CHAPTER 19

CIRCULATION

This Chapter presents the circulation concepts for autos, transit, bicycles and pedestrians in the Downtown. This Chapter is organized as follows:

19.1 Introduction
19.2 Context
19.3 Traffic Circulation Network
19.4 Transit
19.5 Pedestrians
19.6 Bicycles
19.7 Freeway Improvements

19.1 Introduction

This section presents overall concepts for vehicular and non-vehicular circulation for the downtown. The plans for auto, transit, bicycle and pedestrian circulation are based on the circulation goals and policies set forth in Chapter 3: Vision, Goals and Policies.

The overall circulation plan is based on providing convenient access to, and circulation within, the downtown for all transportation modes. This multi-modal approach recognizes the importance not only of auto circulation, but also of good transit, bicycle, and pedestrian circulation to a successful downtown environment. The plan therefore focuses on achieving a balanced utilization of roadway space in the downtown where people can drive into Downtown and find convenient parking, take transit into downtown, bicycle around downtown, and walk around Downtown in a comfortable and safe environment.

19.2 Context

The current downtown street system is a standard grid of two-way streets, with the exception of the Orange/Lemon one-way couplet on the east side of downtown. The principal traffic-carrying streets are Third Street, Mission Inn Avenue, University Avenue, 14th Street, and Market Street, due largely to the fact that they are the principal entry streets into downtown and also have interchanges with the adjacent freeways. The circulation system is completed by a comprehensive grid system of both secondary and local streets.

Grid street systems work particularly well in downtowns due to their inherent simplicity, ease of understanding, and ability to directly serve the diverse land uses typically found in downtowns. However, the fact that a number of the downtown streets are discontinuous and are interrupted by buildings and/or parks, tends to limit and restrict circulation opportunities, as well as being somewhat confusing to visitors. This is particularly the case in the southeast quadrant of downtown, i.e. the Justice District.

Nevertheless the street system generally functions well for the current downtown land uses. Downtown streets generally provide a good level of service and there are few if any traffic circulation problems with respect to either traffic volumes or traffic congestion. Reconnecting certain streets, or converting to two-way streets, to reinforce and enhance the grid could help improve circulation within the downtown.

19.3 TRAFFIC CIRCULATION NETWORK

The following comprise the principal entry corridors into the Downtown area. Nine entry corridors are identified, of which five provide freeway connections. Of the nine entry corridors, four are considered Major Street corridors and five are considered Secondary Corridors.

In order to provide for the efficient access of vehicular traffic within the downtown, as well as efficient circulation with the downtown, the traffic circulation network identified in Figure 19A is proposed. This identifies Major Streets, Secondary Streets, and Local Streets. This classification is supplemental to and does not replace the roadway categories described in the City's General Plan which remain as specified in that document. The Specific Plan categorization is a functional one, which is intended to describe how various streets are expected to operate with respect to traffic flow in the downtown.

19.3.1 Major Streets

Major Streets are those expected to be the principal streets that traffic will use to access Downtown and circulate around Downtown. These streets will thus carry the heaviest traffic volumes and will generally be the widest streets. The Major Streets identified in the Plan are:

- Market Street
- Lime Street
- University Avenue
- 14th Street

19.3.2 Secondary Streets

Secondary Streets will play a supporting role in distributing traffic within Downtown. These streets are expected to carry less traffic than the Major Streets. The Secondary Streets identified in the Plan are:

- Main Street (north of 3rd Street)
- Brockton Avenue (south of Mission Inn Avenue)
- Orange Street
- Lemon Street
- 3rd Street
- Mission Inn Avenue

