

3. CIRCULATION ELEMENT



This Circulation Element provides the framework for Colusa County decisions concerning the countywide transportation system, which consists of various transportation modes, including roadway, transit, bike, pedestrian, rail, and aviation. The Circulation Element also provides for coordination with the incorporated municipalities within the county, the Colusa County Local Transportation Commission (as the Regional Transportation Planning Agency), and State and Federal agencies that fund and manage the County's transportation facilities.

State law (California Government Code Section 65302(b)) mandates that the Circulation Element contain the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, military airports and port, and other public utilities and facilities, to the extent these items exist in the planning area. As required by California Government Code Section 65302(b), the Circulation Element is correlated closely with the land use element and is related to the housing, open-space, noise, and safety elements. The General Plan also draws on information contained in the 2008/09 Colusa County Regional Transportation Plan Update.

The Circulation Element reflects the diversity of Colusa County and establishes standards that guide development of the transportation system through goals policies and actions.

Background

Colusa County's preservation of agricultural land and concentration of growth within incorporated cities has created a unique transportation system compared to the rest of the Sacramento region. Most travel in the County is by automobile.

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The roadway network within the unincorporated parts of the County is rural in character, mainly serving small communities and agriculture uses. Interstate 5 and State Routes 20 and 45 are the primary transportation corridors extending through the County and serve all of the County's major population centers, including Colusa, Williams, Arbuckle, Maxwell, Princeton and Grimes. Other County arterials and a network of local public and private roads constitute the remainder of the roadway system.

Roadway Level of Service

Level of Service (LOS) is a general measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving as well as speed, travel time, traffic interruptions, and freedom to maneuver. The LOS grades are generally defined as follows:

- LOS A represents free-flow travel with an excellent level of comfort and convenience and the freedom to maneuver.
- LOS B has stable operating conditions, but the presence of other road users causes a noticeable, though slight, reduction in comfort, convenience, and maneuvering freedom.
- LOS C has stable operating conditions, but the operation of individual users is substantially affected by the interaction with others in the traffic stream.
- LOS D represents high-density, but stable flow. Users experience severe restriction in speed and freedom to maneuver, with poor levels of comfort and convenience.
- LOS E represents operating conditions at or near capacity. Speeds are reduced to a low but relatively uniform value. Freedom to maneuver is difficult with users experiencing frustration and poor comfort and convenience. Unstable operation is frequent, and minor disturbances in traffic flow can cause breakdown conditions.
- LOS F is used to define forced or breakdown conditions. This condition exists wherever the volume of traffic exceeds the capacity of the roadway. Long queues can form behind these bottleneck points with queued traffic traveling in a stop-and-go fashion.

These definitions of level of service for motorists are contained in the Highway Capacity Manual (HCM) (Transportation Research Board, 2000). The HCM methodology is the prevailing measurement standard at this time throughout the United States.

Background information regarding existing circulation conditions is presented in the General Plan Background Report.

Goal CIRC-1: Provide an Efficient Multi-modal Road and Highway System that Meets the Needs of All Users for the Movement of People and Goods

Objective CIRC-1A: Maintain Safe and Efficient Operating Conditions on All County Roadways

Policy CIRC 1-1: Provide a circulation system that is consistent with the roadway network shown in the Circulation Element Diagram Figure CIRC-1.

Policy CIRC 1-2: Roadway classifications shall be built to the standards described below and illustrated in Figures CIRC-2a and CIRC-2b.

Complete Street

A transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility.

Policy CIRC 1-3: Address the concept of “complete” streets, which requires more complete consideration of all users of the street, in new development and roadway improvement projects.

Policy CIRC 1-4: Define level of service (LOS) consistent with the latest edition of the Highway Capacity Manual and calculate using the methodologies contained in that manual. At a minimum, weekday AM and PM peak hour traffic volumes will be used in determining compliance with the level of service standard. The analysis of other periods may be appropriate and will depend on type of use.

Policy CIRC 1-5: Maintain LOS C or better for County roadways and intersections in the unincorporated County.

Policy CIRC 1-6: Maintain levels of service on state highways consistent with Caltrans standards, to the extent feasible.

Policy CIRC 1-7: Use transportation facilities to support the economic growth of the region and to provide safe and efficient movement of persons and goods.

Policy CIRC 1-8: Plan and design transportation facilities to avoid damage to the County’s scenic and environmental resources, such as reductions in air quality and disruption of soils, topography, vegetative cover, and wildlife habitat.

