

APPENDIX A

GLOSSARY OF TERMS

APPENDIX A - GLOSSARY OF TERMS

AASHTO - American Association of State Highway and Transportation Officials.

ADA - Americans with Disabilities Act.

ADT - Average Daily Traffic.

APBP - Association of Pedestrian and Bicycle Professionals.

Bicycle - A vehicle having two tandem wheels, propelled solely by human power, upon which any person or persons may ride.

Bicycle Boulevard - Streets designed to limit or prohibit motor vehicle traffic, using barriers or other design elements, in order to enhance bicycle safety and enjoyment.

Bicycle Facilities - A general term for improvements and provisions made by public agencies to accommodate or encourage bicycling, including bike racks and lockers, bikeways, and showers at employment destinations.

Bicycle Parking Facilities - See Bicycle Facilities.

Bicycle Sidewalk - A sidewalk, typically wider than one solely for pedestrian use on which it is permissible for bicycles to ride.

Bicycle Transportation Facility - A new or improved lane, path, or shoulder for use by bicyclists, traffic control device, shelter, or parking facility for bicycles.

Bike Lane - A striped lane for one-way bike travel contiguous to a travel lane on a street or highway.

Bike Path - A two-way facility separated from a street or highway for bicycle travel, typically along rail, water, or utility corridors.

Bike Route - A travel way for bicycles through a community, providing a superior route based on traffic volumes and speeds, street width, directness, and cross-street priority, denoted by signs only.

Bikeway - A generic term for any road, street, path or way which in some manner is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

BPAC - Bicycle Pedestrian Advisory Committee - The City of Fresno's appointed advisory committee on bicycling and pedestrian matters.

BTA - The Caltrans Bicycle Transportation Account (BTA) provides state funds for city and county projects that improve safety and convenience for bicycle commuters.

CA-MUTCD - California Manual of Uniform Traffic Control Devices, (FHWA's MUTCD 2003 Edition including Revisions 1 and 2, as amended for use in California - Part 9 is the section for Traffic Controls for Bicycle Facilities).

Caltrans - Acronym for the California Department of Transportation.

Class I Bikeway - See Bike Path.

Class II Bikeway - See Bike Lane.

Class III Bikeway - See Bike Route.

CMAQ - Congestion Management and Air Quality (TEA-21 funding program).

CMP - See Congestion Management Program.

Congestion Management Program - A once state-mandated, now voluntary program recommending the monitoring and mitigation of increased congestion on regional highway routes and transit systems.

CTCDC - California Traffic Control Devices Committee.

Cycle Track - A roadway intended exclusively for use by cyclists which parallels an adjacent roadway and is differentiated from a Class I path in that Class I paths may not necessarily parallel an adjacent road and may include other users. Cycle tracks can be one-way or bi-directional and may also have their own traffic control devices.

DPWP - Department of Public Works and Planning.

Electric Bicycle - The term "electric bicycle" means any bicycle or tricycle with a low-powered electric motor weighing under 100 pounds, with a top motor-powered speed not in excess of 20 miles per hour.

Equestrian Trail – A separated facility for horse travel, typically along scenic routes including rivers or other similar scenic corridors. May be used in conjunction with a multipurpose trail.

FHWA - Federal Highway Administration.

Fresno COG - Fresno COG is a voluntary association of local governments that fosters intergovernmental communication and coordination that undertakes comprehensive regional planning with an emphasis on transportation.

Fresno County - For the purpose of this study, Fresno County variously refers to the Fresno County Department of Public Works and Planning, unless expressly stated otherwise.

Geometry - The vertical and horizontal characteristics of a transportation facility, typically defined in terms of gradient, degrees, super elevation, and travel speed.

Grade Separation - Vertical isolation of travelways through use of a bridge or tunnel so that traffic conflicts are minimized.

Highway Construction Project - A project financed in whole or in part with Federal-aid or Federal funds for the construction, reconstruction or improvement of a highway or portions thereof, including bridges and tunnels.

Incidental Bicycle or Pedestrian Walkway Construction Project (Incidental Feature) - One constructed as an incidental part of a highway construction project.

Independent Bicycle Construction Project (Independent Bicycle Project) - A project designation used to distinguish a bicycle facility constructed independently and primarily for use by bicyclists from an improvement included as an incidental part of a highway construction project.

Independent Pedestrian Walkway Construction Project (Independent Walkway Project) - A project designation used to distinguish a walkway constructed independently and solely as a pedestrian walkway project from a pedestrian improvement included as an incidental part of a highway construction project.

Lateral Clearance - Width required for safe passage of a bicycle and emergency and maintenance vehicles as measured on a horizontal plane.

Loop Detector - A device placed under the pavement at intersections which can detect a vehicle or bicycle and trigger an actuated or semi-actuated signal to turn green.

Mode Split - Percentage of trips that use a specific form of transportation. A one percent bicycle mode split indicates that one percent of trips are made by bicycle.

Multimodal - The utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized, and demand management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies may vary by county and region in accordance with the size and complexity of different urbanized areas.

Multiple Purpose Path/Trail - See Bike Path.

MUTCD - Manual of Uniform Traffic Control Devices (FHWA).

Non-construction Bicycle Project - A bicycle project not involving physical construction which enhances the safe use of bicycles for transportation purposes.

NPTS - National Personal Transportation Survey.

Path – a track or route which people or vehicles are intended to travel.

Pedestrian - The term “pedestrian” means any person traveling by foot and any mobility-impaired person using a wheelchair.

Pedestrian Walkway or Walkway - A continuous way designated for pedestrians and separated from the through lanes for motor vehicles by space or barrier.

PMS - Pavement Management System.

Recreational Trail – A trail serving a recreational purpose, such as hiking, walking, off-road bicycling or horseback riding.

Reversion - Process by which bicycle facilities are removed or converted to non-bicycle use (travel or parking lanes) in the future.

Right-of-Way - The right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian. Also, the strip of land over which a transportation facility is built.

Road Diet - A road diet is a means of narrowing the driving envelope to influence the driver to select a lower speed.

Roundabout - A modern roundabout is a circular intersection where drivers travel counterclockwise around a center island. There are no traffic signals or stop signs in a modern roundabout. Drivers yield at entry to traffic in the roundabout, and then enter the intersection and exit at their desired street. Studies by the Federal Highway Administration have found that roundabouts can increase traffic capacity by 30 percent to 50 percent compared to traditional intersections.

Shared Roadway - A type of bikeway (typically a bike route or bike boulevard) where bicyclists and motor vehicles share the same roadway with no striped bike lane.

Sharrows - Shared lane pavement markings or sharrows are bicycle symbols that are placed in the roadway lane to indicate that motorists should expect to see and share the lane with bicycles. Unlike bicycle lanes, they do not designate a particular part of the roadways for the exclusive use of bicycles.

Sight Distance - A measurement of the cyclist’s visibility, unobstructed by traffic or other barriers, along the normal path to the farthest point of the roadway.

SRTS - The Federal Safe Routes to School (SRTS) Program empowers communities to make walking and bicycling to school a safe and routine activity once again. The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

STP - Surface Transportation Program (ISTEA funding program).

TAC - Technical Advisory Committee.

TCM - Transportation Control Measure.

TDA - Transportation Development Act.

TDM - See Transportation Demand Measures.

TEA - Transportation Enhancement Activities.

TEA-21 - Transportation Equity Act for the 21st Century.

TMA - Transportation Management Agency.

Trail – Unpaved multipurpose facilities suitable for hikers, pedestrians, equestrians, and off-road bicycles.

Traffic Control Devices - Signs, signals, or other fixtures, whether permanent or temporary, placed on or adjacent to a travel way by authority of a public body having jurisdiction to regulate, warn, or guide traffic.

Traffic Volume - The number of vehicles that pass a specific point for a specific amount of time (hour, day, year).

Transportation Demand Measures (TDM) - Generally refers to policies, programs, and actions that are directed towards increasing the use of high occupancy vehicles (Transit, carpooling, and vanpooling) and the use of bicycling and walking with the express purpose of reducing or limiting vehicle cold starts and miles traveled for congestion and air quality purposes.

VMT - Vehicle Miles Traveled.

VT - Vehicle Trip.

APPENDIX B

BICYCLE TRANSPORTATION ACCOUNT REQUIREMENTS CHECKLIST

CALIFORNIA STREETS & HIGHWAYS CODE APPLICABLE BIKEWAY SECTIONS

CALTRANS BICYCLE TOURING GUIDE MAP

Appendix B

Bicycle Transportation Account Requirements Checklist			
Approved	Requirement	Pages	Notes/Comments
	1. Existing and future bicycle commuters	8, 14	
	2. Land use map/population density	3, 8	Figure 1
	3. Existing and proposed bikeways	5-7, 11	Figures 2-3
	4. Existing and proposed bicycle parking facilities	9, 14	Figures 4-5
	5. Existing and proposed multi-modal connections	3, 9	Figures 4-5
	6. Existing and proposed changing and storage facilities	9-10	Figures 4-5
	7. Bicycle safety and education programs	10	
	8. Citizen participation	4, APPX 'E'	Appendix 'E'
	9. Consistency with transportation, air quality and energy plans	15 APPX 'B' & 'C'	Figures 4-5, Appendix 'B' & 'C'
	10. Project descriptions/priority listings	TBL I & IV	Tables I & IV
	11. Past expenditures and future financial needs	10-11, TBL II & V	Tables II & V

Appendix B

Streets and Highways Code Requirements for Bicycle Plans

Bicycle Transportation Plan (City and/or County)

891.2. A city or county may prepare a bicycle transportation plan, which shall include, but not be limited to, the following elements:

- (a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.
- (b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.
- (c) A map and description of existing and proposed bikeways.
- (d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.
- (e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
- (f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.
- (g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.
- (h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.
- (i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.
- (j) A description of the projects proposed in the plan and a listing of their priorities for implementation.
- (k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

Bicycle Plan - City & County - Approval Process

891.4. (a) A city or county that has prepared a bicycle transportation plan pursuant to Section 891.2 may submit the plan to the county transportation commission or transportation planning agency for approval. The city or county may submit an approved plan to the department in connection with an application for funds for bikeways and related facilities which will implement the plan. If the bicycle transportation plan is prepared, and the facilities are proposed to be constructed, by a local agency other than

a city or county, the city or county may submit the plan for approval and apply for funds on behalf of that local agency.

(b) The department may grant funds applied for pursuant to subdivision (a) on a matching basis which provides for the applicant's furnishing of funding for 10 percent of the total cost of constructing the proposed bikeways and related facilities. The funds may be used, where feasible, to apply for and match federal grants or loans.

California Streets & Highway Code 890.6.

The department, in cooperation with county and city governments, shall establish minimum safety design criteria for the planning and construction of bikeways and roadways where bicycle travel is permitted. The criteria shall include, but not be limited to, the design speed of the facility, minimum widths and clearances, grade, radius of curvature, pavement surface, actuation of automatic traffic control devices, drainage, and general safety. The criteria shall be updated biennially, or more often, as needed.

Uniform Specifications & Symbols for Signs, Markers and Traffic Control Devices Code 890.8.

The department shall establish uniform specifications and symbols for signs, markers, and traffic control devices to designate bikeways, regulate traffic, improve safety and convenience for bicyclists, and alert pedestrians and motorists of the presence of bicyclists on bikeways and on roadways where bicycle travel is permitted.

Uniform Signs & Safety Criteria for Signs, Markers and Traffic Control Devices Code 891.

All city, county, regional, and other local agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted shall utilize all minimum safety design criteria and uniform specifications and symbols for signs, markers, and traffic control devices established pursuant to Sections 890.6 and 890.8.

Local Agencies Right To Establish Local Controls For Bicycles

California Vehicle Code 21206.

This chapter does not prevent local authorities, by ordinance, from regulating the registration of bicycles and the parking and operation of bicycles on pedestrian or bicycle facilities, provided such regulation is not in conflict with the provisions of this code.

Local Establishment of Bicycle Lanes Code 21207.

(a) This chapter does not prohibit local authorities from establishing, by ordinance or resolution, bicycle lanes separated from any vehicular lanes upon highways, other than state highways as defined in Section 24 of the Streets and Highways Code and county

highways established pursuant to Article 5 (commencing with Section 1720) of Chapter 9 of Division 2 of the Streets and Highways Code.

(b) Bicycle lanes established pursuant to this section shall be constructed in compliance with Section 891 of the Streets and Highways Code.

APPENDIX C

2011 FRESNO COG REGIONAL TRANSPORTATION PLAN (BIKEWAYS)

2011 REGIONAL TRANSPORTATION PLAN

LONG-RANGE TRANSPORTATION
VISION FOR THE FRESNO COUNTY
REGION FOR THE YEARS 2010 TO
2035

Adopted JULY 29, 2010

PREPARED BY:
THE COUNCIL OF FRESNO COUNTY
GOVERNMENTS



**Exhibit 4-1
Intermodal Transportation Network**



This increasingly difficult funding situation exists at a time when airports within Fresno County have identified important and necessary development projects and when there is a growing awareness within the County of the importance of local airports to the entire transportation system and to the regional economy. The need for a stable and reliable funding source for airport development is vital to the well-being of the air transportation system and the economy of the Fresno County region.

4.7 Non-Motorized Transportation

4.7.1 Overview

The Non-Motorized Transportation Element of the RTP is focused on regional, metropolitan, and community bikeway networks and a network of multi-use trails that includes bicycling. Local planning efforts also include equestrian and hiking trail networks and pedestrian facilities. Pedestrian facilities are essentially site-specific and local, and hold particular importance in community design and redesign in working toward a more livable environment. Equestrian facilities are essentially recreational in nature. Neither pedestrian nor equestrian facilities are typically regional in function and, following the direction of the District 6 System Management Plan, this RTP will not consider them as viable alternative transportation modes at the regional level. This RTP does recognize the value of equestrian and hiking trail systems for recreational purposes, as enhancements to the multimodal transportation system, and for their contribution to an improved quality of life in Fresno County and, therefore, supports their continued development.

For many, the use of bicycles as a means of transportation has several appealing aspects. Bicycling has positive air quality, energy, economic and health impacts and can reduce automobile congestion. From an air quality perspective, every bicycle trip that replaces an auto trip results in cleaner air. Bicycles do not consume limited fuel, maintenance is low, and bicycling can be used for commuting as well as for recreational purposes while providing physical exercise.

The bicycle's door-to-door capability for shorter trips makes it an attractive alternative mode of transportation in the Fresno region when the climate is mild, because the flat terrain is ideal for riding. Implementation of a comprehensive bikeway system will provide connectivity between cities and access to destinations of regional interest, as well as commuter lanes in the Fresno-Clovis Metropolitan Area and in many smaller cities within the county.