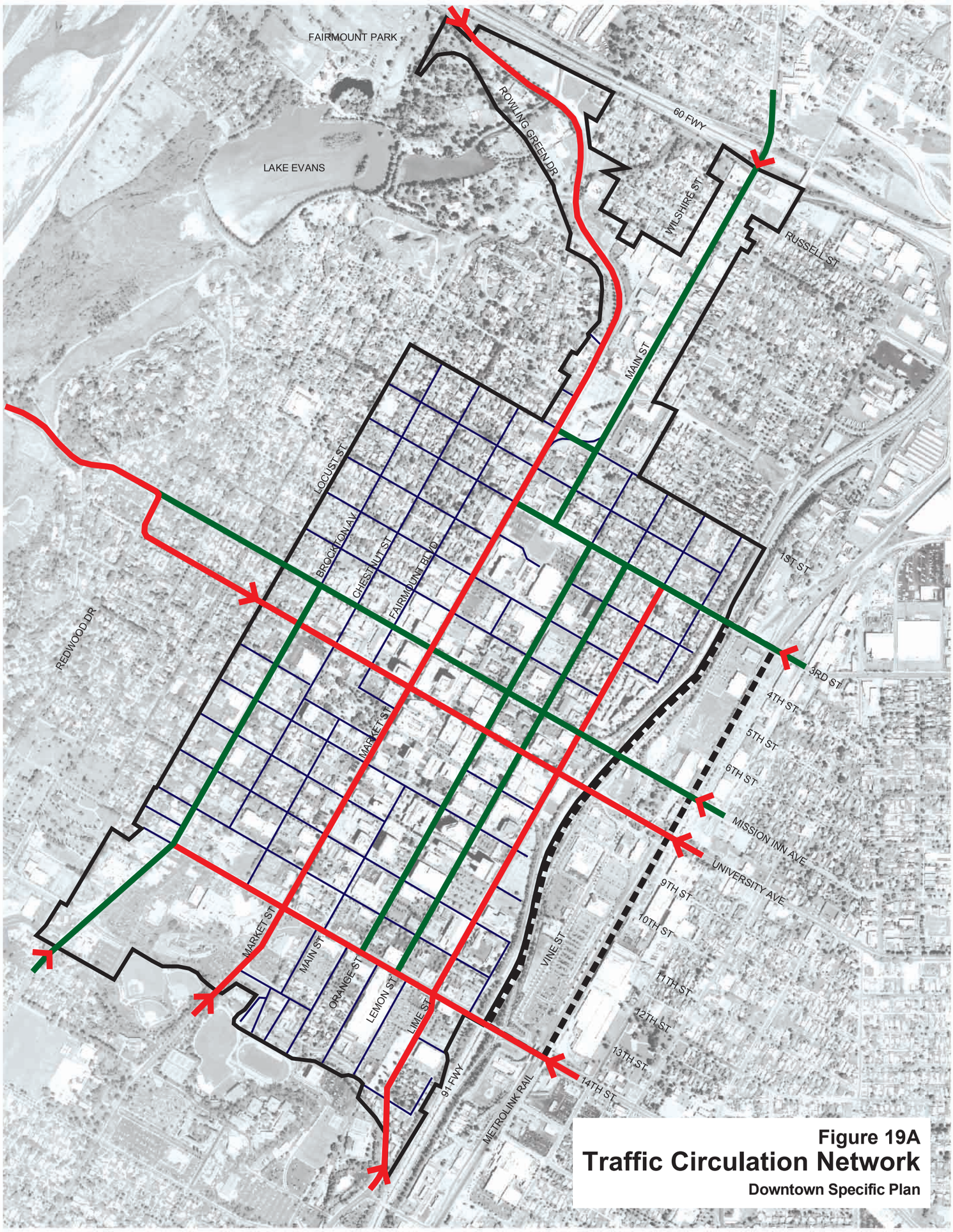

Figure 19A
Traffic Circulation Network
Downtown Specific Plan

LEGEND

- Entry Gateway
- Major Street
- Secondary Street
- Other Street

1 5 20 ACRES

N

0 300' 1200'
600' 2400'

19.3.3 Other Streets

Other streets within the downtown area are important for circulation of local traffic to specific land uses and buildings. These streets, which essentially complete the circulation grid, are not expected to carry through traffic or heavy traffic volumes.

Outside of the Raincross District, many of these streets pass through residential areas (e.g. west of Brockton Avenue and north of 3rd Street). While these streets serve for local access to the residences they are not appropriate streets for access to downtown and through traffic should be discouraged in these areas. Of particular concern is Fairmount Boulevard between First and Sixth Streets where the Residential District is adjacent to the Raincross District. To reduce cut-through traffic through the Residential District, vehicular access from Fairmount Boulevard to any new development between First and Sixth Street in the Raincross District, is strongly discouraged. In addition, to further protect the historic residential neighborhood, Fairmount Boulevard shall not be widened to accommodate traffic associated with development in the Raincross District.