Policy CIRC 1-9: Periodically evaluate the adequacy of traffic impact fees and roadway financing programs to ensure sufficient funding is provided for circulation network improvements necessitated by existing and planned future growth.

Policy CIRC 1-10: Ensure adequate funding and planning mechanisms are in place to identify needed roadway improvements and establish methods to finance roadway improvements, particularly those improvements that may not be provided in full by new development.

Policy CIRC 1-11: Require new development to: 1) finance and construct all off-site circulation improvements (including safety improvements) necessary to mitigate a project’s transportation impacts to local roads, consistent with the policies of the General Plan; and 2) to analyze traffic

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impacts on the regional transportation system and require a fair-share contribution necessary to mitigate significant impacts to regional transportation improvements where a financing plan or other mechanism has been adopted to ensure the full funding and construction of improvements. Right-of-way dedication should be requested as a condition of a proposed new or widened major or minor collector.

Policy CIRC 1-12: Require new development and other projects with transportation impacts to pay their fair share cost of all feasible transportation improvements, including bicycle/pedestrian, transit, and safety, necessary to reduce the severity of cumulative transportation impacts.

Policy CIRC 1-13: Require specific plans, commercial and industrial projects, subdivisions, and other large-scale projects to implement appropriate transportation control measures to reduce vehicle miles traveled and traffic congestion.

Policy CIRC 1-14: Ensure that transportation and circulation improvements are constructed and operational prior to or concurrent with the need for the improvements, to the extent feasible.

Policy CIRC 1-15: Encourage increased patrolling of streets and highways by the California Highway Patrol to enforce speed, weight, and safety regulations on the road.

Policy CIRC 1-16: Encourage transportation improvements that permit increased travel by recreational vehicles, provided that such improvements do not have a negative environmental impact.

Policy CIRC 1-17: Program and spend available transportation funds to maximize the use of federal and other matching sources.

Policy CIRC 1-18: Maintain the County roadway network through a regular program that prioritizes improvement projects based on need for improvements and available funding.

Policy CIRC 1-19: Include safe routes to schools in new development projects, where appropriate.

Action CIRC 1-A: Develop and adopt transportation impact study (TIS) guidelines for development, infrastructure, and public projects that consider all modes of travel and define, at a minimum, the need for transportation impact studies, analysis methodology, and CEQA significance criteria.

Action CIRC 1-B: Pursue all available sources of funding and protect existing sources for the development, improvement, and maintenance of the existing roadway system

Action CIRC 1-C: Establish a County transportation impact fee program that addresses impacts to Countywide transportation facilities and establish or update community-level fee programs to address impacts to local roadways in communities projected to accommodate the majority of growth in the next 5-10 years, including Arbuckle, Maxwell, and the unincorporated areas around Colusa and Williams. The program should address: timely construction of necessary improvements to accommodate existing needs and projected growth, a stable source of funding for necessary road improvements, and that new

development pays for its fair share of impacts to local facilities, regional facilities, and interchanges on the State Highway System.

Action CIRC 1-D: Review and revise roadway standards for community and rural areas to ensure that the standards are adequate to accommodate complete streets, addressing the following factors as applicable: number of travel lanes, lane width, medians, drainage control, shoulder width, parking lanes, bike lanes, fire and emergency response standards, curb and gutter design, landscaped strip and sidewalk width. The revised standards should also include a requirement for a 40-foot minimum easement width when creating an access easement or road when one or more parcels is to be accessed.

Action CIRC 1-E: Seek funding for the Safe Routes to Schools program.

Action CIRC 1-F: As part of the development review and planning process, review general plan amendments, zone change requests, specific plans, subdivisions, commercial and industrial projects, as well as other large-scale development projects to ensure that adequate transportation control measures are included.

Objective CIRC-1B: Provide and Sustain a Viable Rural Public Transit System

Policy CIRC 1-20: Ensure that residents have convenient transit service to employment centers, County service centers, other government centers, and regional destinations (i.e., Sacramento International Airport), as funding allows.

Policy CIRC 1-21: Work with Colusa County Transit and neighboring transit providers, including Yuba/Sutter Transit, Yolo Bus, and Glenn County Transit, to ensure that Colusa County residents have access to destinations throughout the region.

Policy CIRC 1-22: Prioritize providing public transit connections, through Colusa County Transit and Dial-a-Ride, from the major unincorporated communities to locations that connect with other regional transit providers (e.g., Yuba/Sutter Transit, Yolo Bus, and Glenn County Transit) and to the incorporated cities and make every effort to provide daily service, at a minimum, to the unincorporated communities of Arbuckle, College City, Grimes, Princeton, Maxwell, and Stonyford.