Furthermore, the relationship between transit, bicycling, and pedestrian trips is important to the Fresno COG and to the communities within Fresno County. The Blueprint Planning Program along with the Public Transportation Infrastructure Study (PTIS) are of primary importance in addressing this relationship. For example, Blueprint Smart Growth Principles include "create walkable neighborhoods, mix land uses, and provide a variety of transportation choices" among many others. Within the new Measure C Program, 4% of funding is allocated to pedestrian/trails/bicycle facilities subprograms while fully 24% of funding is allocated to the Regional Public Transit Program, including the Public Transit Agencies Subprogram (19.66%), the Farmworker/Car/Van Pools Subprogram (1.16%), the New Technology Reserve Subprogram (2.10%) and the ADA/Seniors/Paratransit Subprogram (0.79%), among others. In addition, the 2011 RTP includes new policy regarding Complete Streets and policy enhancements suggested by the Fresno County Department of Public Health that emphasize walking, bicycling, and transit for reasons of health and well-being. Policy and funding are finally coming together to establish an achievable, not just theoretical, relationship between transit and bicycling/pedestrian infrastructure.

Goals for the development of bicycle transportation in Fresno County are as follows:

- Planning - The recognition and integration of the bicycle as a valid transportation mode in transportation planning activities.

- Physical Facilities - Safe, convenient, and continuous routes for bicyclists of all types that interface with and complement a multimodal transportation system.
- Safety and Education - Improved bicycle safety through education and enforcement.
- Encouragement - Increased acceptance of bicycling both as a legitimate transportation mode on public roads and highways and as a transportation mode that is a viable alternative to the automobile.
- Implementation - Increased development of the regional bikeways system and related facilities by maximizing funding opportunities.

4.7.2 Existing System Inventory

The planned bikeways regional system is shown in Exhibits 4-20 and 4-21. The plan calls for community routes and routes which link communities and provide access to activity centers, including major commercial and employment centers, major recreational sites, and schools. All of the cities in the County and the County itself have planned bikeway facilities, although limited available funding has had an impact on their construction. Nevertheless, local agencies continue to add to the inventory of completed bikeways on an ongoing basis, particularly in conjunction with new development.

Exhibit 4-20

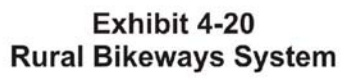
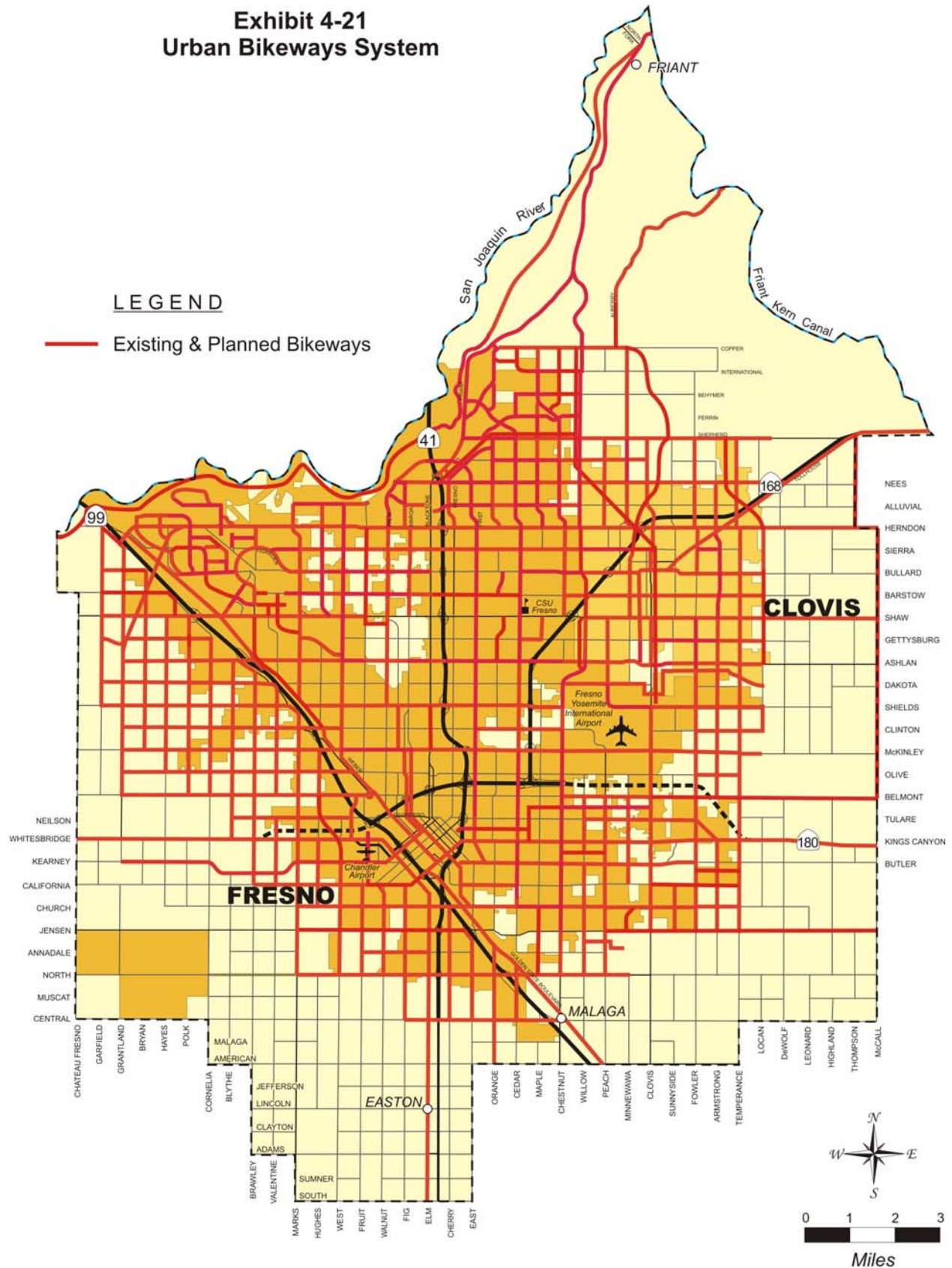


Exhibit 4-21 Urban Bikeways System



4.7.3 Accomplishments

Since the adoption of the 1984 General Plan, the City of Fresno has modified its street design standard for the construction of collectors and arterials in newly developing areas to add five feet per side for a bike lane. The adoption of this standard has promoted the long-term development of a bikeway system in newer areas. Provision of this right-of-way in advance avoids the conflicts that arise when the loss of on-street parking becomes a necessary part of bikeway implementation. Within the City of Fresno, several miles of bikeways have been added, particularly in the Woodward Park and Bullard Community Plan areas, but elsewhere in the community as well. The City of Clovis provides for bike lanes along designated streets in accordance with adopted specific plans and has implemented bikeways along segments of several major streets.

Cities outside of the metropolitan area have also proceeded with efforts to incorporate bikeway facilities in their plans and programs. For example, the City of Reedley adopted a Kings River Corridor Specific Plan in January 1991 that included proposed bikeway facilities. Reedley also approved a General Plan Update in August 1993 and a subsequent Specific Plan that include both city bikeways and bikeways that provide connectivity to the Regional Bikeway System.

Coalinga and Kerman recently updated their general plans to include a bikeways section. Fresno, Selma, Sanger, Parlier, Reedley and Fresno County have all addressed bicycle transportation in their general plan circulation elements. In addition, Coalinga and Huron, and more recently Fresno, Clovis, Kingsburg, Reedley, Sanger and Selma, have developed Bicycle Transportation Plans in order to compete for funding under the Bicycle Transportation Account.

Several communities have competed successfully for funding under the Safe Routes to School Program. These include Clovis, Reedley, Kerman, Fresno, Mendota, Sanger, Orange Cove, San Joaquin, Firebaugh, and the County itself.

The City of Fresno requires the installation of bike racks in new development to encourage increased use of bicycling and bus commuting. The City of Fresno has also installed bike racks on its entire transit fleet, as has the City of Clovis on its Stageline transit fleet and the Fresno County Rural Transit Agency on its intercity transit fleet. Newer busses of the Rural Transit Agency's intracity fleet are also equipped with bike racks.

The City of Fresno has established a Bicycle Pedestrian Advisory Committee that advises the City Council and Mayor on all matters involving bicycle transportation. In addition, the City of Fresno contracted with the consulting firm Fehr and Peers in 2009 to prepare a comprehensive Bicycle Master Plan. The Plan is estimated to be completed by mid-2010. The County of Fresno has also begun the preparation of a Regional Bicycle Master Plan. That Plan is estimated to be adopted in August 2010. The City of Clovis will also likely update its Bicycle Master Plan in 2010. All of this activity provides a unique opportunity to develop a comprehensive and coordinated bicycle/trails system within the Fresno-Clovis Metropolitan Area and the entire county.

The Measure C Extension approved by the voters in November 2006 requires that by January 1, 2012, all jurisdictions within Fresno County will have updated and/or adopted a Master Plan for Trail, Bicycle and Pedestrian Facilities that promotes connectivity within all of Fresno County and its urban areas. The Master Plan will be the guiding document for upgrade and/or installation of such facilities. If any jurisdiction fails to meet this goal, the earmarked funds for trail, bicycle and pedestrian facilities shall be withheld by the Fresno County Transportation Authority until such time as a jurisdiction is in compliance.

Measure C Extension earmark funds may be used for new construction of pedestrian/bicycle trails, bikelanes, and for the development of the Master Plan as well as retrofitting pedestrian/bicycle trails within the circulation system that existed as of January 2007 or the date of adoption of the Master Plan. Trails built with earmarked or other Measure C Extension funds shall, at a minimum, be designed in accordance with the design criteria for bicycle paths and multi-purpose trails set forth in the California Highway Design

Manual, Chapter 1000, Bikeway Planning and Design, with certain caveats as noted in the Final Measure C Extension Expenditure Plan.

The Final Measure C Extension Expenditure Plan includes additional requirements applying to all streets, roads, and highways utilizing either regional or local allocation funds. For example, every highway, expressway, super-arterial, arterial, or collector within the County constructed or reconstructed in whole or in part with Measure C Extension funds shall include accommodations for bicycle travel either by a shared roadway or by bike lane. Reference is made to the Expenditure Plan for a description of these additional requirements, including exceptions to the requirements.

4.7.4 Needs Assessment

While much of the basic work of planning for regional and metropolitan bikeway systems was done in this area in the 1970s and 1980s, it is important to periodically reevaluate the planned bikeway system and make adjustments as necessary to reflect changes in growth patterns and the development of new activity centers. As noted above, both the City of Fresno and the County of Fresno are currently developing comprehensive revisions to their Bicycle Master Plans/Bicycle Transportation Plans, with completion in 2010. The City of Clovis also expects to update its Bicycle Transportation Plan beginning in 2010. However, the need remains, particularly with many mid-sized and smaller cities in Fresno County, to prepare and adopt Bicycle Transportation Plans that discuss the eleven required elements listed in Section 891.2 of the Streets and Highways Code. These plans are required in order for local agencies to be eligible to compete for Bicycle Transportation Account funding.

There is an ongoing need to focus on implementation of facilities through development project requirements and through active programs undertaken by the county or the cities. Most likely the programmatic initiative for facility implementation rests with traditional public works or traffic engineering staff who work with street development and pavement marking and signing programs. With competition for funds and staff time, local programs can be dependent on the priorities set by both governing bodies and by agency staff. Coordination between agencies on regional routes can also diminish unless a forum exists which promotes active participation. The Council of Fresno County Governments can assist local agency staff by providing an opportunity to share information and coordinate future efforts, taking a proactive position to encourage and facilitate bicycle use. There have been two recent examples of this Fresno COG role. First, the Fresno COG, with assistance from a non-motorized committee formed for this purpose, assisted the County in determining the unincorporated area bikeway network for inclusion in the County's recent general plan. Second, the Fresno COG prepared in April 2001 a "template" Bicycle Transportation Plan for use by cities in Fresno County. The "template" plan has been and will continue to be particularly useful to the smaller communities as the larger communities typically have their own staffs to manage their planning processes.

In addition, a number of pedestrian safety enhancements such as pedestrian over-crossings and under-crossings at dangerous intersections, street and sidewalk repairs and installations, and additional curb cuts and handicap ramps have also been identified within communities as worthwhile projects should future funding become available.

4.7.5 Proposed Actions

Future Planning Activities

The Fresno COG began implementation of the Measure C Extension Pedestrian/Trails/Bicycle Facilities Program in Fiscal Year 2007-08. By January 1, 2012, all jurisdictions within Fresno County will have updated and/or adopted a Master Plan for trail, bicycle and pedestrian facilities that promotes connectivity within all of Fresno County and its urban areas.

Short-Term Program (1 - 4 Year Programs and Projects)

The Transportation Development Act requires that 2% of the Local Transportation Fund be set aside each year for bicycle and pedestrian purposes. The COG apportions these monies annually to each jurisdiction, proportionate to its population. Recent years have shown growing use of these funds for pedestrian projects, particularly as local jurisdictions looked for funding to meet ADA requirements. With growing emphasis on air quality and Transportation Demand Management objectives and with funding available through the Measure C Extension Program that must be spent on ADA improvements, the focus may shift back to bikeway system implementation.

Fresno County will continue to implement planned facilities as a part of its road construction program. The cities of Fresno and Clovis will stripe and sign those major street segments that have recently been constructed and will be constructed, particularly within the growing northern, eastern and western portions of the Fresno Clovis Metropolitan Area. The RTP anticipates that the cities of Fresno and Clovis and Fresno County will continue to implement the regional bikeway system in a timely manner and that the smaller cities within Fresno County also will continue to implement their proposed bikeway plans as funding provides.

In addition, the Measure C Extension Program requires every highway, expressway, super-arterial, arterial or collector within the County constructed or reconstructed in whole or in part with Measure C funds shall include accommodations for bicycle travel either by a shared roadway or by bike lane. A shared roadway includes a paved shoulder or a wide outside lane. The Measure C Extension Program includes other provisions as well, including a listing of exceptions to the requirements.

In 2008, the State of California enacted AB 1358, the Complete Streets Act, which requires cities and counties to incorporate provisions for multimodal streets into their General Plan Circulation Elements starting in 2011. This requirement will result in streets, roads and highways that better meet the needs of pedestrians, bicyclists, and others in a manner that is suitable to the rural, suburban or urban context of the General Plan.

Long-Range Improvement Plan

The proposed Fresno COG Master Plan for Trail, Bicycle and Pedestrian Facilities will designate the most suitable location for the long-term development of bikeway corridors for commuting and recreation. A detailed description of the metropolitan and rural cities routes will be included in the Master Plan, development of which is expected to begin in fiscal year 2011-12. Through this planning effort and other means, the Fresno COG, in conjunction with its member agencies, will renew efforts to encourage bicycle travel and to coordinate metropolitan and regional planning efforts.