19.3.4 Recommended Street Improvements

The following street improvements are recommended. These will generally enhance the current grid, improve local traffic circulation within the downtown, and help make the street system more understandable to visitors.

- The current downtown street grid system is important to the future success of downtown and should be maintained and enhanced where possible. No additional streets should be closed.

- Retain the Orange-Lemon one-way couplet. As an alternative, both streets could be reconfigured as two-way streets, however, this would result in a loss of some on-street parking.

The feasibility of converting both streets to regular two-way streets was explored, and was concluded to be infeasible. The Lemon Street roadway is relatively narrow at about 33-34' in 66' right-of-way. Conversions to two-way operation would require one lane in each direction plus a left turn lane. This would utilize the entire roadway width and thereby eliminate about 155 total on-street parking spaces on both sides of the street between 14th Street and Third Street. On-street parking is generally considered to be a critically important amenity for convenient visitor access in the downtown, particularly in the Justice District. In was, therefore, concluded that the benefits of conversion to two-way flow would be outweighed by the negative impacts of losing 155 on-street parking spaces.

Orange Street on the other hand, has a somewhat wider roadway at 44-50' or more, in a 66-70' right-of-way. With Lemon Street remaining one-way northbound, it is important to retain equal one-way capacity (two-lanes) southbound on Orange Street. However, by also providing one northbound lane, with a left turn lane, circulation would be enhanced. (Westbound traffic is currently impacted by the one-way couplet because circulation options are much more limited due to the discontinuity of 9th Street and Main Street. Adding a northbound lane on Orange Street would allow westbound

traffic to head north without the long and confusing detours currently necessitated by the one-way system). It was concluded that although about 75 on-street parking spaces would be lost on the west side of the street, on-street parking could be retained on the east side of the street, so in this instance the benefits of the local northbound lane to convenient traffic circulation would outweigh the loss of parking spaces.

19.4 TRANSIT

Downtown is the focus and hub of service provided by the Riverside Transit Agency (RTA) who provide a total of eleven bus lines serving downtown from all parts of Riverside. Many of these lines run from one part of the city to another, through downtown, and many also terminate downtown at the downtown transit terminal at University/Mission Inn/Fairmount. This serves as both a terminus and a stopping point for all routes in the downtown to enable transfers and connections between bus lines.

A downtown transit hub is therefore very important to RTA operation. Unfortunately the existing transit terminal has suffered from a variety of social problems including loitering, panhandling and crime rates.

Transit will play an increasingly important role in the future development of downtown. As development density increases, transit is ideally suited to moving additional people without widening streets or building new roads. The intent of the specific plan is to ensure that transit continues to perform as a viable alternative to the automobile, particularly for the employees working downtown. In this context, the Specific Plan should accommodate the long range plans of the Riverside Transit Agency, which include:

- Continuation and enhancement of local service.
- Addition of express service on key routes serving Downtown.
- Addition of longer distance service to other cities in Riverside County, as well as to San Bernardino and Orange Counties.

The following specific recommendations are made for transit in the Downtown:

- Focus transit service on two key downtown transit streets - University Avenue and Market Street. These two streets will continue to provide the backbone of bus routes through the downtown, as they are centrally located to most all downtown destinations. The specific plan thus recognizes the importance of facilitating bus operations along these streets. Currently the majority of transit routes use University Avenue and Market Street and this is expected to continue. The Transit Street designation recognizes that these streets are expected to carry the highest volume of buses. Although these streets are also Major Streets for auto traffic, signal timing, curb space designations and sidewalk design should reflect the needs of transit operations.

- Provide improved transit amenities throughout the downtown, but focused on Market Street and University Avenue. This will include enhanced passenger stops with shelters, seated waiting areas, and information displays. The design of these bus stop areas should be distinctive and recognizable, and integrated into the streetscape design of each street and/or block.