Policy CIRC 1-23: Apply for Urban Mass Transit Act (AMTA) Section 18 formula and discretionary funds.

Policy CIRC 1-24: Limit use of State Transit Assistance funds to transit facilities and service.

Policy CIRC 1-25: Encourage the continuation of privately operated bus service between unincorporated communities, Colusa, Williams, and connections to regional transit.

Policy CIRC 1-26: Prioritize providing public transportation for the elderly, handicapped, economically disadvantaged, and others with unmet transportation needs. Secondary priority is given to diverting automobile trips to transit.

Policy CIRC 1-27: Support applications by private non-profit rural transit providers for federal subsidies. Explore and support opportunities for private operation of the transit system as needed to fill gaps in public transit options.

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Action CIRC 1-G: Support regional transit planning efforts to develop and implement intra-regional transit service.

Action CIRC 1-H: As part of the development review process, ensure that development and planning projects accommodate transit facilities (bus stops, sheltered bus stops, turnarounds, etc.) where appropriate and that development contributes its fair share to transit facilities and services.

Objective CIRC-1C: *Promote and Ensure the Provision of Safe, Convenient and Attractive Sidewalks, Bikeways, and Trails where Appropriate for Local, Regional and Recreational Travel*

Policy CIRC 1-28: Work with appropriate agencies to implement a regional bikeway system that connects the cities, larger unincorporated communities, recreation destinations, and scenic areas as shown in Figure CIRC-3. Implement a dedicated multi-purpose bikeway between Arbuckle, Maxwell, Williams, and Colusa as a part of this effort.

Policy CIRC 1-29: Create a complete bikeway and sidewalk system within each community, including the completion of existing systems and provide connections to the regional system. Create walkways and bikeways that connect existing paths where feasible, and that connect to downtown/community core areas, schools, grocery stores, parks, and other community features.

Policy CIRC 1-30: Ensure that existing and new pedestrian facilities are compliant with the Americans With Disabilities Act (ADA).

Policy CIRC 1-31: Protect abandoned rail corridors for re-use as trails and other forms of alternative transportation, where feasible.

Policy CIRC 1-32: Support development of facilities that link bicyclists and pedestrians with other modes of transportation.

Policy CIRC 1-33: Require residential development at urban densities (3.5 units per gross acre or greater) to include provisions for bicycle and pedestrian travel. Where possible, these bicycle and pedestrian routes should be integrated with trails serving the rest of the community.

Policy CIRC 1-34: Sidewalks should be required within all new development at urban densities if such development is contiguous or within the communities of Arbuckle, Maxwell, Grimes, or Princeton. This requirement also applies to the unincorporated portions of Colusa and Williams, and its adoption by each of these two cities is encouraged.

Action CIRC 1-I: Develop and adopt a Bicycle Master Plan that provides for and encourages the development of an integrated system of bikeway facilities. These facilities would provide for safe and convenient travel for bicyclists and access to recreational bicycling opportunities throughout the County.

The Bicycle Master Plan should include provisions that:

- *Provide safe bicycle routes within communities between residential, commercial areas, schools, downtown/community core areas, and essential services.*

- *Provide regional bicycle routes establishing access between the larger communities, incorporated cities, recreation destinations, and scenic areas as generally shown in Figure CIRC-3*
- *Utilize existing linear features such as levees and public utility right-of-ways.*
- *Provide access to recreational areas such as the Sacramento River, East Park Reservoir, Mendocino National Forest, and proposed Sites Reservoir.*
- *Prioritize construction of bikeways, including off-road bikeways in locations that have the highest demand, both at the local community and regional recreation levels.*
- *Require development to dedicate rights-of-way or easements to construction.*
- *Consider Bicycle/Pedestrian Master Plans adopted by the Cities of Colusa and Williams.*

Action CIRC 1-J: Pursue funding for construction and maintenance of bikeways and sidewalks, including off-road bikeways where feasible.

Action CIRC 1-K: Develop an Americans With Disabilities Act (ADA) transition and compliance program for pedestrian facilities.

Objective CIRC-1D: Prioritize the Improvement and Maintenance of Roads and Transportation Facilities, Directing County Funds to those Areas Most in Need of Improvement

Policy CIRC 1-35: Local transportation funds shall be allocated to the cities of Colusa and Williams and the County by the Local Transportation Commission based on the most current Department of Finance population estimate for each area.

