

## 6 CONNECTED CITY

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

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, 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 new 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 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

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### 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 to promote biking, walking, safer street crossings, and attractive streetscapes. (Staff 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 walking and safe bike routes 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 Foster a transportation network for 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 stripe roadways and intersections so that streets are pedestrian and bicycle-friendly. (Staff recommendation)
- 6-P.12 Develop and implement a comprehensive wayfinding program that serves all modes of transportation. (Staff recommendation)

## Actions

### Mode Prioritization

- 6-A.1 Prioritize transportation 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 pedestrian and bicycle circulation routes within Downtown and the Transit Villages, and to and from adjacent neighborhoods consistent with the Bicycle Master Plan. (Staff recommendation)

### Network Design

- 6-A.4 Maintain and update design standards for each functional roadway classification. (1995 General Plan)

*Roadway standards are illustrated in Figure 6-2 and are for typical midblock applications when constructing new roadways or improving existing roadways where sufficient right-of-way is available. Additional right-of-way may be needed for turn lanes at some intersection approaches. Different standards may govern in Specific Plan areas.*

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

*This should 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, and pedestrians. 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.6 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.7 As part of street redesigns, consider the needs of different modes – such as shade for pedestrians, lighting at pedestrian scale, mode-appropriate signage, etc. Use the layered network to allocate rights-of-way and design for traffic calming. (Staff recommendation)
- 6-A.8 Add bike and pedestrian facilities on roads with excess capacity. (Staff recommendation)
- 6-A.9 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.10 Manage travel speeds in Downtown, at Transit Villages, and near schools, parks, and the University to enhance safety. (Staff recommendation)
- 6-A.11 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.12 Ensure safe railway crossings along the passenger and freight rail corridors. (Staff recommendation)
- 6-A.13 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.14 Engage the community and neighborhoods in street design and re-design. (Staff recommendation)
- 6-A.15 Establish a funding system that will enable completion of the circulation system before the projects that require them are occupied. (1995 General Plan)

## 6.2 PEDESTRIAN, BICYCLE, AND VEHICULAR MOVEMENT

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### PEDESTRIAN MOVEMENT

#### Principles

- 6-P.13 Treat pedestrians as if they are as important as cars and prioritize pedestrian movement in Downtown, Transit Villages, and near schools. (Modified from 1995 General Plan),  
*Except on freeways and a few hillside residential streets, pedestrians should have direct, safe routes.*
- 6-P.14 Make walking interesting. (1995 General Plan)  
*Avoid long, uniform frontages and creating pedestrian paths that do not follow streets; give people reasons to want to walk.*

- 6-P.15 Provide direct pedestrian routes and encourage smaller block sizes, especially in the Transit Villages. (1995 General Plan; Transit Villages elaboration added)

*There are opportunities to provide direct paths in several locations, including around passenger rail stations as sites in Transit Villages are developed.*

- 6-P.16 Provide a safe and healthful pedestrian environment 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)

## **Actions**

*For a map of trails and multi-use paths, see Figure 6.5*

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

- 6-A.16 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.17 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.18 Provide pedestrian routes between offices, neighborhoods, and Downtown. (Staff recommendation; Transit Village Handout)
- 6-A.19 Strengthen trail connections to Downtown (Orange Blossom Trail, Lugonia Trail, Citrus Avenue, Church Street). (Staff recommendation; Transit Village Handout)
- 6-A.20 Enhance street lighting for pedestrians. (Staff recommendation)
- 6-A.21 Include amenities such as shade trees, 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 6.4. 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.17 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.18 Develop bike routes that provide access to rail stations, downtown, schools, parks, and the University. (Modified from 1995 General Plan)

## Actions

- 6-A.22 Use the City's Bicycle Master Plan as the primary vehicle to plan for and implement bikeway improvements. (Staff recommendation)
- The Bicycle Master 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.23 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.24 Implement bicycle and trail improvements that provide strong north-south connections, especially with major east-west trails, including routes on Mountain Avenue, Nevada Street, Alabama Street, Texas Street, New York Street, Orange Street, Church Street, and Wabash Avenue. (Staff recommendation)
- 6-A.25 Seek assistance from major employers in providing support facilities to encourage use of bikes for commuter purposes. (1995 General Plan)
- 6-A.26 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.27 Implement bicycle route improvements that provide inter-city and regional connections, connecting to 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 6.1*

## Principles

- 6-P.19 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.20 Strive to maximize the efficiency of the existing automobile 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.21 Discourage the use of City streets as alternatives to congested regional highways. (Staff recommendation)
- 6-P.22 Review and coordinate circulation requirements with Caltrans as it pertains to the freeways and state highways. (1995 General Plan)

### **Actions**

- 6-A.28 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.29 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.30 Prioritize “closing the gap” in new street construction in areas where the full road section is not built out.
- 6-A.31 Utilize transportation demand management strategies, non-automotive enhancements (bicycle, pedestrian, transit, train, trails, and connectivity), and traffic signal management techniques as long-term transportation solutions and traffic mitigation measures. (Staff recommendation)
- 6-A.32 Allow for flexibility in the roadway standards where appropriate to preserve historic features, specimen trees and significant landscaping, accommodate turn lanes, wider sidewalks, bike paths, and public art, and permit creativity in the design of roadways in new developments such incorporating landscaped medians. (Staff recommendation).
- 6-A.33 Encourage the use of car share and car hire services within Redlands to provide vehicular transportation alternatives. (Staff recommendation).