The 20-year Measure C Extension Program estimated countywide funding total for bicycle facilities is \$15 million; for pedestrian/trails in the urban area (Clovis and Fresno Spheres of Influence) is \$37 million; and, for pedestrian/trails in the rural area is \$16.3 million.

4.7.6 Unfinanced Needs

Were unlimited funding available, each local agency in the county would develop its planned bikeway facilities through construction of additional pavement width, acquisition and development of separated paths, or striping and signing of existing rights-of-way. A standard striping and signing program using state guidelines is very costly to implement. As a part of the proposed Fresno COG Master Plan for Trail, Bicycle and Pedestrian Facilities, the Fresno COG will quantify the planned miles of facilities and will encourage local governments to apply for new funding sources and expend funding that is already available for completion of the planned system.

APPENDIX D

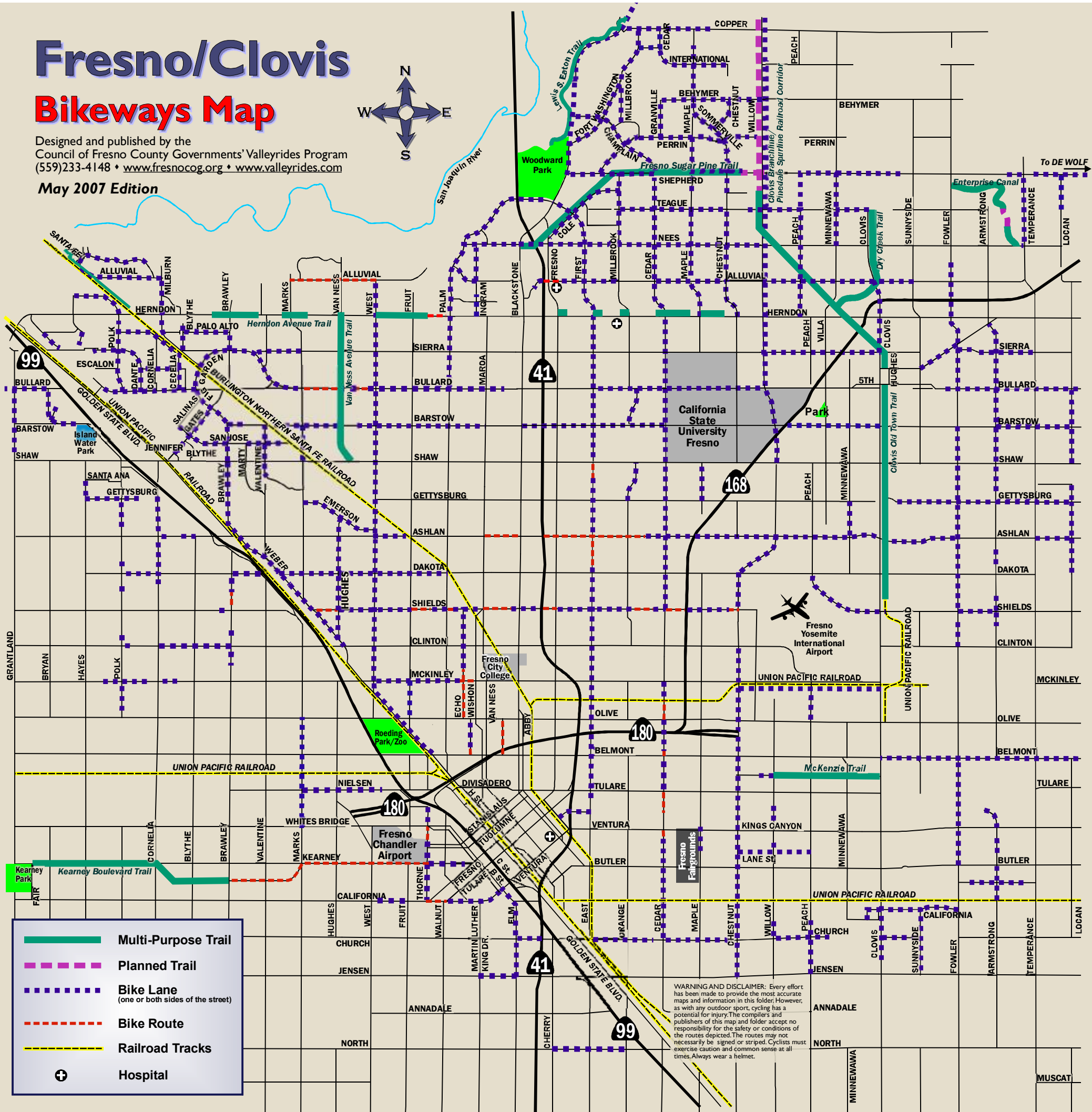
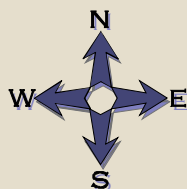
CITY BIKEWAY MAPS

Fresno/Clovis

Bikeways Map

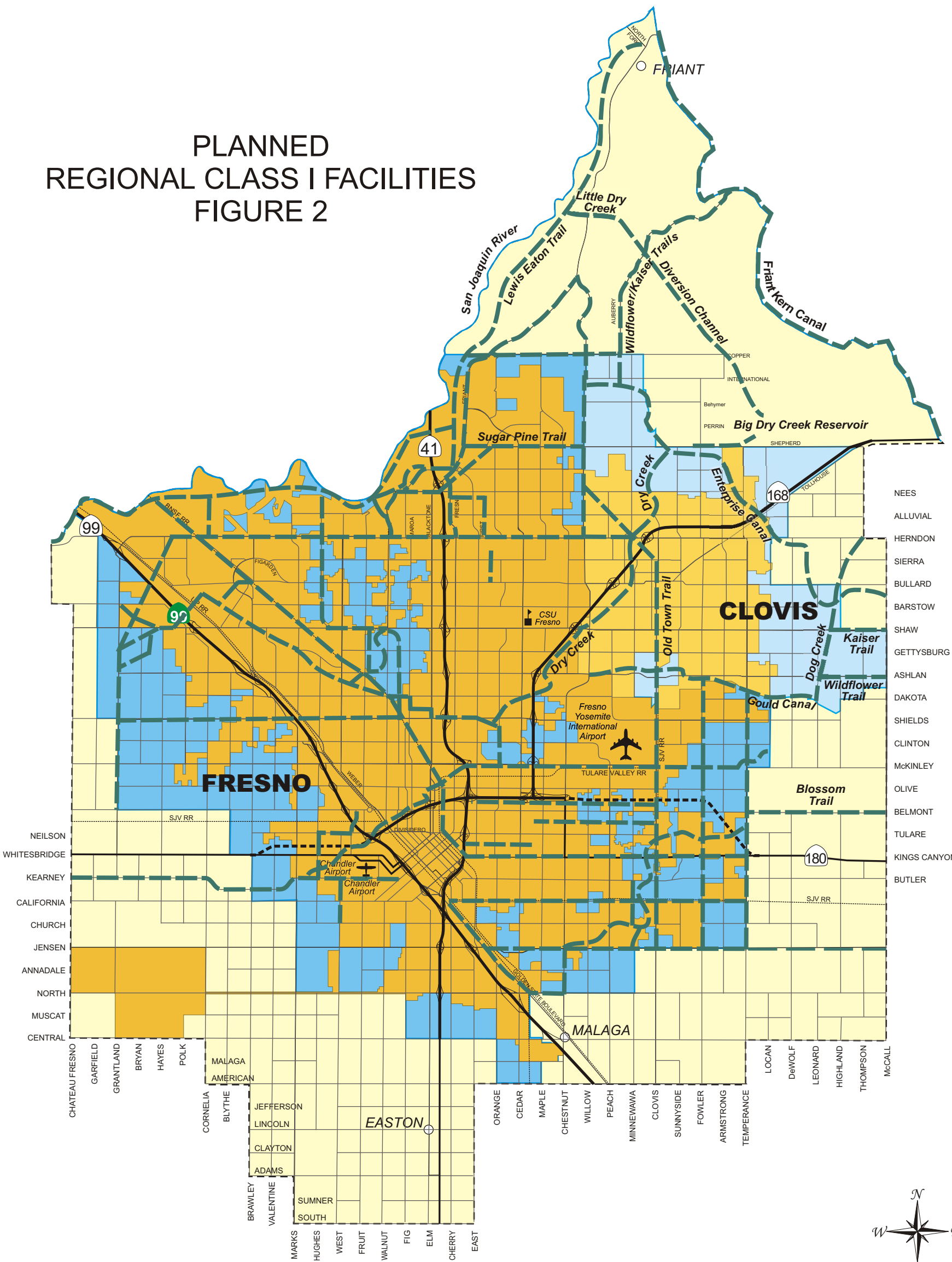
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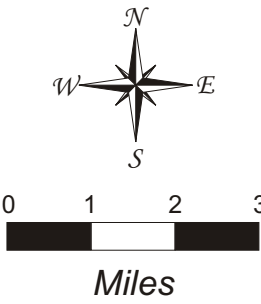
City of Clovis

PLANNED
REGIONAL CLASS I FACILITIES
FIGURE 2



City of Clovis

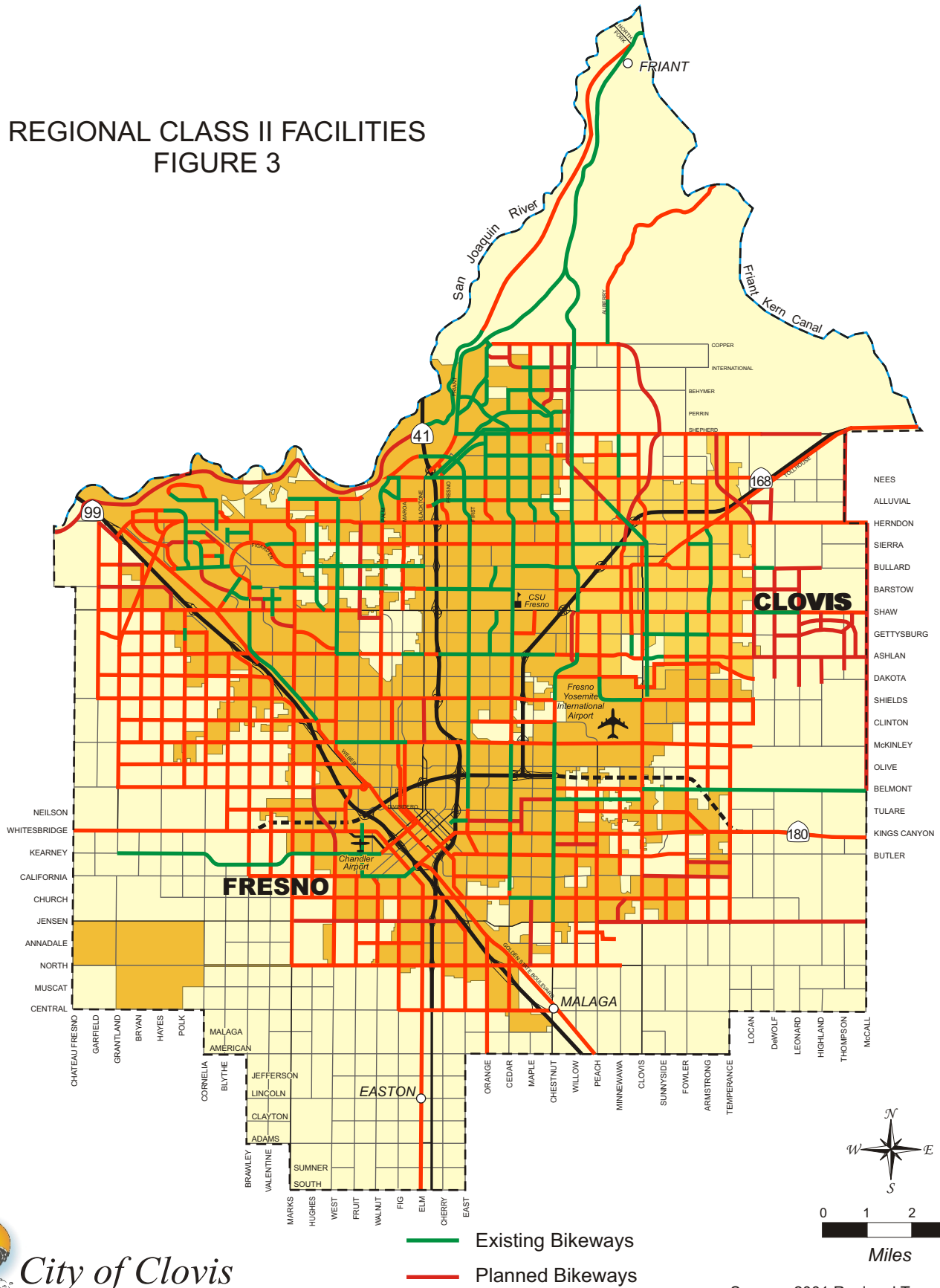
Planned Class I Bikeway/Trail



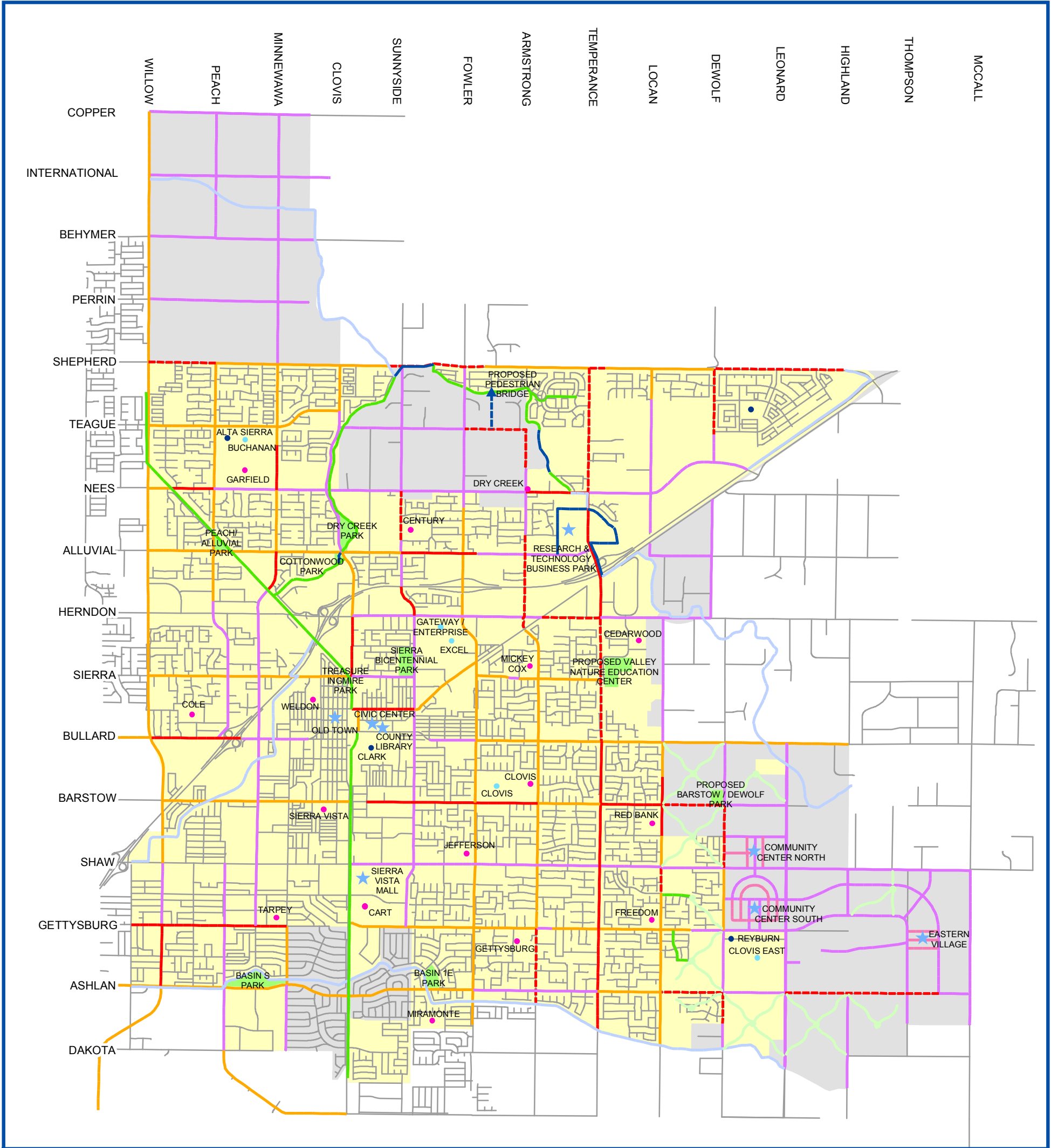
Source: 2001 Regional Transportation Plan,
City of Clovis & County of Fresno