Policy CIRC 1-36: Where appropriate and feasible, establish road maintenance districts to provide a stable source of funding and to ensure that road maintenance can occur when necessary.

Policy CIRC 1-37: Explore and pursue all available state, federal, and private funding for the development of its transportation systems, where the County has a reasonable chance of receiving funding or developing a successful program.

Policy CIRC 1-38: Any excess local transportation funds not needed for new or improved circulation facilities should be used for road maintenance.

Policy CIRC 1-39: Prioritize the replacement or rehabilitation of deficient bridges.

Policy CIRC 1-40: Twenty-five percent of the timber funds generated from forest sales should continue to be used for streets and roads.

Policy CIRC 1-41: Support and encourage legislation that will ensure that Colusa County receives a larger share of State and Federal road maintenance funds.

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Policy CIRC 1-42: Support the removal or reduction of restrictions on the spending of state and federal transportation monies

Policy CIRC 1-43: Encourage Caltrans to clear or prevent weed growth and to perform drainage and culvert maintenance along the shoulders and in the median of Interstate 5, State Route 20, and State Route 45 to avoid potential fire hazards.

Policy CIRC 1-44: Coordinate with state and federal agencies that own and maintain roadways in Colusa County to continue to provide reasonable access to forest lands and recreation areas within the County that are not accessible by County-maintained roads.

Action CIRC 1-L: Continue to maintain a database of all County maintained roadways to identify roadways with immediate maintenance needs and to determine which roadways should no longer be maintained and allowed to return to rural/agricultural roads.

Action CIRC 1-M: Identify areas of the County where it is feasible to establish transportation maintenance districts. Transportation maintenance districts should include an impact fee component to ensure that new development pays its fair share of the cost of development and maintenance of the County roadway and transportation network. Prioritize establishing road maintenance districts to address areas with the highest road maintenance needs.

Action CIRC 1-N: As part of the development review process, require new subdivisions to join or create roadway maintenance districts for maintaining public roads and transportation facilities installed with the development.

Goal CIRC-2: Support the Movement of Goods through Trucking, Rail, Air, and Other Forms of Freight Service to and from Businesses in the County

Objective CIRC-2A: Support and Improve Rail Services to Provide Goods and Passenger Movement

Policy CIRC 2-1: Encourage the restoration of passenger rail service along the California Northern Pacific Railroad tracks parallel to Interstate 5.

Policy CIRC 2-2: Support the continuation of freight and rail service to businesses and communities along the main and branch lines of the California Northern Pacific Railroad.

Policy CIRC 2-3: Coordinate with California Northern Pacific Railroad and other rail providers to encourage adequate rail service, investigate possibilities for passenger service, and ensure on-going maintenance of facilities and road crossings.

Policy CIRC 2-4: Railroad crossings of State and county roads shall be marked, signalized, and gated where warranted by traffic volumes and required by the California Public Utility Commission (PUC).

Policy CIRC 2-5: Work with other agencies to plan railroad corridors to facilitate the preservation of important railroad rights-of-way for future rail expansion or other appropriate transportation facilities.

Objective CIRC-2B: *Improve and Enhance Air Services to Provide Goods Transportation, Tourism and Related Economic Activities*

Policy CIRC 2-6: Promote the expansion and improvement of existing airport facilities. When there is a reasonable chance of approval, the County shall apply for available State and Federal aeronautics funds.

Policy CIRC 2-7: Establish a use-based funding mechanism to support maintenance and improvement of the Colusa County Airport.

Objective CIRC-2C: *Support and Protect Waterways for Tourism and Related Economic Activities*

Policy CIRC 2-8: Support access and navigational improvements and facilities on/adjacent to the Sacramento River, East Park Reservoir, Stony Creek, and other waterways that encourage commercial fishing, tourism, recreation, and improve boating safety.

Goal CIRC-3: Provide a Circulation System that Supports Public Safety

Objective CIRC-3A: *Minimize Inconveniences and Safety Hazards Caused by Road Flooding, Washouts, and Emergency Conditions*

Policy CIRC 3-1: Ensure that roadway design standards include all-weather dual-purpose function, as appropriate, to increase capacity, improve safety, and enhance flood control.

Policy CIRC 3-2: Work with adjoining landowners to reduce roadway flooding. Where localized flooding occurs as a result of new private development, the cost for remediation should be the responsibility of the new development.

Policy CIRC 3-3: Ensure that development, roadway, and planning projects include adequate access and features to accommodate evacuations and movement of people to critical services during emergency conditions.