- Study the provision of a new downtown Transit Center. This study should address the problems with the current bus station, determine the best course of action to eliminate those problems, and determine if an improved facility could be located on that site or at a different location. This facility, which would serve downtown passengers, should be located west of SR-91. It should provide 10-20 bus bays to accommodate RTA operations, and might need up to a half-block of land area. The Transit Center should include waiting and loading areas, facilities for fare collection, and purchase of bus passes, transit information, and could also include a utility bill payment center and public information center. It should be highly visible, well lit, well designed and aesthetically pleasing. It would be preferable for the Transit Center to also be integrated with commercial development, particularly retail uses. The Transit Center could be a stand-alone facility or it could be integrated into a new building (such as the ground floor of a parking garage or office/commercial development). It should be designed as a downtown focal point not just for transit but for other activities as well so that constant and high volume activity provides a sense of security and eliminates the problems experienced at the current facility.

Because a convenient transit center for downtown uses needs to be located west of the SR-91 Freeway, it is not able to adequately perform as a regional transit center. The continuing growth of Metrolink (with associated parking demands), the emergence of longer distance express bus service to Inland Empire cities as well as other counties, and the possibility of a future high speed rail station, all speak to the need to consideration of a regional transit center. A Regional Transit Center should therefore be considered east of SR-91, adjacent to the Metrolink Station. This would serve a different transit center market to the Downtown Transit Center and would focus on bus access to Metrolink, as well as longer distance bus service (e.g. to Orange County). This transit center could be integrated with possible expansion of parking at the Metrolink Station, as well as a potential future high speed rail station. It could also be integrated with a future RTA operations facility if appropriate and/or feasible

As downtown continues to grow, and as transit becomes increasingly important in servicing that growth, it can be anticipated that certain measures may need to be taken to ensure that transit is able to effectively access and circulate within downtown and provide a convenient alternative to the automobile. There will be an increasing need to facilitate bus movements into and through the downtown. Transit should be given at least equal priority to the automobile on key downtown streets in order to facilitate bus movements within downtown. Greater use of transit will also help reduce parking needs within the downtown.

A number of longer term improvements will anticipate the greater use of transit in the future and the need to facilitate bus movements through the Downtown.

- A future downtown shuttle service should be considered. This could connect the downtown area to the Metrolink Station, to outlying areas such as Riverside Community College and UCR, as well as to parking facilities on the edge of downtown.

- At some time in the future, the City should consider installation of some form of transit priority at traffic signals along Market Street and University Avenue to facilitate bus operations. This could take the form of buses being able to advance or extend the green signal, as well as providing "queue jumpers" to enable buses to pass through a green signal before autos.

- Finally, also in the longer term, the City should consider installing peak period bus lanes to facilitate buses travelling east/west through the Downtown. This could involve conversion of curb parking from an angle to parallel configuration and allowing parking only during off-peak hours when the curb lane is not being used by buses.

19.5 PEDESTRIANS

A comfortable, safe, and enjoyable walking environment is essential to a successful downtown. While many streets have wide sidewalks and pedestrian circulation is well provided for in many areas (e.g. the Downtown Mall along Main Street), there are other areas where pedestrian facilities are less coherent. This includes the lack of a good connection across the SR-91 Freeway to the Marketplace area and the Metrolink Station, and the rather disjointed and uncoordinated walkways along Eleventh Street through the Justice District. To this end, the Specific Plan includes the following recommendations for pedestrian circulation:

- Enhance Eleventh Street into a major east-west pedestrian corridor from Market Street to Lime Street (Eleventh Street between Market and Main would not be closed to vehicular traffic). This is a significant opportunity to provide a major east/west pedestrian spine through the Justice Center. Mid-block pedestrian signals should ultimately be installed at Main Street, Orange Street, Lemon Street and Lime Street.

- Provide a foot bridge over SR-91 from the East Side of Lime Street to Vine Street on the alignment of Eleventh Street, with an enhanced pedestrian connection into the Metrolink Station. This will provide a direct pedestrian access between Metrolink and the employment center of the Justice District. It will also improve pedestrian connections between the downtown and the Marketplace area.

- Enhanced Downtown alleyways can be an important component of the pedestrian environment, in addition to providing essential service access to buildings. Alleys and other pedestrian walkways may also be used to create view corridors at mid-block points which would offer a view, as well as pedestrian access, to a location that might otherwise be overlooked. One potential location for such an alleyway/view corridor is in the block bounded by Market, Main, 10th, and 11th Streets where there is currently a surface parking area that provides a view corridor from Market Street to the beautiful County Courthouse on Main Street. Any future improvements to this area could incorporate an alleyway that would maintain the view corridor while providing pedestrian and possibly even limited vehicular access. Refer to Chapter 20: Streetscape Improvements, for a more detailed discussion of how alley walkways can be improved to accommodate pedestrians.