City of Clovis

REGIONAL CLASS II FACILITIES
FIGURE 3



City of Clovis



CLOVIS' CLASS I/II BICYCLE FACILITIES
FIGURE 4



<p>Class I Bike Facilities</p> <ul style="list-style-type: none">ExistingProposedProposed Capital Improvements To Be Constructed Within the Next Five YearsProposed Developer Improvements To Be Constructed Within the Next Five YearsPaseos	<p>Activity Centers</p> <ul style="list-style-type: none">Intermediate SchoolsHigh SchoolsElementary SchoolsCity ParksPoints of Interest <p>City Limits</p> <p>Sphere of Influence Project Area</p>
<p>Class II Bike Facilities</p> <ul style="list-style-type: none">ExistingProposedProposed Capital Improvements To Be Constructed Within the Next Five YearsProposed Developer Improvements To Be Constructed Within the Next Five Years	
<p>Planned Unmarked Bike Lane</p>	

CITY OF COALINGA
PROPOSED AND EXISTING BIKEWAYS

CLASS 1 BIKE PATH FACILITIES

EXISTING

PROPOSED

CLASS 2 BIKE LANE FACILITIES

EXISTING

PROPOSED

POINTS OF INTEREST

•

TRANSPORTATION FACILITIES
(PARK N RIDE/BUS TRANSIT)

•

MEDICAL CENTER

•

SHOPPING CENTERS / AREAS

•

ELEMENTARY SCHOOLS

•

MIDDLE SCHOOL / HIGH SCHOOL
/ COMMUNITY COLLEGE

•

COMMUNITY CENTERS / LIBRARIES
/ CITY HALL

■

PARKS

CITY DESCRIPTIONS

■

SPHERE OF INFLUENCE

■

CITY LIMIT

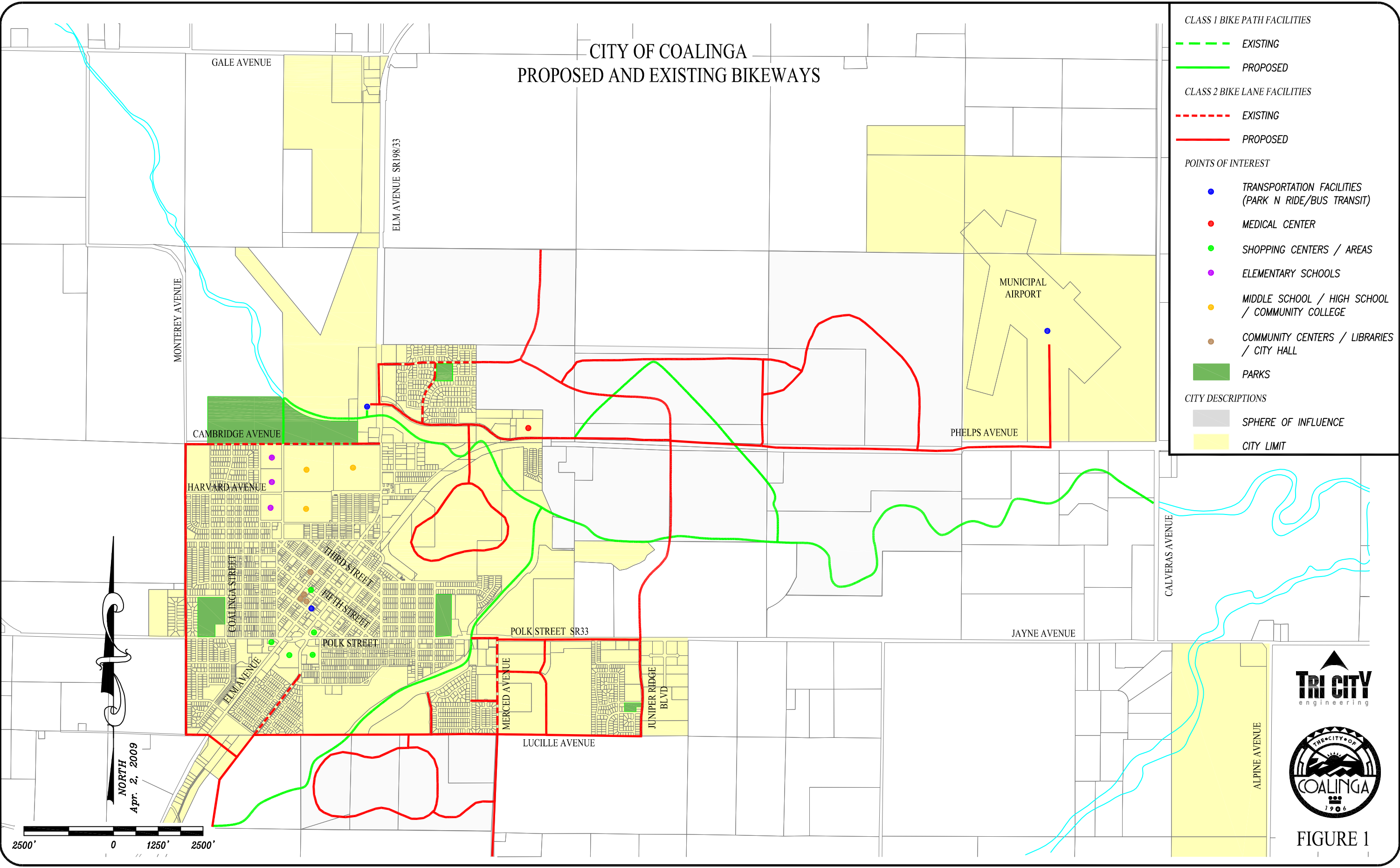
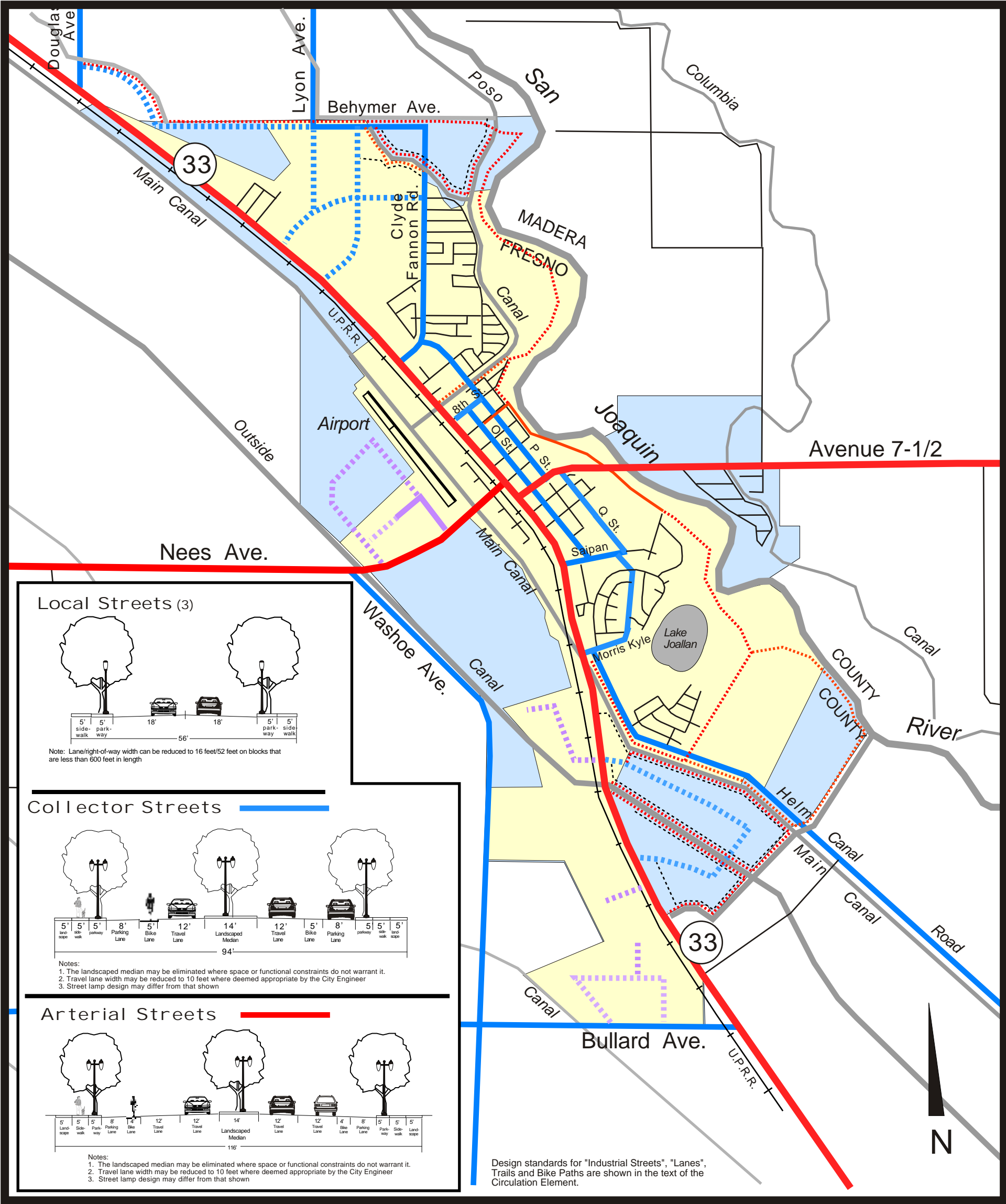


FIGURE 1



Proposed Circulation System Map (1, 2)

Existing Future

Arterial Street

Collector Street

Industrial Street

Local Street(3)

Pedestrian Trails(4)

Waterways

Arterial Street

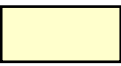
Collector Street

Industrial Street

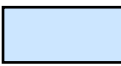
Local Street(3)

Pedestrian Trails(4)

Waterways



City Boundaries
(2009)



Ultimate Sphere of
Influence

Notes:

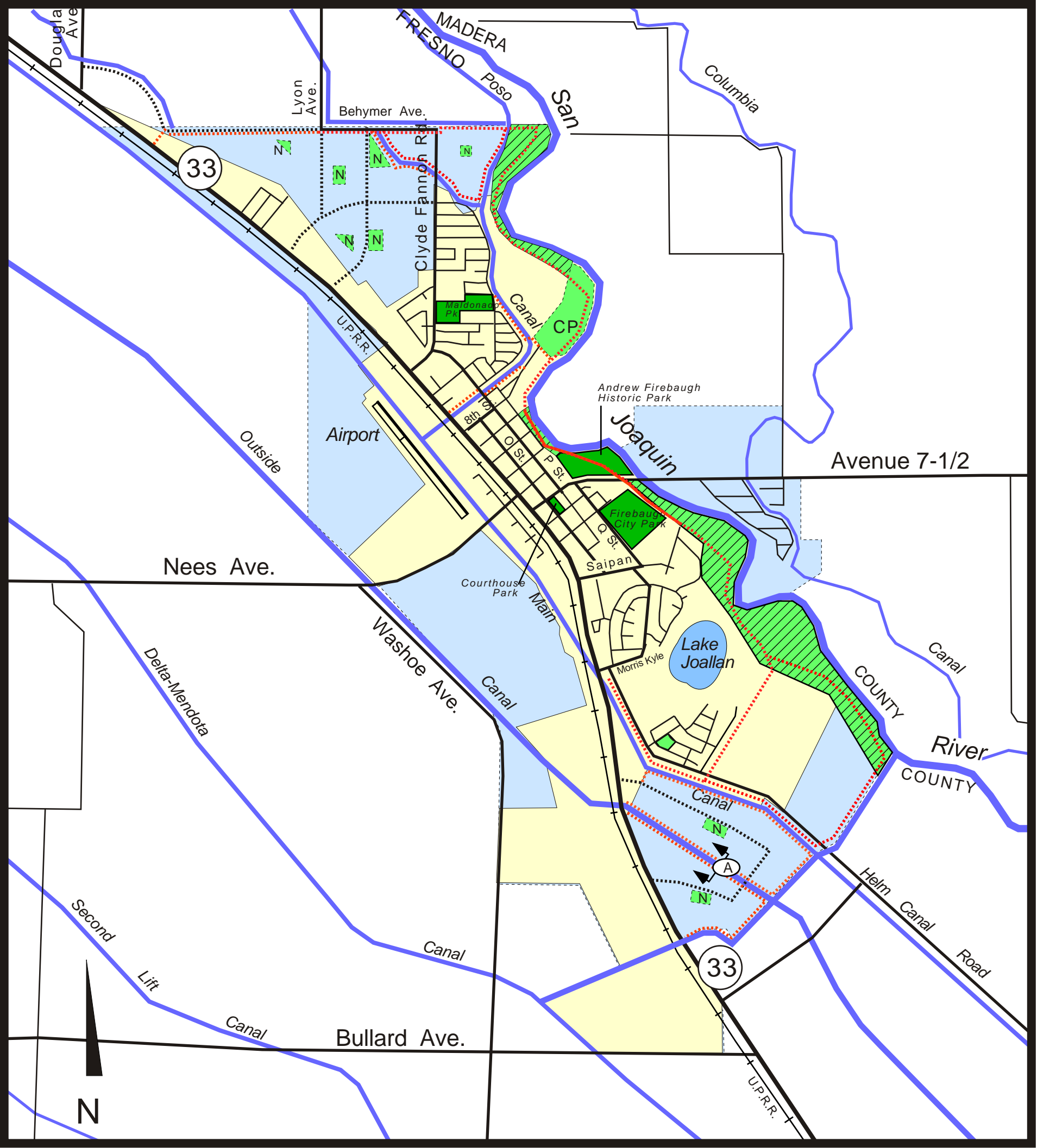
- Existing streets may not be fully developed to Circulation Element Standards;
- "Future" road alignments are shown with broken lines, and are generalized and subject to change;
- Most future local streets are generally not shown on this map. An exception is where local streets will abut water channels.
- Trail locations are approximate