Action CIRC 3-A: Work with federal and state funding agencies to create a funding plan to implement improvements for emergency access, evacuation, fire protection, public safety, and drainage, and work with appropriate agencies to identify and prioritize projects.

Objective CIRC-3B: *Reduce Moving Traffic Hazards*

Policy CIRC 3-4: Install stop signs, railroad crossing guards, and warning signs where appropriate and warranted.

Policy CIRC 3-5: Limit driveway intersections and curb cuts along arterial and collector roadways in order to provide improved mobility and safety for all travel modes.

Policy CIRC 3-6: Ensure adequate access for emergency vehicles.

Policy CIRC 3-7: Ensure adequate access to emergency facilities and between major communities.

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Policy CIRC 3-8: Encourage the widening of State highways to allow the safe movement of farm vehicles and equipment.

Policy CIRC 3-9: Limit the intrusion of agricultural vehicles and heavy trucks on new residential streets.

***Action CIRC 3-B:** As part of the development review process, ensure that roadside commercial uses, large-scale industrial uses, and large-scale commercial or industrial agricultural uses have an approved public access plan. The plan should address public safety and ease of access to the site.*

***Action CIRC 3-C:** Bi-annually review truck routes and revise, where necessary, to reduce truck traffic through residential and pedestrian-oriented areas.*

***Action CIRC 3-D:** Bi-annually review the County's circulation system for areas with traffic hazards, such as the approach to the one-lane bridge near Sites, and prioritize installation of warning signage, stop signs, or other appropriate measures for locations with significant accident rates.*

Goal CIRC-4: Improve Livability in the County through Land Use and Transportation Decisions that Provide Residents with Choices to the Mode that they Use to Make Trips in the County

Objective CIRC-4A: *Provide Circulation Improvements that Address Livability, Accommodate Industrial and Commercial Development, and Consider Regional Planning Efforts, State Law, and Current Priorities*

Policy CIRC 4-1: Ensure that transportation control measures, alternative transportation options, and congestion management strategies are applied to long-term planning activities and large-scale new development projects.

Policy CIRC 4-2: All transportation improvement projects proposed for inclusion in local and regional transportation plans (Regional Transportation Plan, Regional Transportation Improvement Program, Congestion Management Plan, Capital Improvement Program, etc.) shall be consistent with the air quality, transportation, land use, and other goals and policies of the General Plan.

Policy CIRC 4-3: Projects included in the Capital Improvement Program and proposed for regional transportation plans should prioritize, in the following order: 1) projects that improve operations on existing roads without increasing capacity, 2) projects that encourage alternative transportation modes, 3) projects that increase capacity on existing roadways, and 4) new roadways.

Policy CIRC 4-4: Coordinate with Caltrans, the Colusa County Air Pollution Control District, and Colusa County Regional Transportation Commission to minimize air quality and transportation impacts associated with planned and existing transportation facilities.

Action CIRC4-A: County transportation planning decisions shall be coordinated with all affected public and private agencies.

Action CIRC 4-B: Invite the public to attend meetings and provide input regarding the future of the circulation system.

