



## NAPA COUNTY GENERAL PLAN: CIRCULATION ELEMENT



As is the case with most California communities, circulation—the movement of people and goods—is an important issue in Napa County. The County's key industry, agriculture, relies on the circulation system to move workers, visitors, services, and product from vineyard to winery and from winery to market. Residents in Napa County need to travel to school, work, and shopping, and visitors to Napa County need safe and convenient ways to access the County's many destinations.

However, as a community with no direct access to an interstate freeway (a portion of Interstate 80 runs through a corner of Napa County, but there are no on- or off-ramps), and lacking the population size that would support significant transit investments, Napa County faces challenges unlike any other county in the Bay Area. Most significantly, Napa County must find ways to maintain and improve access, address congestion, and serve remote areas of the County while preserving the area's rural character.

This Circulation Element of the General Plan presents a summary of transportation issues and presents goals, objectives, policies, and action items intended to help Napa County meet these and other challenges.

**IN THIS ELEMENT**

- Transportation in Napa County (Page CIR-2)
- Napa County’s Roadway System (Page CIR-5)
- Transportation Issues Facing the County (Page CIR-6)
- Circulation Goals, Policies, Objectives, and Actions (Page CIR-10)

This Element describes the general location and extent of existing and proposed roads and other transportation facilities and services. It is intended to help County decision-makers prioritize future transportation investments and to ensure that transportation and land use decisions are integrated as provided for in this Element and in the Agricultural Preservation and Land Use Element.

**TRANSPORTATION IN NAPA COUNTY**

**Typical Modes of Travel in Napa**

Approximately 86 percent of Napa County’s population commutes to work in private automobiles with most (77.6 percent) driving alone. Table CIR-A provides a comparative analysis of the commuting choices of Napa County residents versus those for the state of California and the rest of the country.

**TABLE CIR-A: HOW NAPA COUNTY RESIDENTS TRAVEL TO WORK**

<b>Commuter Mode</b>	<b>Napa County</b>	<b>Bay Area</b>	<b>California</b>	<b>U.S.</b>
Single-Occupant Vehicle <sup>1</sup>	77.6%	66.5%	73.9%	76.6%
Carpool	9.0%	10.0%	10.0%	9.0%
Public Transit	2.0%	12.0%	5.2%	5.2%
Bicycling/Walking	5.4%	5.5%	3.8%	3.4%
Other Means	0.8%	1.5%	5.9%	1.2%
Work At Home	5.2%	5.6%	5.5%	4.6%
Percentage Who Work Outside County of Residence	22%	29%	17%	24%
Mean Travel Time to Work (in minutes)	24.7	31.1	28.9	26.4

Notes:

1. "Single Occupant Vehicle" includes motorcycles.

Sources: American Community Survey, 2015

As shown above, Napa County’s commuters are relatively similar to commuters statewide and nationwide in the way they choose to travel to work. The Bay Area as a whole has a higher percentage of commuters using public transit due to the extensive rail and bus systems in the more urbanized parts of the region. Napa commuters are slightly above national and state averages in their use of bicycles and walking, although this is likely limited to the relatively flat and compact Napa Valley. In other areas of the County, longer distances and more challenging terrain generally limit cycling to a mostly recreational activity.

**Public Transit**

Though not yet a major contributor to the existing transportation system, public transit services are available in all of the incorporated jurisdictions and in some of the unincorporated areas of the County. Fixed-route local, intercity, demand-response service, and paratransit are provided by the following operators:

- **VINE** provides intra- and inter-city fixed route services. VINE operates local service in the city of Napa, and regional service between Napa County and destinations such as the Vallejo Ferry Terminal and Suisun City Train Depot in Solano County, and the El Cerrito del Norte BART (Bay Area Rapid Transit) station in Contra Costa County. Future connectivity to the Sonoma-Marín Area Rapid Transit (SMART) rail system is under consideration.
- **American Canyon Transit** provides fixed-route service in American Canyon.