Map 3-2

2030 Firebaugh
General Plan

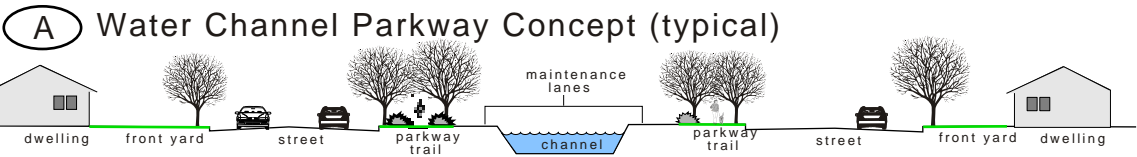
Collins & Schoettler
PLANNING CONSULTANTS

City of Firebaugh



Proposed Parks & Open Space Map

- Future Parks
- Existing Parks
- River-side Open Space
- Trails/Pathways
- Major Streets
- Waterways
- City Boundaries (2007)
- Ultimate Sphere of Influence



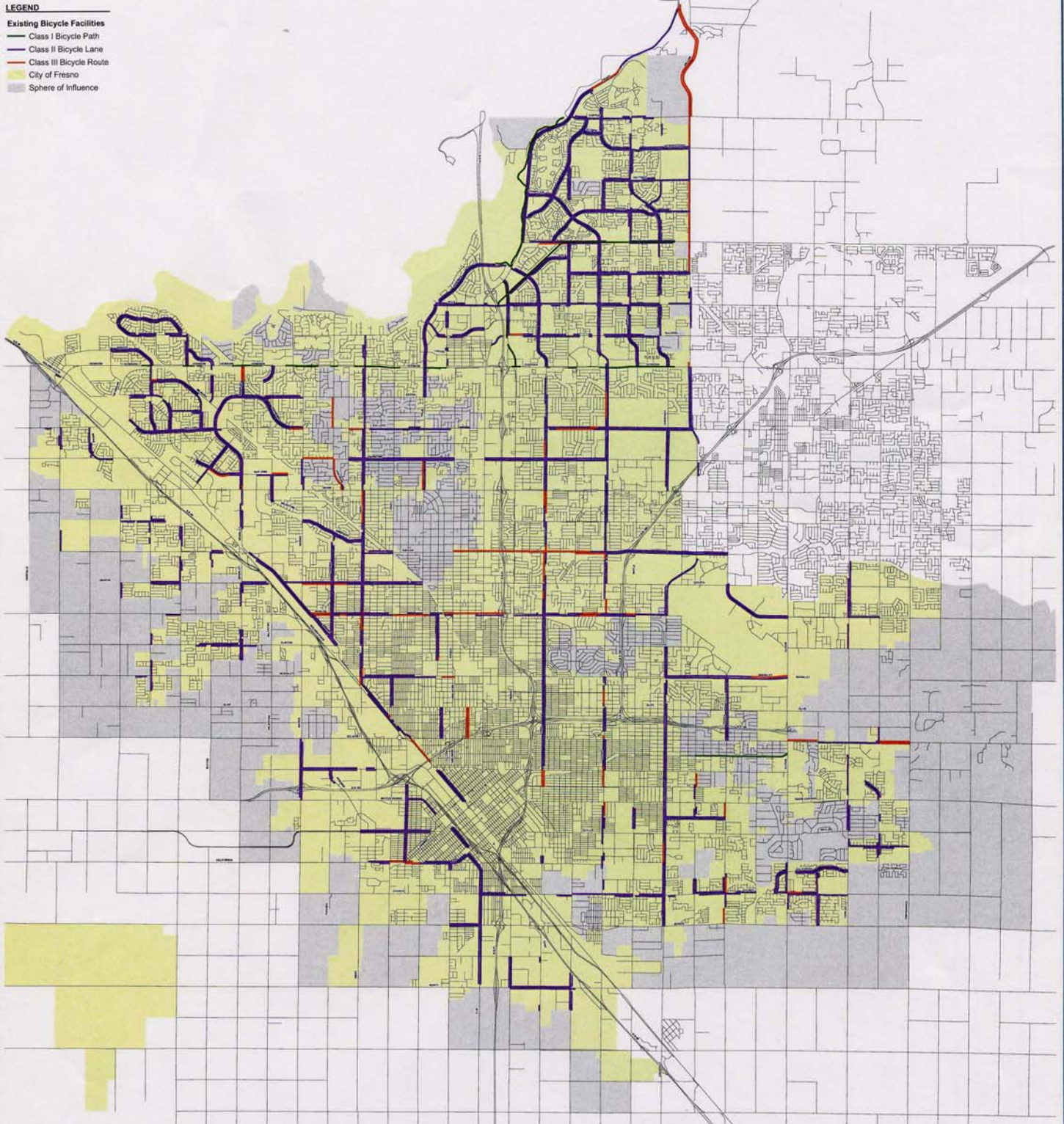
Map 4-5

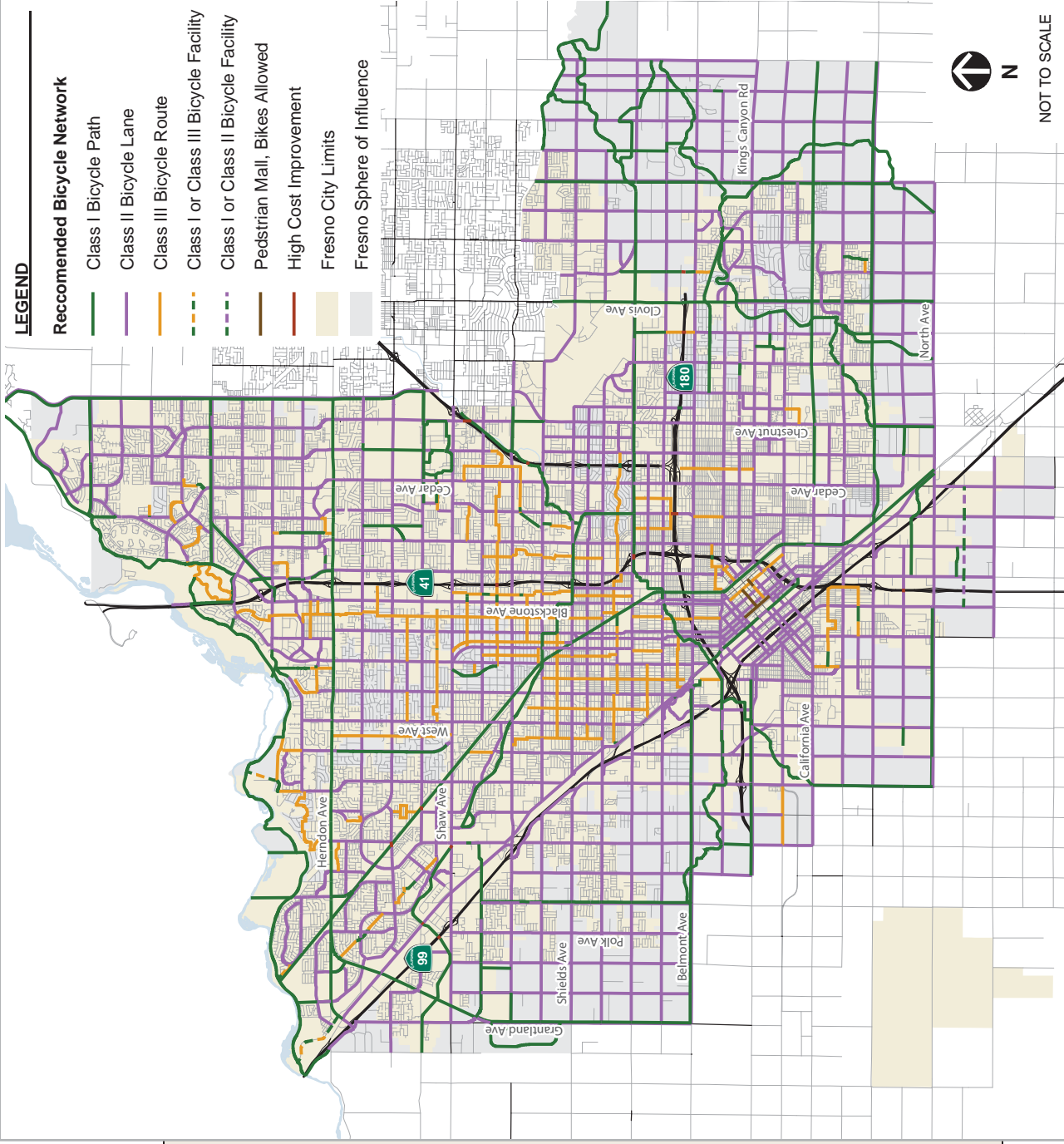
2030 Firebaugh
General Plan

Collins & Schoettler
PLANNING CONSULTANTS

EXISTING BICYCLE FACILITIES:

City of Fresno





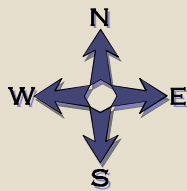
**Figure 5.1 – Proposed
Fresno Bikeway System**



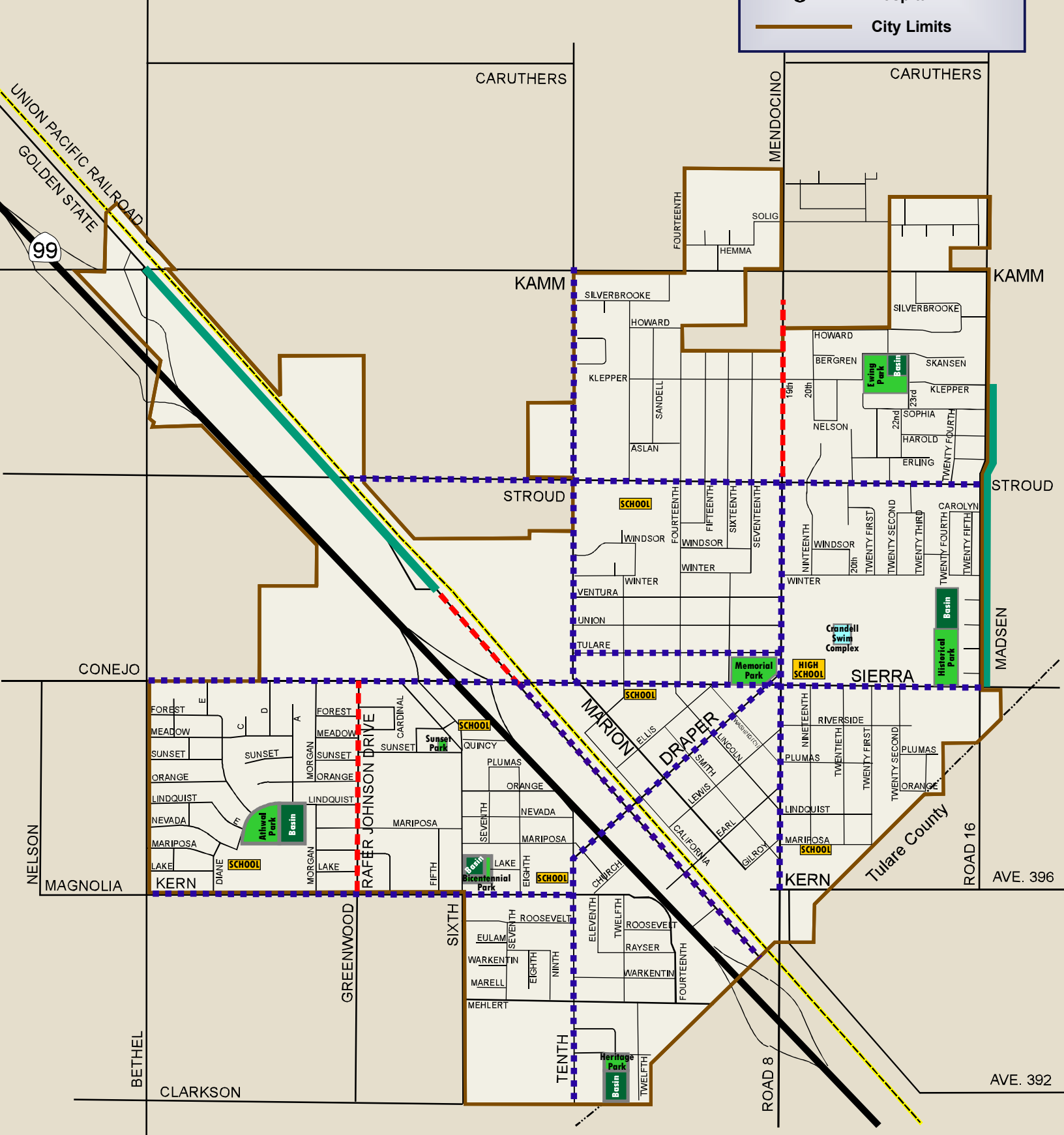
Kingsburg Bikeways Map

Designed and published by the
Council of Fresno County Governments' Valleyrides Division
(559)233-4148 • www.fresnocog.org • www.valleyrides.com

June 2007 Edition



	Multi-Purpose Trail
	Planned Trail
	Bike Lane (one or both sides of the street)
	Bike Route
	Railroad Tracks
	Hospital
	City Limits



City of Orange Cove

Adams

Sumner

South

Parlier

Monson

Anchor

Jacobs

Hills Valley Rd.