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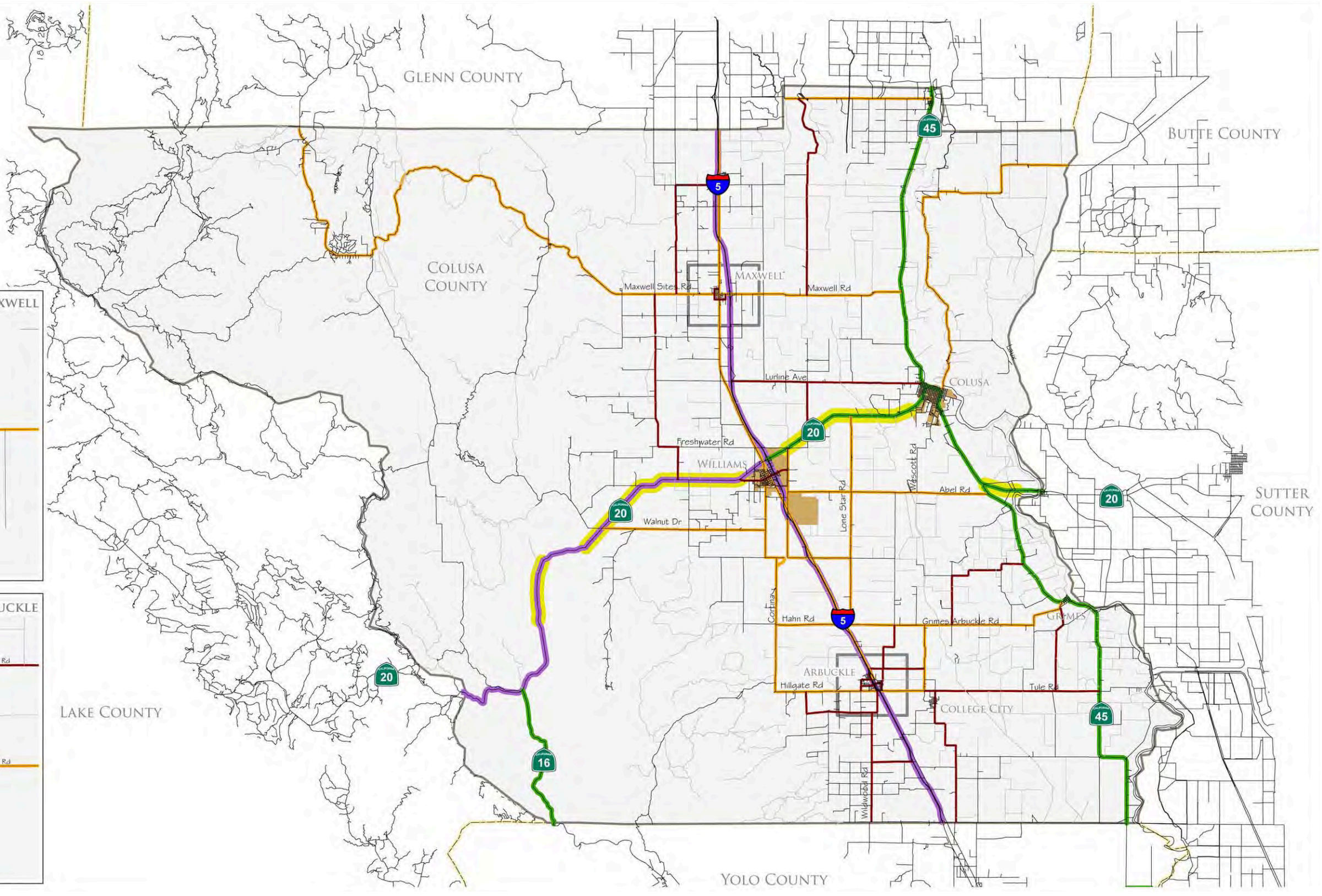
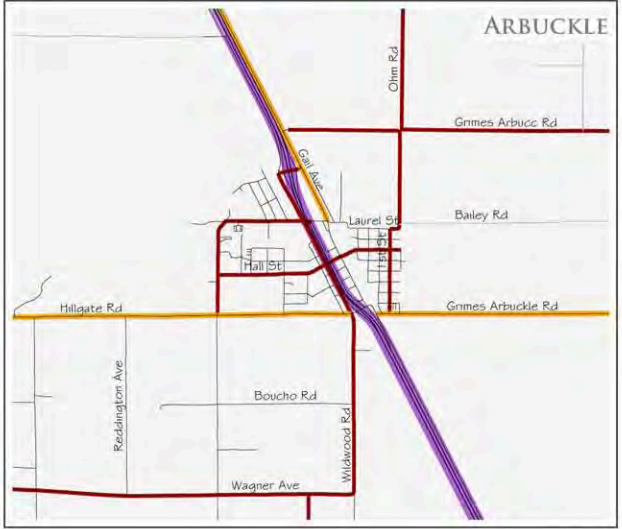
LEGEND

Roadway Functional Class

- Interstate/Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local
- Private
- Passing Lanes
- City Limits
- Colusa County