- **Yountville Trolley** provides door-to-door service throughout Yountville, including to the Veterans Home.
- **St. Helena Shuttle** provides on-demand, door-to-door and fixed-route service in St. Helena.
- **Calistoga Shuttle** is a general public on-demand service in Calistoga.
- **VINE GO** paratransit provides curb-to-curb service for residents countywide who live within ¼-mile of a bus route.

In August 2001, all transit services in the County were consolidated under the auspices of VINE Transit, which is managed by the Napa Valley Transportation Authority ([www.nvta.ca.gov](http://www.nvta.ca.gov)). This agency also serves as the Congestion Management Agency for Napa County.

In addition to the public services described above, a number of private companies offer a variety of transportation services throughout Napa. These include taxis, limousine services, shuttles operated by local companies, tour buses, and on-demand ridesourcing services such as Lyft and Uber (also known as Transportation Network Companies or TNCs).

### Active Transportation

The Napa Valley Vine Trail is an off-street bicycle/pedestrian path for commuters and recreational riders between Yountville and Napa. It is planned for the Trail to eventually connect all five municipalities in Napa County, as well as Vallejo in Solano County, and to include portions of the region-wide Bay Trail and Ridge Trail.

The more urbanized areas of Napa County sometimes have sidewalks and other pedestrian infrastructure, and some recreational bicycle/pedestrian trails extend into the unincorporated area from adjacent cities and towns.

NVTA is currently undertaking an update to the Countywide Bicycle Plan, with the intent of establishing policies and implementing programs to expand opportunities for bicycling in Napa County.

### Rail Transportation

Rail transportation in Napa County is limited to commercial and freight services. No commuter rail service exists within the County at this time. (The Napa Valley Wine Train is not a transportation service but is a sightseeing operation extending between Napa and St. Helena.) As of this update, freight service is limited; the California Northern Railroad extends through the southern part of the



County, from Suisun/Fairfield in Solano County through Napa Junction and to Brazos Junction on the Napa River, with a spur extending north to Streblo.

### Air Transportation

The primary air transportation venues in Napa County are Napa County Airport and Angwin-Parrett Field Airport.

Located 6.5 miles south of the city of Napa in the unincorporated area, **Napa County Airport** is a general aviation airport operated by Napa County. Originally established by the U.S. Army in 1942 as the Napa Auxiliary Air Defense Field, it was turned over to the County in 1945.

**Angwin Airport** (Parrett Field) is privately owned and operated. It also offers ground schools and flight instruction.

The **Lake Berryessa Seaplane Base** has an emergency seaplane landing area that is also open to the public for recreational use.

### Water Transportation

Some visitors come to Napa County by water. The Napa River is designated as a navigable waterway up to Third Street in the city of Napa, and there is a public dock at the Riverfront development. The Napa River played an important role in the early days of Napa County's development, providing an easy means to get the County's agricultural and other products to market.

As noted previously, the VINE public transit system provides bus service to the Vallejo Ferry Terminal, allowing passengers to use the ferry system to connect to the San Francisco Ferry Building, Pier 41, and the Mare Island Terminal.

## NAPA COUNTY'S ROADWAY SYSTEM

Napa County's roadway system reflects its primarily agricultural character. The County is different from most other counties in the Bay Area in this regard; the limited number of roadway types and the primarily rural nature of the roadways set Napa County apart from its more urban neighbors.

For instance, one interstate freeway (I-80) crosses the southeastern corner of the County, and there is no direct access to that freeway within Napa County (both American Canyon Road and Jamieson Canyon Road connect to I-80 in Solano County).



In the County's rural eastern area, no roadway more than two lanes wide currently exists or is planned, and many of the roadways are steep and curving, reflecting the topography of the area.

