work week
 - Flex time
 - Ridesharing
 - Ridesharing subsidy and tax credits
 - Ridesharing parking cost subsidy
 - Ridematching and carpooling
 - Guaranteed ride home
 - Car hire services
 - Commuter stores
 - Car share programs
 - Bike share programs
 - On-site facilities for commuters
 - Remote park-and-ride lots with amenities
 - Preferential parking for ride sharers
 - Other new and innovate alternatives that may arise in the future

Actions

- 6-A.62 Work with employers to implement TDM programs to reduce peak period trip generation. (1995 General Plan)
- 6-A.63 Provide adequate parking availability Downtown for residents, commuters, visitors, and shoppers throughout the day. (Staff recommendation)
- 6-A.64 Design parking to meet applicable urban design goals and minimize negative impacts on pedestrians, bicyclists, and transit users. (Staff recommendation)

- 6-A.65 Encourage developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, or off-site parking within a reasonable walking distance. (Staff recommendation)
- 6-A.66 Develop flexible on-site vehicle parking requirements. Such requirements would include implementation of innovative parking techniques, implementing effective TDM programs to reduce parking demand, and consideration of other means to efficiently manage parking supply and demand. (Staff recommendation)
- 6-A.67 Plan for and adopt alternative transportation management plans as they become feasible. (GSPC recommendation)

6.5 GOODS MOVEMENT

Principles

- 6-P.24 Prioritize goods movement along specific routes in the city, consistent with the layered network, to foster efficient freight logistics. (Staff recommendation)
- 6-P.25 Update and implement a truck route map to ensure it serves shipping needs in the city while considering potential conflicts with preferred modes and other sensitive land uses in the city, consistent with the layered network. (Staff recommendation)

Actions

- 6-A.68 Focus truck routes on roadways prioritized for automobiles, consistent with the layered network. (Staff recommendation)
- 6-A.69 Maintain a truck route map and provide signage to direct truck traffic to designated routes. Design designated truck routes such that the pavement, roadway width, and curb return radii support anticipated heavy vehicle use. (Staff recommendation)
- 6-A.70 Coordinate with other agencies and private entities to investigate methods of improving service, implementing a quiet zone, and enhancing connectivity. (Staff recommendation)
- 6-A.71 Discourage truck traffic from parking, idling, or traveling through residential neighborhoods. (GPSC recommendation)
- 6-A.72 Conduct education programs for the goods movement industry on designated truck routes through the city. (GPSC recommendation)
- 6-A.73 Create easily understood truck route maps, potentially through on-line applications, to be distributed by the goods movement industry. (GPSC recommendation)