- Designate the following as pedestrian oriented streets:

  - Sixth Street (Market to Lemon)
  - Mission Inn Avenue (Locust to Vine)
  - University Avenue (Locust to Vine)
  - Ninth (Market to Lime)
  - Tenth (Market to Lime)
  - Market Street (Fifth to Eleventh)
  - Main Street (Fifth to Fourteenth)
  - Orange Street (Third to Fourteenth)
  - Lemon Street (Third to Fourteenth)
  - Fifth Street (Market to Orange)

These streets form the backbone of the pedestrian circulation network in downtown and, in most cases, provide pedestrians with a street environment that will minimize conflict with autos. Streetscape designs should reflect pedestrian needs, including good street lighting, provision of benches, location of street furniture that allows adequate walking areas, adequate crosswalk provisions, shade trees, and curb parking to provide a buffer between traffic lanes and sidewalks. Downtown trailblazing and directional signage should also be designed/configured accordingly.

19.6 Bicycles

The City's General Plan designates Class II Bike Routes on a number of arterial roadways approaching downtown. It is the intent of the Specific Plan to facilitate bicycle access to Downtown by providing connections to these General Plan bike lanes approaching downtown. Within the downtown area, bicycle lanes should be provided on key streets where possible. However, given the need for convenient on-street parking on downtown streets, the striping of bike lanes is not always feasible within available right of way. Based on an evaluation of downtown streets, it is recommended that bike lanes be striped on the following key streets, to provide a backbone bicycle network that also connects to the Citywide bike lanes approaching downtown.

- Market Street (throughout downtown)
- Main Street (north of Third)
- Third Street (east of Market)
- 14th Street (throughout downtown)
- Lime Street (14th Street to 3rd Street)
- Olivewood Avenue (Riverside Community College to 14th Street)
- University Avenue (throughout downtown)

The bike lanes on Market Street and Third Street currently exist. Bike lanes on Main Street are proposed as part of improvements recommended in this Plan. Bike lanes on the other streets noted above are shown for long range planning purposes because they are not currently feasible without street widening or removal of on-street parking. If such changes occur in these streets, then bike lanes should be added.

19.7 FREEWAY IMPROVEMENTS

Downtown Riverside is serviced by two freeways, SR-60 and SR-91. The principle access from SR-60 is a full diamond interchange at Market Street, with a secondary access by a split diamond interchange with Main Street and Orange Street. The principle access from SR-91 is via a split diamond interchange with Mission Inn Avenue and University Avenue and via a full interchange with 14th Street. There are also ramps on SR-91 between the downtown and SR-60, at La Cadena Drive (northbound) and at Poplar/Mulberry (southbound) although these serve primarily the local adjacent area rather than downtown.

A planned project by Caltrans will significantly improve the SR-91/I-215/SR-60 interchange to the northeast of downtown. This will not change the principal ramp interchanges at Market Street, Mission Inn Avenue/University Avenue, and 14th Street. It will, however, modify the following ramps:

SR-60:

- Removes the eastbound on-ramp at Orange Street, and replaces it with a new eastbound on-ramp at Main Street.

This change will probably serve to reduce traffic on Orange Street and increase traffic on Main Street. This will be a positive benefit as it should reduce traffic in the residential area and relocate it to an appropriate arterial street.

SR-91:

- Removes the northbound off-ramp and northbound on-ramp at La Cadena Drive and replaces them with a new northbound off-ramp at Spruce Street. The northbound on-ramp will not be replaced.
- Removes the southbound off-ramp at Poplar and the southbound on-ramp at Mulberry, and replaces with a new southbound on-ramp at Spruce Street. The southbound off-ramp will not be replaced.

Neither of these ramp locations are in the Specific Plan area, or serve the downtown directly.

Caltrans is in the process of evaluating all of these ramp modifications, but it is not expected that they will significantly alter traffic patterns in the downtown.