In the Napa Valley, some roadways are more urban in character. A portion of State Route (SR) 29 north of SR 121 is designated as a freeway, and the portion of SR 29 between SR 37 and SR 12/121 is considered part of the Federal Highway Administration's National Highway System, for which the state and federal governments have agreed-upon standards and principles. Some of the major roadways serving the incorporated cities and town are four lanes wide; north of the city of Napa most roads remain two lanes wide, although they sometimes accommodate higher traffic volumes than is typically associated with rural areas.

The Goals and Policies section of this Element defines the types of roadways that are shown on the Circulation Map.

## **TRANSPORTATION ISSUES FACING THE COUNTY**

Car and truck traffic in Napa County has steadily increased as the County has experienced growth in urban and agricultural development, and this increase in traffic is expected to continue into the foreseeable future as growth in Napa County and the region continues.

Traffic volumes on roadways in the County are expected to increase in the future, according to regional planning agencies such as the Metropolitan Transportation Commission (MTC) and the NVRTA. Some of the increase in traffic on County roadways will occur as the result of growth beyond the control of Napa County, created by development either within the incorporated cities and town or outside the County entirely (in the Bay Area and the Sacramento region). Key contributing factors to traffic growth include traveler preference for private automobiles with few shared rides, housing supply and housing costs in the Napa Valley, and the lack of roadway and parking pricing to manage demand.

In addition to commuter traffic, Napa County (particularly the Napa Valley and, increasingly, some connecting roads in the eastern hills) is subject to a significant amount of traffic generated by the many tourists who visit the County, many of whom are attracted by its approximately 500 wineries and many world-class restaurants. A recent industry study<sup>1</sup> estimated that there were 3.8 million annual visits to wineries in Napa, with wine-related tourism spending topping \$1 billion a year.

---

<sup>1</sup> "The Economic Impact of Napa County's Wine and Grapes," November 2012, prepared by Stonebridge Research for Napa Valley Vintners.

The NVRTA recently sponsored a study to better understand travel patterns in Napa County. The *Napa County Travel Behavior Study* (prepared by Fehr & Peers for the Napa County Transportation and Planning Agency, December 2014) used a variety of data sources (such as vehicle classification counts, in-person visitor surveys, online employee surveys, mobile device data, and license plate matching techniques) to gather information on the travel behavior of the full range of people in Napa County, including visitors, employees, residents, and students. Among many pieces of information generated by this study, one item is a summary of the proportion of total daily vehicle trips that travel between different parts of the County during different times of the week, as shown in Table CIR-B. One difference between weekend and weekday travel is that, on Saturdays, the proportion of travel coming from the incorporated cities is lower than it is on weekdays, while the amount of inter-county travel (between Napa and other counties) is much higher, indicating an effect of Napa’s role as a tourist destination. Even on weekdays, the amount of inter-county travel is relatively high at about 30% of all trips; this is likely a function of visitors coming to Napa from elsewhere even during the week, as well as workers traveling to local jobs who live in other counties, at least in part because of high housing costs and limited housing supply within Napa.

<b>TABLE CIR-B: ORIGINS AND DESTINATIONS OF VEHICLE TRIPS IN NAPA COUNTY</b>			
<b>Trip Type and Percent of Total</b>	<b>Weekday (Mon-Thurs)</b>	<b>Friday</b>	<b>Saturday</b>
Trips starting and ending in the unincorporated area of the County	19%	20%	18%
Trips starting and ending in cities and town in Napa County	26%	25%	19%
Trips between the unincorporated area and cities and town in Napa County	20%	22%	11%
Trips between Napa County and other counties	31%	31%	47%
Trips starting and ending outside Napa County (that is, passing through the County)	3%	3%	5%

Source: Fehr & Peers, *Napa County Travel Behavior Study*, December 2014

Because most of the County’s visitors come to visit wineries, tourism-related impacts are also concentrated on roads providing access to wineries. A study of weekend versus weekday traffic volumes on major roadways in the County found that the following roadways have higher traffic levels on weekends:



- Chiles Pope Valley Road
- Petrified Forest Road
- Silverado Trail
- Wooden Valley Road
- Yountville Cross Road
- Pope Canyon Road

Only one of these roadways—Wooden Valley Road—is not in, or directly connected to, the Napa Valley, although it does serve a number of wineries in that area, is a shortcut to Lake Berryessa, and provides access to I-80.