MS

ES


ES

MS






HS

Orange Cove General Plan Circulation Map

Legend

-  Parcels
-  South Street Labels
-  Sphere of Influence
-  City Limits

General Plan Designations

-  Arterial
-  Collector
-  Local
-  Bicycle/ Pedestrian Path
-  Green Routes

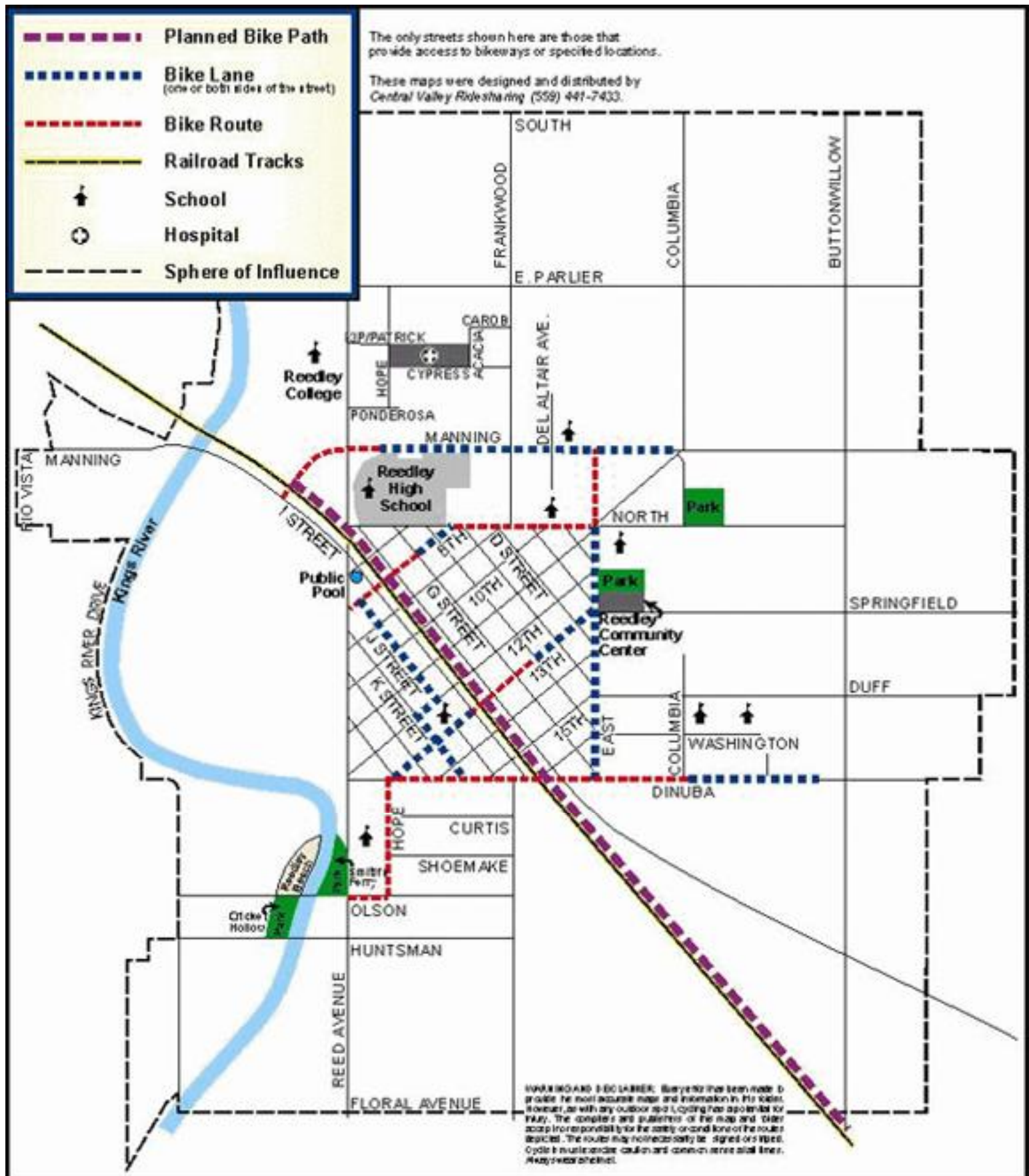
Orange Cove General Plan

Map 3-6



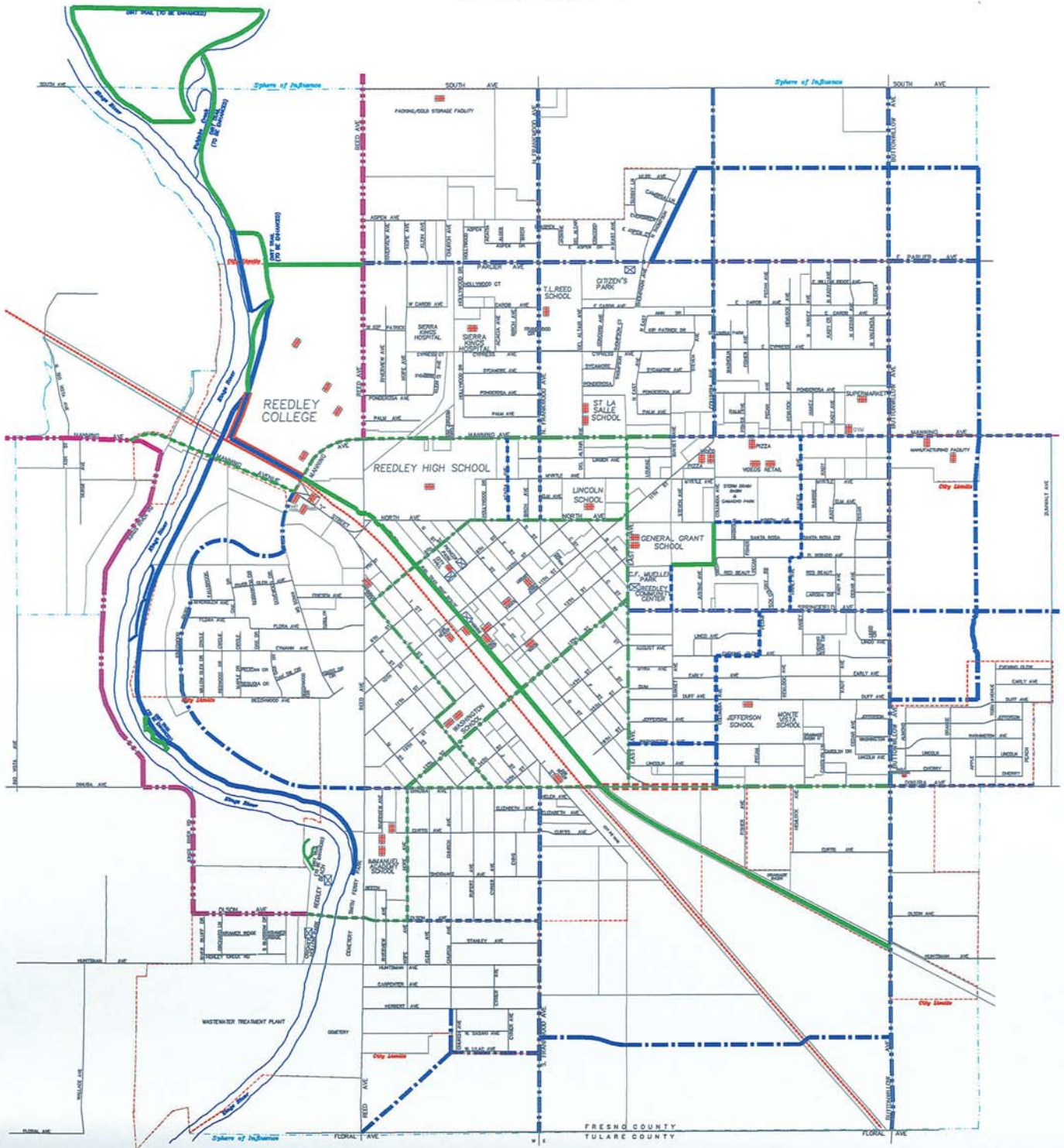
Collins & Schoettler
PLANNING CONSULTANTS
1501 West Main Street • Victorville, CA • 92401
Base map provided by Inland Empire Council of Governments. Forwarded as is to the City of Orange Cove. The information is for reference only. Not for use in engineering or construction.

City of Reedley



BIKE PATH DESTINATION MAP

ATTACHMENT 3



CURRENT BIKEWAYS

- CLASS I
- CLASS II
- CLASS III

PLANNED BIKEWAYS

- CLASS I
- CLASS II
- CLASS III

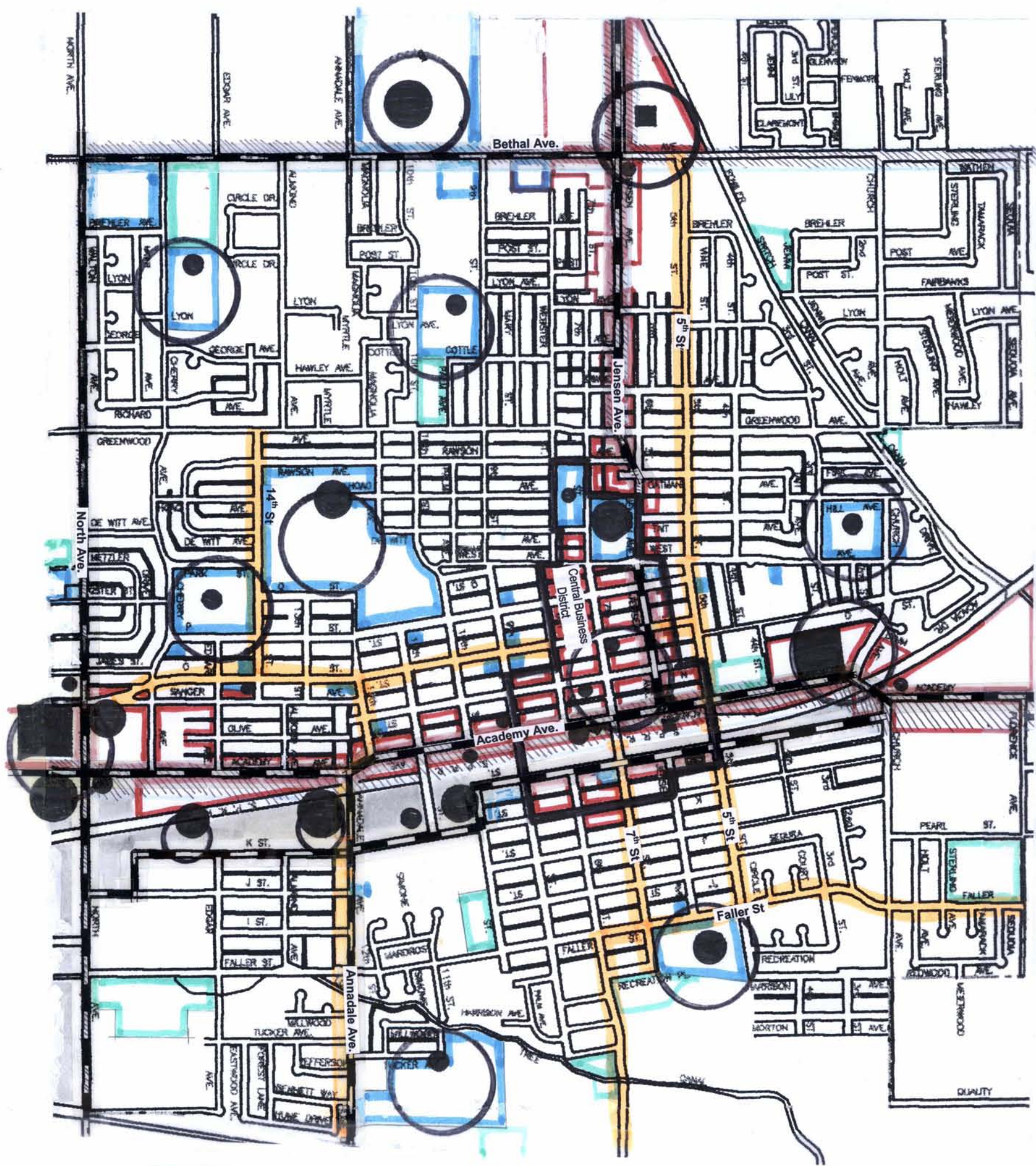
PRIORITY 1 PROJECTS

- CLASS I
- CLASS II
- CLASS III

REGIONAL BIKEWAYS

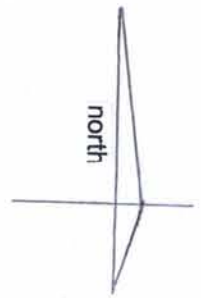
BIKEWAY FACILITIES

- BIKE RACKS
- PARK & RIDE LOT
- PUBLIC RESTROOM FACILITIES NEAR BIKE ROUTES

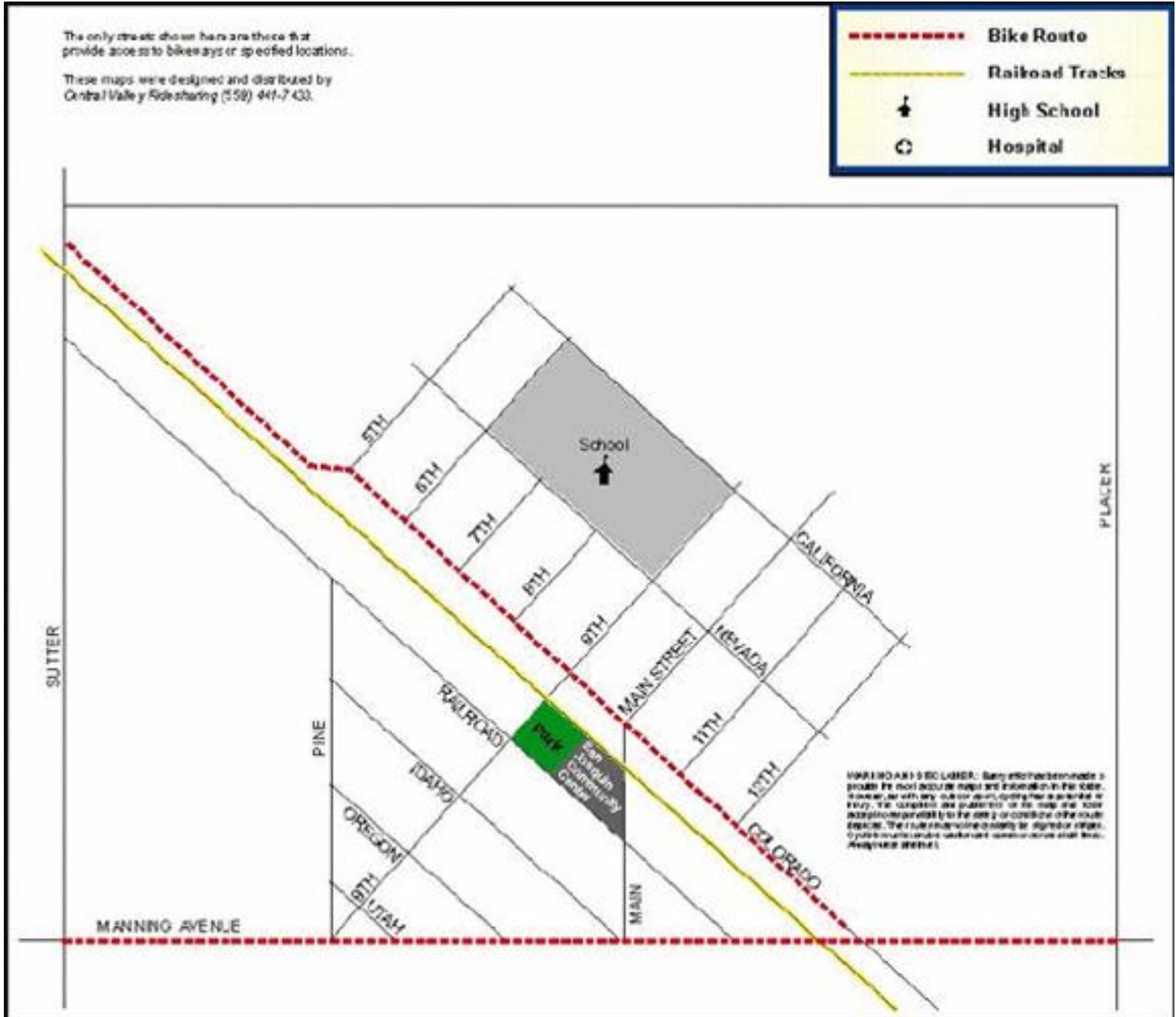


LEGEND

- INDIVIDUAL EMPLOYERS
 - 10-20 employees
 - 21-50 employees
 - 51-100 employees
 - 100+ employees
- COLLECTIVE EMPLOYERS (shopping & professional centers)
 - 10-20 employees
 - 21-50 employees
 - 51-100 employees
- AUTOMOTIVE TRIPS
 - 200+ adt / weekday
 - 500+ adt / weekday
- AUTOMOTIVE TRAFFIC
 - existing truck route
 - projected (2025) traffic:
 - +20,001 adt
 - 13,001-20,000 adt
 - 9,000-13,000 adt
- PROPOSED PHASE 1 BIKE LANES (CLASS II)



City of San Joaquin



APPENDIX E

FRESNO COUNTY INTERNET WEBSITE BIKEWAY SURVEY

**What area of the County do you live in? What is your zip code?
Do you live in City Limits?**

About how many days a month do you ride your bike?