NOT TO SCALE



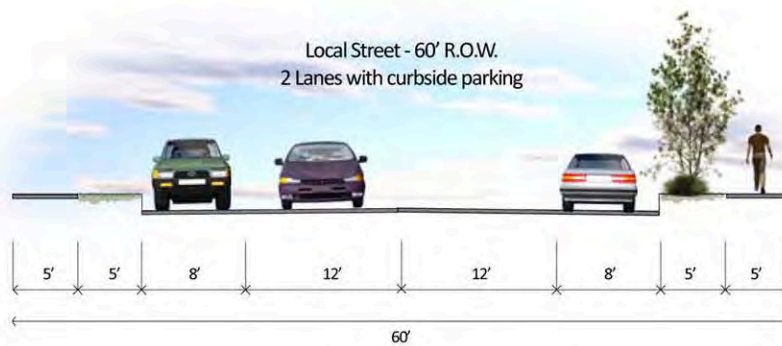
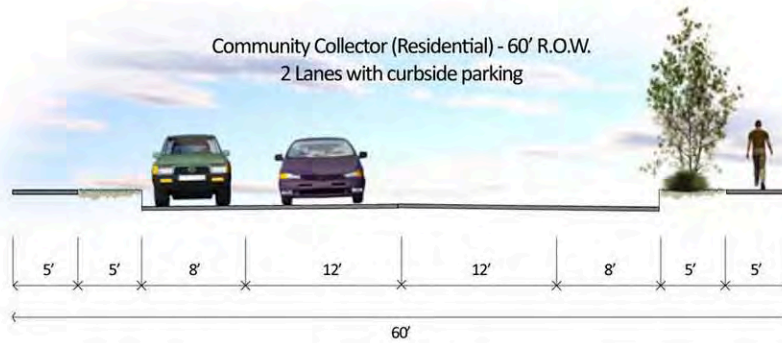
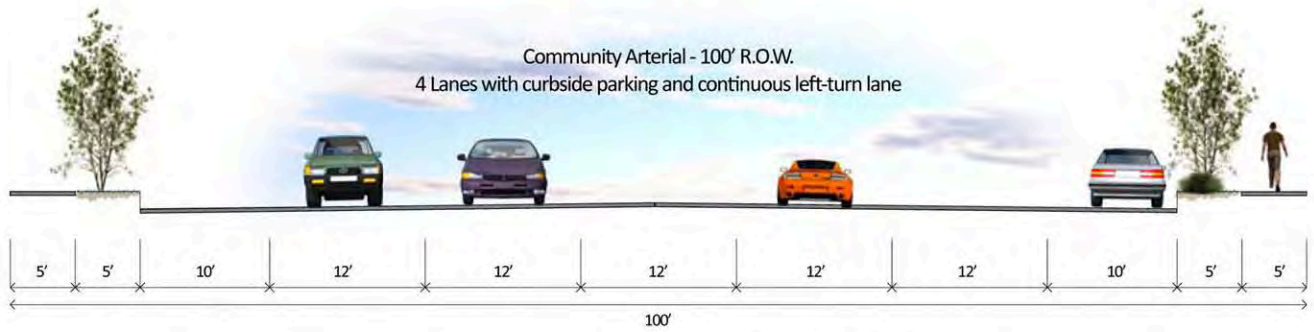
De Novo Planning Group

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Figure CIRC-1
Circulation Diagram

Source: Fehr & Peers, 2011



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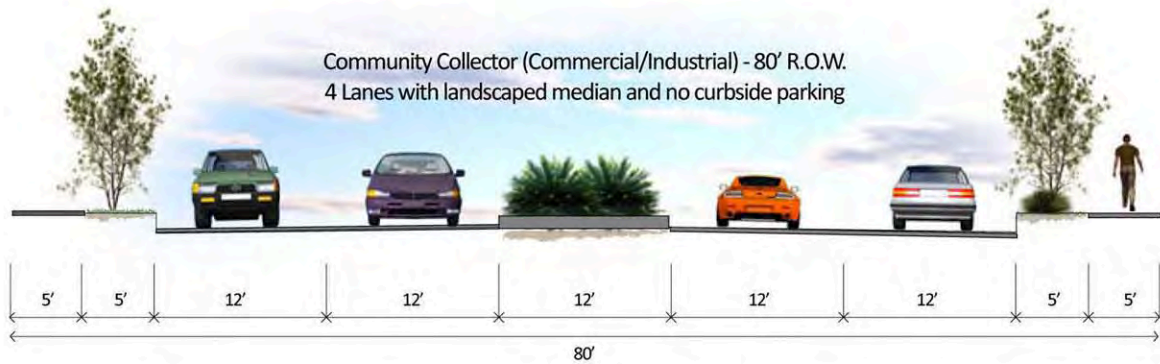


Figure CIRC-2a
Roadway Standards

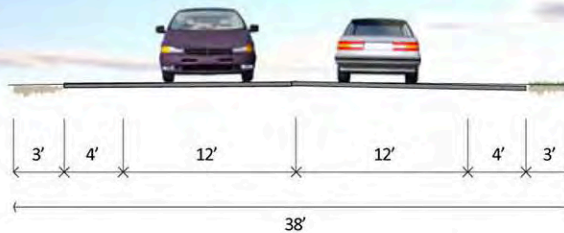
Community Collector (Commercial/Industrial) - 68' R.O.W.
4 Lanes without curbside parking