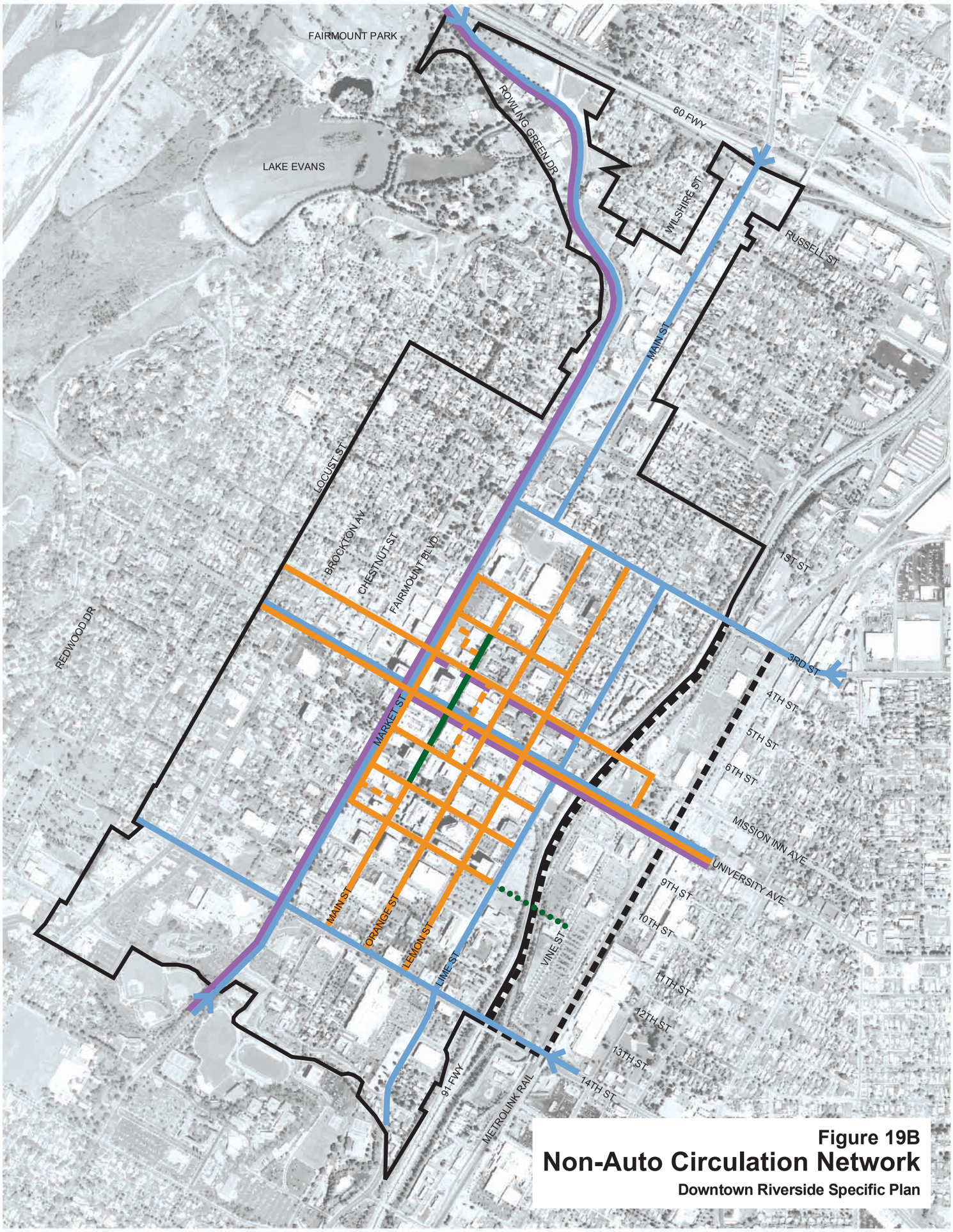

Figure 19B
Non-Auto Circulation Network
Downtown Riverside Specific Plan

LEGEND

- General Plan Class II Bike Route Approaching Downtown
- Class II Bike Route (Bike Lane)
- Transit Street
- Bus only Lanes in Peak Periods (Longer Term)
- Pedestrian-oriented Street
- Pedestrian-oriented Alley Opportunities
- Pedestrian Mall (Pedestrian-only)
- Opportunity for Pedestrian Bridge over Freeway

1 5 20 ACRES

N

0 300' 1200'
600' 2400'