- Never
- Occasionally (one or two)
- Frequently (5-10)
- Most (more than 15)
- Every day

What is the average distance of your bicycle rides (one-way)?

- Under 2 miles**
- 2-5 miles**
- 5-10 miles**
- 10 miles or greater**

What modes of transportation do you bicycle to?

- Carpool
- Amtrak
- Bus

**Have you ever been involved in an accident with a motor vehicle
while riding your bike in Fresno County?
How far do you live from work or school?**

Why do you bike?

- Exercise
- Pleasure/Recreation
- Shopping/errands
- Commute to work
- Commute to school
- To reach transit bus/train etc., vanpool
- Environmental
- Financial
- Do not own car/do not drive
- Do not bike

What prevents you from bicycling more often?

- Destination too far
- Cars on roadway
- Small children traveling
- Lack of bikeways
- Lack of bike paths
- Poor lighting
- Weather

Bikeway/road in poor condition

On which do you prefer to ride?

Off- street paved bike paths
On street striped bike lanes
Un-striped bike routes
Unpaved trails or paths
Recreation/nature trails

Is it easy for you to use your bike in Fresno County?

Yes

Some problems: _____

No maps, signs, or road markings to help me find my way

No safe or secure place to leave my bicycle at my destination

No way to take my bicycle with me on the bus

Hard to find a direct route I liked

Other problems: _____

Where are your favorite places to bicycle in Fresno County?_____

What place is most difficult or unsafe to ride your bicycle? Why?

Where would you ride if route was safer or more accessible, what prevents you from riding there?

What could be done to encourage you to bicycle more in Fresno County?

Better lighting

Better connection to libraries, schools, parks

More bicycle parking

Bike paths

Striped Bike lanes

Bus and transit connectivity

Bicycle trails

Other_____

When you ride do you have a place to ride safely? Location of bike ride? _____

a) On the road, sharing the road with motor vehicles?

Yes

Some problems (please note locations):

- No space for bicyclists to ride
- Bicycle lane or paved shoulder disappeared
- Heavy and/or fast-moving traffic
- Too many trucks or buses
- No space for bicyclists
- Poorly lighted roadways
- Other problems: _____

How were the intersections you rode through?

Good

Some problems: (please note location) _____

- Had to wait too long to cross intersection
- Couldn't see crossing traffic
- Signal didn't give me enough time to cross the road
- Signal didn't change for a bicycle
- Unsure where or how to ride through intersection
- Other problems: _____

How was the surface that you rode on?

Good

Some problems, the road or path had:

- Potholes
- Cracked or broken pavement
- Debris (e.g. broken glass, sand, gravel, etc.)
- Dangerous drain grates, utility covers, or metal plates
- Uneven surface or gaps
- Bumpy or angled railroad tracks
- Rumble strips
- Other problems: _____

b) On an off-road path or trail, where motor vehicles were not allowed?

Yes

Some problems:

- Path ended abruptly
- Path didn't go where I wanted to go
- Path intersected with roads that were difficult to cross
- Path was crowded
- Path was unsafe because of sharp turns or dangerous downhill
- Path was poorly lighted
- Other problems: _____

Appendix E Page E-5 Fresno County Internet Website Survey (English)

Source: Pedestrian and Bicycle Information Center

Appendix E Page E-6 Fresno County Internet Website Survey (Spanish)

<p>¿En qué área del Condado vive usted?</p> <p>¿Cuál es su código postal?</p> <p>¿Vive dentro de los límites de la ciudad?</p> <p>¿Número de personas en su hogar?</p> <p>¿Cuántas personas en su hogar tienen licencia de manejar?</p>	<p>Número de autos en su hogar:</p> <p><input type="checkbox"/> Ninguno</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3 o más</p>
<p>En promedio, ¿cuántos días por mes usted usa su bicicleta?</p>	<p><input type="checkbox"/> Nunca</p> <p><input type="checkbox"/> Ocasionalmente 5-10</p> <p><input type="checkbox"/> Frecuentemente 10+</p> <p><input type="checkbox"/> Diariamente</p>
<p>¿Cuál es la distancia promedio de sus viajes en bicicleta?</p>	<p><input type="checkbox"/> Menos de 2 millas</p> <p><input type="checkbox"/> 2-5 millas</p> <p><input type="checkbox"/> 5-10 millas</p> <p><input type="checkbox"/> 10-20 millas</p> <p><input type="checkbox"/> Más de 20 millas</p>
<p>¿Qué tan lejos tiene que viajar para llegar a su trabajo o escuela?</p>	<p><input type="checkbox"/> Menos de 2 millas</p> <p><input type="checkbox"/> 2-5 millas</p> <p><input type="checkbox"/> 5-10 millas</p> <p><input type="checkbox"/> Más de 20 millas</p>
<p>¿Por qué usa su bicicleta?</p>	<p><input type="checkbox"/> Ejercicio</p> <p><input type="checkbox"/> Placer/Recreación</p> <p><input type="checkbox"/> Compras/Mandados</p> <p><input type="checkbox"/> Viajar al trabajo</p> <p><input type="checkbox"/> Viajar a la escuela</p> <p><input type="checkbox"/> Conectar al tránsito (autobús/tren/carpool)</p> <p><input type="checkbox"/> Ayudar al medio ambiente</p> <p><input type="checkbox"/> Razones financieras</p> <p><input type="checkbox"/> No tiene auto/no maneja</p> <p><input type="checkbox"/> No utilice su bicicleta</p>
<p>¿Qué lo previene de usar su bicicleta más seguido?</p>	<p><input type="checkbox"/> Destino muy lejos</p> <p><input type="checkbox"/> Autos en las calles/muy pocos carriles para bicicletas</p> <p><input type="checkbox"/> Falta de caminos para bicicletas fuera de la carretera</p> <p><input type="checkbox"/> Poco alumbramiento</p> <p><input type="checkbox"/> Desechos en el carril para bicicletas/carril en malas condiciones</p> <p><input type="checkbox"/> El clima</p> <p><input type="checkbox"/> Físicamente incapaz</p> <p><input type="checkbox"/> No tiene bicicleta</p>
<p>¿Qué lo animaría a usar su bicicleta más seguido?</p>	<p><input type="checkbox"/> Mejor alumbramiento</p> <p><input type="checkbox"/> Mejor conexión de rutas a escuelas, bibliotecas, parques, otros puntos de interés</p> <p><input type="checkbox"/> Más estacionamientos para bicicletas</p> <p><input type="checkbox"/> Caminos para bicicletas junto a las calles</p> <p><input type="checkbox"/> Carriles para bicicletas en la calle</p>
<p>¿Dónde montaría su bicicleta si la ruta fuera más segura o más accesible?</p>	<p><input type="checkbox"/> Conexión con autobús y tránsito</p> <p><input type="checkbox"/> Caminos para bicicletas</p>
<p>¿Qué lo detiene de montar su bicicleta ahora?</p>	

Appendix E Page E-7 Fresno County Internet Website Survey (Spanish)

Por favor califique las estructuras para el uso de bicicletas en orden de su preferencia 1-5. Usted típicamente monta su bicicleta...	<input type="checkbox"/> Camino pavimentado fuera de la carretera <input type="checkbox"/> Carril pintado dentro de la carretera <input type="checkbox"/> Caminos no pavimentados fuera de la carretera <input type="checkbox"/> Caminos de recreación/junto a la naturaleza <input type="checkbox"/> Carril no pintado dentro de la carretera <input type="checkbox"/> En la carretera con otros vehículos motorizados <input type="checkbox"/> En los caminos designados para bicicletas
¿Encuentra usted este tipo de problemas cuando monta su bicicleta?	<input type="checkbox"/> No mapas, señales o marcamientos en la carretera para ayudar a encontrar el camino <input type="checkbox"/> No lugares seguros para dejar mi bicicleta al llegar a mi destino <input type="checkbox"/> No poder llevar bicicleta conmigo en el autobús <input type="checkbox"/> No ruta designada para bicicleta para llegar a mi destino <input type="checkbox"/> Carril de bicicleta desaparece <input type="checkbox"/> No espacio para montar mi bicicleta en el carril <input type="checkbox"/> El camino tiene poco alumbrado <input type="checkbox"/> La señal no cambió para cruzar en bicicleta <input type="checkbox"/> No, yo no encuentro ningún problema al montar mi bicicleta
¿Cómo estuvo la superficie donde montó su bicicleta?	<input type="checkbox"/> Buena superficie libre de desechos y problemas <input type="checkbox"/> Grietas o pavimento roto <input type="checkbox"/> Peligrosas tapaderas de utilidades, tapaderas del desagüe, o placas de metal <input type="checkbox"/> Superficie no plana o boquetes <input type="checkbox"/> Tiras de estruendo <input type="checkbox"/> Carriles de tren desnivelados <input type="checkbox"/> Otro problema
¿Se siente usted seguro cuando monta su bicicleta en las carreteras del Condado de Fresno?	<input type="checkbox"/> Sí <input type="checkbox"/> No
¿Ha estado usted involucrado en un accidente mientras monta su bicicleta en el Condado de Fresno?	<input type="checkbox"/> Sí <input type="checkbox"/> No
Comentarios Adicionales	

Por favor indique la ruta o calle/intersección que le parezca particularmente peligrosa para ciclistas. ¿Por qué?

Por favor identifique alguna ruta de bicicleta que esté incompleta o que termine abruptamente.

¿Tiene usted hijos en su hogar que asisten a la escuela? __Sí __ No

Si su respuesta fue sí, ¿sus hijos caminan o montan su bicicleta a la escuela? __Sí __ No

¿A qué escuela asisten sus hijos?

Si los niños en su hogar no caminan o montan su bicicleta a la escuela (ya sea solos o supervizados por un adulto), ¿por qué no lo hacen? [Marque todas las que apliquen]

Si su hijo/hija no camina o monta su bicicleta a la escuela, ¿cuál es la razón primordial?

__ Tiempo	__ Mala ruta	__ Tráfico pesado	__ Muy lejos
__ Falta de banquetas o ruta	__ Preocupación por crimen	__ Falta de señales de tráfico	
__ Hijo/hija muy chico	__ Otra _____		

Si se hicieran mejoras, ¿usted dejaría que su hijo/hija camine o monte su bicicleta a la escuela (ya sea solo/sola o con un padre o guardian)? __Sí __ No

¿Con qué propósito usted camina usualmente? En este cuestionario, caminar incluye viajar en silla de ruedas, silla motorizada y otros sistema de ayuda mobiliaria (excepto bicicletas).

Por favor provea el número de minutos promedio por día que usted pasa caminando a cada destino:

Appendix E Page E-8 Fresno County Internet Website Survey (Spanish)

	0-5 minutos	5-10 minutos	10-20 minutos	20-45 minutos	Más de 45 minutos	No Aplica N/A
Para ir al trabajo/escuela						
De compras						
Para ir al tránsito público/colectivo						
Recreación/Ejercicio						
Otro						

Si usted no camina, ¿cuál es la razón? Marque todas las que apliquen:

- ☐ No disfruto caminar
- ☐ Prefiero montar bicicleta
- ☐ Prefiero manejar un auto
- ☐ No tengo tiempo para caminar
- ☐ Físicamente no puedo caminar
- ☐ Falta de banquetas o rutas
- ☐ Otra (Favor de especificar) _____

En una escala del 1-4 por favor califique sus preocupaciones acerca de caminar en su vecindario:

	1. No hay preocupación	2. Un poco de preocupación	3. Una preocupación	4. Preocupación Mayor
Autos a alta velocidad/ conductores no seguros				
Segmentos faltantes de banqueta				
Banqueta inadecuada				
Vehículos estacionados en banquetas				
Faltante/Inadecuado cruce de peatones				
Faltante/Inadecuada rampa de banqueta				
Crimen				
Area visualmente no atractiva				
Falta de destinos interesantes a corta distancia				
Falta de confiable, eficiente tránsito público				

Si le gustaría caminar más, califique cuál de los cambios siguientes lo harían caminar más seguido:

	No Cambio	Talvez caminaría más	Probablemente caminaría más	Definitivamente caminaría más
Tráfico vehicular más lento				
Más caminos para peatones				
Rutas designadas para caminar				
Mapas/Señales para peatones				
Destinos más cercanos a casa				
Mejorados cruces de peatones				
Banquetas más anchas				
Banquetas más niveladas				
Calles más atractivas (árboles/jardinería)				
Mejor alumbramiento de calles				
Mejor tránsito público				
Mejor seguridad (presencia policial, seguridad vecinal)				

Por favor liste las calles o intersecciones en el Condado de Fresno que usted sienta son especialmente peligrosas para peatones.

Appendix E Page E-9 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

County of Fresno Bicycle
Transportation Plan

Q1. What area of Fresno
County do you live in?

Answer Options	Response
	Count
	428
answered question	428
skipped question	0

Q2. What is your zip
code?

Answer Options	Response
	Count
	428
answered question	428
skipped question	0

Q3. Do you live within
the limits of a City?