### **Freeways**

- 6-A.34 Work with state and regional transportation agencies in the continued improvements to freeways and interchanges within the City. (Staff recommendation)
- 6-A.35 Work with California Department of Transportation (Caltrans) to achieve timely construction of freeway and interchange improvements. (1995 General Plan)
- 6-A.36 Support proposed Caltrans I-10 and I-210 improvement projects. (1995 General Plan)

### **Boulevards and Arterials**

- 6-A.37 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.38 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.39 Maximize the carrying capacity of arterials and boulevards by controlling the number of driveways and through traffic 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.40 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)

*Traffic above the standards may cause residents to become concerned about noise, speeding, child safety, and loss of privacy. Typically, residents will become concerned when traffic reaches 3,000 vehicles per day.*

- 6-A.41 Discourage through-traffic on local streets. (1995 General Plan)

- 6-A.42 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)

*Implementation of proposed arterial and collector improvements would also reduce diversion to local streets.*

- 6-A.43 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)

*Much of the developed area north of Lugonia Avenue lacks collectors within the original half-mile square road grid.*

- 6-A.44 Adopt design standards for hillside and rural streets. (Staff recommendation)

- 6-A.45 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.46 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.47 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.48 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.49 Designate a scenic drive along the Santa Ana Wash that will serve as a neighborhood connector as well as a recreational route for drivers and bike riders. In addition, a number of streets within the City have been designated 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

## **6.3 TRANSIT**

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### **Principles**

6-P.23 Support public transit as a viable form of transportation in Redlands. (Staff recommendation)

6-P.24 Support passenger rail as an alternative mode of regional transit. (Staff recommendation)

### **Actions**

6-A.50 Support investments in passenger rail by providing effective on-site circulation and multi-modal connections to transit stations. (Staff recommendation)

- 6-A.51 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.52 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.53 Work with Omnitrans to accommodate and adjust bus service as necessary to support future rail service. (Staff recommendation)
- 6-A.54 Work with Omnitrans to plan for bus shelters and turnouts. (1995 General Plan)
- 6-A.55 Continue to collaborate with regional transit partners to achieve seamless transfers between systems, including scheduling, ticketing, and shared fare systems. (Staff recommendation)
- 6-A.56 Incorporate real-time information systems so that passengers will know when their bus or train is expected to arrive. (Staff recommendation)  
*Such technologies include online applications and changeable message signs at major bus stops.*
- 6-A.57 Develop strategies to maximize off-peak use of transit. (Staff recommendation)
- 6-A.58 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.59 Encourage convenient and safe pedestrian linkages to and from transit service to provide better first-mile and last-mile connectivity. (Staff recommendation)

## 6.4 AIRPORT

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### Principles

- 6-P.25 Develop Redlands Airport to meet the general aviation needs of the Planning Area based on capabilities of the existing runways. (1995 General Plan)

### Actions

- 6-A.60 Update and maintain the Redlands Municipal Airport Master Plan to guide operations and airport improvements. (Staff recommendation)
- 6-A.61 Invest in upgrading the physical appearance of Redlands Airport so that it is attractive to business and recreational travelers. (Staff recommendation)

## 6.5 TRANSPORTATION DEMAND MANAGEMENT (TDM) AND PARKING

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### Principles

6-P.26 Adopt and implement a Transportation Demand Management Program. This program can include elements such as:

- 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
- Care hire services
- Commuter stores
- Care share programs
- Bike share programs
- On-site facilities for commuters

(Modified from 1995 General Plan)

*Redlands must comply with requirements set forth by SANBAG's 2007 Congestion Management Program. The City could also appoint a dedicated Transportation Demand Management (TDM) coordinator in charge of overseeing development and compliance.*

6-P.27 Work with employers to implement TDM programs to reduce peak period trip generation. (1995 General Plan)

6-P.28 Provide adequate parking availability Downtown for residents, commuters, visitors, and shoppers throughout the day. (Staff recommendation)

6-P.29 Design parking to meet applicable urban design goals and minimize negative impacts on pedestrians, bicyclists, and transit users. (Staff recommendation)

## Actions

- 6-A.62 Promote programs that reduce residents' average vehicle ownership, such as car-sharing and unbundled parking (pricing parking separately from housing). (Staff recommendation)
- 6-A.63 Strive to implement measures to minimize the time motorists spend searching for parking, through wayfinding and pricing parking to create availability, especially in Downtown. (Staff recommendation)
- 6-A.64 Consider implementing parking pricing and commuter parking limits as tools for managing congestion once the passenger rail begins operation. (Staff recommendation)
- 6-A.65 Consider allowing 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)

## 6.6 GOODS MOVEMENT

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### Principles

- 6-P.30 Prioritize goods movement along specific routes in the city, consistent with the layered network, to foster efficient freight logistics. (Staff recommendation)
- 6-P.31 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.67 Focus truck routes on roadways prioritized for automobiles, consistent with the layered network. (Staff recommendation)
- 6-A.68 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.69 Coordinate with other agencies and private entities to investigate methods of improving service, implementing a quiet zone, and enhancing connectivity. (Staff recommendation)