Community Collector (Commercial/Industrial) - 80' R.O.W.
4 Lanes with landscaped median and no curbside parking



Rural Roadway - 38' R.O.W.
2 Lanes with paved shoulder



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Figure CIRC-2b
Roadway Standards

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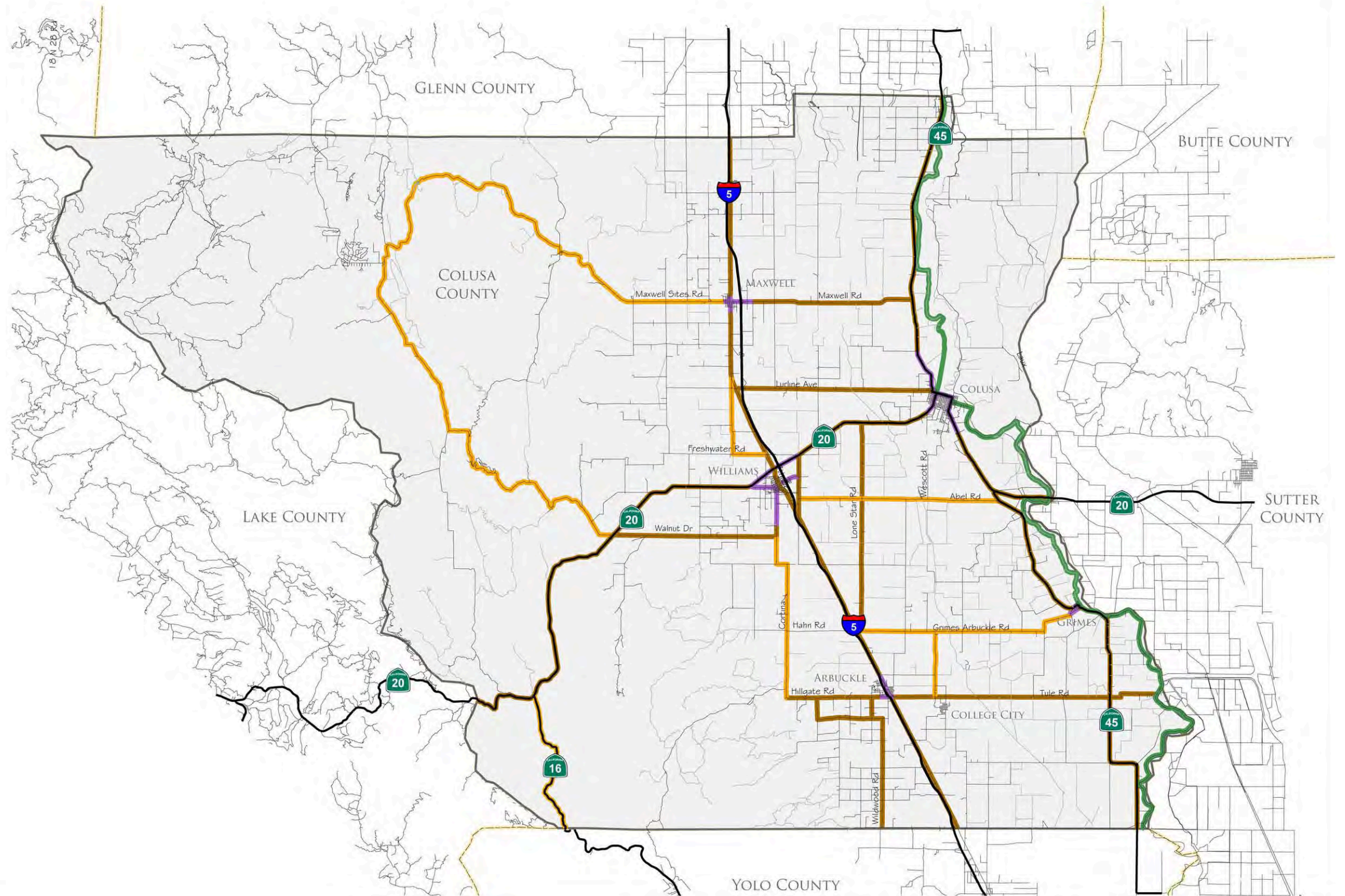
Bicycle Facility

- Class 1 Bike Path
- Class 2 Bike Lane
- Class 3 Bike Route with 3 ft. Shoulder
- Class 3 Bike Route
- Colusa County



N

NOT TO SCALE



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Figure CIRC-3
Regional Bicycle Facilities

Source: Fehr & Peers, 2011