Answer Options	Response	Response
	Percent	Count
Yes	85.0%	364
No	14.0%	60
Do not know	0.9%	4
	answered	
	question	428
	skipped	
	question	0

Q4. Number of persons
in household?

Answer Options	Response
	Count
	428
answered question	428
skipped question	0

Q5. How many licensed
driver's in household?

Appendix E Page E-10 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

Answer Options	Response Count
	428
answered question	428
skipped question	0

Q6. Number of cars in household?

Answer Options	Response Percent	Response Count
None	2.1%	9
1	15.9%	68
2	50.0%	214
3 or more	32.0%	137
	answered question	428
	skipped question	0

Q7. On average, how many days per month do you bicycle?

Answer Options	Response Percent	Response Count
Never	9.5%	35
Infrequently (1 - 4 days)	20.3%	75
Occasionally (5 - 10 days)	23.0%	85
Frequently (10+ days)	33.8%	125
Daily	13.5%	50
	answered question	370
	skipped question	58

Q8. What is the average distance of your bike ride?

Answer Options	Response Percent	Response Count
Less than 2 miles	15.1%	53
2 - 5 miles	19.4%	68
5 - 10 miles	17.7%	62
10 - 20 miles	19.7%	69
More than 20 miles	28.2%	99
	answered question	351

Appendix E Page E-11 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

skipped
question 77

Q9. How far is your
commute to work or
school?

Answer Options	Response Percent	Response Count
Less than 2 miles	10.2%	37
2 - 5 miles	15.1%	55
5 - 10 miles	35.7%	130
10 - 20 miles	29.9%	109
More than 20 miles	9.1%	33
	answered question	364
	skipped question	64

Q10. Why do you
bicycle? Check all that
apply.

Answer Options	Response Percent	Response Count
Exercise	88.5%	322
Pleasure/recreation	86.0%	313
Shopping/errands	24.5%	89
Commute to work	36.3%	132
Commute to school	6.3%	23
To reach transit(bus/train/carpool etc.)	4.7%	17
Environmental concern	37.4%	136
Financial concern	20.9%	76
Do not own car/do not drive	1.6%	6
Do not bicycle	6.9%	25
	answered question	364
	skipped question	64

Q11. What prevents you
from bicycling more
often? Check all that
apply.

Answer Options	Response Percent	Response Count
----------------	---------------------	-------------------

Appendix E Page E-12 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

Destination too far	25.6%	91
Cars on roadway	59.7%	212
Lack of striped bike lanes	64.2%	228
Lack of off-road bike paths	39.4%	140
Poor lighting	23.4%	83
Debris in bike lane/bikeway in poor condition	45.6%	162
Weather	31.8%	113
Physically unable	1.7%	6
Do not own a bicycle	4.2%	15
	answered question	355
	skipped question	73

Q12. What would encourage you to bicycle more often? Check all that apply.

Answer Options	Response Percent	Response Count
Better lighting	28.6%	102
Better connection of routes to schools, libraries, parks, and other points of interest	60.8%	217
More bicycle parking	31.7%	113
Bike paths adjacent to road	73.9%	264
Striped bike lanes	69.2%	247
Bus and transit connectivity	12.9%	46
Bicycle trails	74.8%	267
	answered question	357
	skipped question	71

Q13. Where would you ride if the route(s) was/were safer or more accessible?

Answer Options	Response Count
	306
answered question	306

Appendix E Page E-13 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

skipped question 122

Q14. What prevents you from riding there now?

Answer Options	Response Count
answered question	299
skipped question	129

Q15. Please rank bicycle facilities in order of preference with 1 being the lowest and 5 being the highest.

Answer Options	Response Average	Response Total	Response Count
Off-street paved bike path	3.32	1230	370
On street striped bike lane	3.34	1237	370
Unpaved trails or paths	2.76	1023	370
Recreation/nature trails	2.94	1089	370
Un-striped bike route (on street)	2.62	971	370
		answered question	370
		skipped question	58

Q16. Do you typically ride...

Answer Options	Response Percent	Response Count
On road with other motor vehicles	80.5%	285
On bike path or trail	19.5%	69
	answered question	354
	skipped question	74

Appendix E Page E-14 Fresno County Internet Website Survey Summary

April 27, 2009 - June 23, 2009

Q17. Do you encounter these problems when riding your bicycle?
Check all that apply.

Answer Options	Response Percent	Response Count
No maps, signs or road markings to help me find my way	13.6%	47
No secure place to leave my bike at destination	52.6%	182
Unable to take bike with me on the bus	4.6%	16
No bike route to destination	59.2%	205
Bicycle lane or paved shoulder disappears	87.0%	301
No space for me to ride/traffic in bike lane	76.6%	265
Path or road poorly lighted	31.8%	110
Signal did not change for bicycle	48.8%	169
No, I find bicycling problem free	1.2%	4
	answered question	346
	skipped question	82

Q18. How was the surface you rode on?
Check all that apply.

Answer Options	Response Percent	Response Count
Good surface free of debris and problems	29.9%	99
Cracked or broken pavement	73.1%	242
Dangerous utility covers, drain grates or metal plates	31.1%	103
Uneven surface or gaps	53.2%	176
Rumble strip	14.5%	48
Bumpy or angled railroad tracks	23.6%	78
Other problem	18.1%	60
Comments		101
	answered question	331
	skipped question	97

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Q19. Do you feel safe
when riding your bicycle
in the roadway in Fresno
County?

Answer Options	Response Percent	Response Count
Yes	30.1%	104
No	69.9%	242
	answered question	346
	skipped question	82

Q20. Have you been
involved in an accident
while riding your bicycle
in Fresno County?

Answer Options	Response Percent	Response Count
Yes	24.1%	84
No	75.9%	265
	answered question	349
	skipped question	79

Q21. Please indicate
which bike route or
street/intersection that
you feel is particularly
dangerous to bicyclists.
Why?

Answer Options	Response Count
	248
answered question	248
skipped question	180

Q22. Please identify bike
route(s) that is/are
incomplete or abruptly
ends

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April 27, 2009 - June 23, 2009

Answer Options	Response Count
answered question	195
skipped question	233

Q23. Do you have children that attend school in your household?

Answer Options	Response Percent	Response Count
Yes	35.0%	122
No	65.0%	227
	answered question	349
	skipped question	79

Q24. If yes, do they bicycle or walk to school?

Answer Options	Response Percent	Response Count
Yes	26.9%	49
No	73.1%	133
	answered question	182
	skipped question	246

Q25. What school(s) do they attend?

Answer Options	Response Count
answered question	136
skipped question	292

Q26. If the children in your household do not walk or bicycle to school (either alone or with adult supervision), why don't they? Check all that apply.

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Answer Options	Response Percent	Response Count
Time	23.7%	28
Poor route	33.9%	40
Traffic too heavy	50.0%	59
Distance too far	38.1%	45
Lack of sidewalks or route	37.3%	44
Concern about crime	23.7%	28
Lack of traffic signals	9.3%	11
Child is too young	28.0%	33
Other	17.8%	21
Comments		38
	answered question	118
	skipped question	310

Q27. If improvements were made, would you let your child walk/bicycle to school (either alone or with a parent or guardian)?

Answer Options	Response Percent	Response Count
Yes	77.8%	130
No	22.2%	37
	answered question	167
	skipped question	261

Q28. For what purpose do you usually walk? In this survey, walking includes travel by wheelchair, scooter and other mobility aids (excluding bicycles). Please provide the average number of minutes per day you spend walking to each destination.

Answer Options	0 - 5 minutes	5 - 10 minutes	10 - 20 minutes	20 - 45 minutes	45+ minutes	N/A	Rating Average	Response Count
To get to work/school	60	23	19	7	5	106	3.87	220

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Shopping	57	41	44	18	3	85	3.5	248
To get to public transit/carpool	55	16	8	3	1	120	4.18	203
Recreational/fitness	28	14	61	93	69	44	3.95	309
Other	20	6	25	20	18	79	4.47	168
							answered question	330
							skipped question	98

Q29. If you do not walk, what is the reason?
Check all that apply.

Answer Options	Response Percent	Response Count
I do not enjoy walking	6.6%	17
I prefer to ride a bicycle	57.4%	147
I prefer to drive a car	22.7%	58
I do not have time to walk	29.3%	75
I am physically unable to walk	4.3%	11
Lack of sidewalks or routes	23.4%	60
	answered question	256
	skipped question	172

Q30. Please rate your concerns about walking in your neighborhood.

Answer Options	1 - No concerned	2 - Somewhat of a concern	3 - A Concern	4 - A major concern	Rating Average	Response Count
Speeding cars/unsafe driving	125	87	44	65	2.15	321
Missing segments of sidewalk	182	40	39	49	1.85	310
Inadequate sidewalk	176	33	48	51	1.92	308
Vehicles parked on sidewalks	227	38	19	18	1.43	302
Missing/inadequate crossings	174	61	37	33	1.77	305
Missing/inadequate curb ramps	221	35	26	21	1.5	303

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April 27, 2009 - June 23, 2009

Crime	165	76	36	28	1.76	305
Visually unappealing surroundings	196	54	39	20	1.62	309
Lack of interesting destinations within walking distance	151	77	52	28	1.86	308
Lack of reliable, efficient public transit	188	37	43	36	1.76	304
					answered question skipped question	330
						98

Q31. If you would like to walk more, rate which of following changes would make you walk more often?

Answer Options	1 -No Change	2 - Maybe walk more	3 - Likely to walk more	4 - Definitely walk more	Rating Average	Response Count
Slower vehicle traffic	152	71	38	35	1.85	296
More pedestrian paths	67	65	84	93	2.66	309
Designated walking routes	79	65	77	85	2.55	306
Maps/signs for walkers	161	59	34	37	1.82	291
Destinations closer to home	89	65	67	83	2.47	304
Improved street crossings	122	76	49	49	2.08	296
Wider sidewalks	141	62	49	40	1.96	292
More level sidewalks	149	64	43	37	1.89	293
More attractive streets (trees/landscaping)	102	61	83	55	2.3	301
Better street lighting	92	69	75	58	2.34	294
Better public transit	163	41	51	43	1.91	298
Improved security (neighborhood watch, police presence)	118	78	54	45	2.09	295
					answered question skipped question	330
						98

Q32. Please list streets or intersections in Fresno County that you feel are especially dangerous to pedestrians.

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April 27, 2009 - June 23, 2009

Answer Options	Response
	Count
	123
answered question	123
skipped question	305

APPENDIX F

PROJECT RANKING

APPENDIX F: PROJECT RANKING

Project Ranking Criteria:

- **Land Use:** A project that provides or promotes connections or access to multiple land uses (e.g. primary generators such as dense residential neighborhoods with high numbers of bicycle commuters with areas of dense employment) will rank favorably according to the land use criteria. Facilities that provide intra- or inter-neighborhood access to schools, for shopping trips, access to transit, access to public open space/parks would also rank favorably according to the land use criteria. Longer corridor projects that “connect” more land uses will tend to rank higher as they are assigned greater points over shorter projects that do not connect generators with destinations, or vice versa.
- **Current Bicyclist Demand:** Higher points are awarded to those projects that currently have significant usage, based on land uses, population, corridor aesthetics, etc. Justification for this criterion is that corridors or spot locations currently receiving high demand may or may not be optimally designed for safety and functionality and additional improvement would benefit a large number of existing bicyclists.
- **Latent Bicyclist Demand:** Higher points are awarded to projects likely to generate significant usage, based on land uses, population, corridor aesthetics, etc. Justification for this criterion is that existing corridors or spot locations may be viewed by high percentage of local residents/potential users as undesirable from a safety or operational perspective. If safety or functionality is improved, even high use facilities may increase in use levels.
- **Technical Ease of Implementation:** Technical ease of implementation focuses on the actual engineering challenges of a project, emphasizing the point that typical physical requirements of bicycle projects such as parking removal, traffic lane removal, or lane re-striping are not technically challenging from an engineering perspective. Physical solutions are often readily apparent but may require development of political support, addressed under “Political Ease of Implementation,” or that specific operational issues be addressed specifically to demonstrate that no negative impacts will occur to other modes. This criterion addresses specifically the technical, physical aspects of the engineering solution.
- **Political Ease of Implementation:** Maximum points are assigned for an easy, popular project. If significant neighborhood opposition is a known factor, if support of local elected official is not anticipated, or if other political opposition to a particular aspect of the assumed engineering solution (such as parking removal) is anticipated, then the project received fewer points under this criterion. NOTE: Projects that are supported by current or adopted planning efforts by regional or local agencies receive points under this criterion. For example, projects that are identified in the City of Fresno Bicycle Master Plan, have the potential to serve bicyclists.. In addition, projects that are supported by existing or anticipated funding should receive points under this criterion.

- **Overcomes Barrier / Connectivity:** Maximum points should be assigned to recommended facilities that would address a major safety concern for bicyclists using bridges, interchanges, and other environments difficult for bicyclists to navigate. Higher points should be assigned to roadways with high speed, high traffic volume, wide road width, difficult intersections or other obstacles to bicycle travel. Maximum points should be assigned for filling a gap in the existing network.
- **Public Input:** This is based directly on public input received during public workshops, results from the public surveys, and direct conversations with staff. Points were assigned in correlation to the number of comments and perceived interest of workshop attendees.

Project Ranking Value Summary:

Land Use

- 0 - Does not go to specific destination and is not part of school, employment, or transit route
- 1 - Makes some connection or part of significant route
- 2 - Multiple connections or school route
- 3 - Multiple connections and school route or significant employment/shopping route

Political Ease of Implementation

- 0 - Very expensive, sensitive issue/area, widespread opposition
- 1 - Public interest uncertain, not mentioned in other plans or jurisdiction unknown
- 2 - Known public support and/or in another plan - may have some barriers
- 3 - Known public support and in another plan, potential funding available in the short term

Technical Ease of Implementation

- 0 - Engineering very difficult, expensive
- 1 - Difficult, environmental issues, jurisdiction questions
- 2 - Relatively easy terrain, known road or right of way width adequate, project engineering not prohibitive
- 3 - No significant impediments (based on type of route)

Current and Latent Demand

- 0 - Little or no current use and little expected with improvement
- 1 - Cyclist use currently, serves very small population - limited potential for increased use
- 2 - Route used frequently and more use likely or new class I that has significant public support
- 3 - Route heavily used will likely see increased use with improvement

Overcomes Barrier/Connectivity

- 0 - Does not provide significant connection, safety improvement or improved access
- 1 - Provides limited connection or safety improvement to a significant route
- 2 - Provides connection on significant route or makes cyclist environment better
- 3 - Provides multiple connections, closes significant gap, significantly improves safety or alleviates barrier

Public Input/Support

- 0 - Public or staff opposition
- 1 - Unknown support
- 2 - Support from either public or staff
- 3 - General support - moderate priority
- 4 - High support from both public and local entity
- 5 - High support and identified as a priority