Tourists have similar needs to residents—both need efficient ways to move around the County. Tourists, because they are generally less familiar with the County, appreciate wayfinding signage and markings that can help them find their destinations. At the same time, the County’s visitors also expect a pleasing driving experience that emphasizes the area’s scenic beauty and minimizes sign clutter and other intrusions which detract from that beauty. This issue is addressed in the Community Character Element of this General Plan.

While high traffic volumes and increases in vehicle delay are indicators of a thriving economy, they also can have a number of potential impacts on the quality of life in Napa County:

- Generally, as traffic volumes increase, congestion also increases. Congestion can grow at a faster rate once capacity is reached, which means that even small amounts of traffic growth can have noticeable effects. As a result, vehicle speeds slow, trips take longer, and travel times become less reliable. This is particularly true during rush hours and busy weekends, which can reduce emergency response times and increase the time required for trip planning.
- Higher levels of congestion can be associated with higher transit ridership, if there are convenient transit services available that would allow some travelers to save time as compared to driving. This type of transit service is generally not available today in Napa County.
- Because cars and trucks waste fuel while idling and work most efficiently at speeds of about 45-55 miles per hour, higher levels of congestion can translate into increased energy use and associated emissions of air pollutants.
- Higher traffic volumes are correlated with higher vehicle miles traveled (VMT), which means higher greenhouse gas (GHG) emissions. The estimated 262 million VMT in Napa County





in 2014 contributed 125,711 metric tons of carbon dioxide emissions per year, which is 26 percent of all carbon dioxide emissions in the County.<sup>2</sup>

- Higher traffic volumes and higher traffic speeds also create more traffic-related noise.

This Element of the General Plan addresses these challenges by setting forth goals, policies, and action items to establish expectations about transportation network performance and to guide future infrastructure and land use decision-making. At a broad scale, the goals and policies about transportation included here are correlated with policies of the Agricultural Preservation & Land Use Element by allowing for selected roadway capacity increases in the southern part of the County where the most growth is anticipated, and by focusing attention on access, safety, transit, and active transportation modes throughout Napa County. By correlating transportation goals and policies with the Agricultural Preservation and Land Use Element, this Element is also protective of natural resources (Conservation Element), visual character (Community Character), and the County's thriving economy (Economic Development).

In Napa County, protecting the rural character of the area and minimizing the cost of new road expansion are both priorities. Consequently, building new or wider roads has been limited to only a few locations where deemed to be both feasible and desirable. Attractive public transit alternatives are also difficult to implement, due to the dispersed pattern of employment and tourist destinations, and services with low numbers of riders typically require substantial government subsidy. In the more developed (and flatter) Napa Valley, traveling without a private vehicle is more feasible and the potential exists to encourage drivers to use their cars less, supporting the County's long-held commitment to urban-centered growth.

As noted above, this Circulation Element contains policies that result in only very limited roadway capacity expansion. In most areas of the County, the roadway system that exists today is intended to be the roadway system of the future, supplemented by more efficient methods for moving people around. Policies explain where roads will be improved, where traffic congestion will be accepted as a trade-off for maintaining the County's rural character, how convenient local access will be provided for, and creative approaches to transportation alternatives and transportation demand management. Attention is given to special needs populations and the elderly, and ways that new developments can address the impacts to which those developments contribute.

---

<sup>2</sup> Napa County Climate Action Plan Final Inventory Forecast Memo, Ascent Environmental, April 13, 2016.



*Note to the Reader: Emergency evacuation routes and access are addressed in the Safety Element of this General Plan.*

## CIRCULATION GOALS

- Goal CIR-1:** The County's transportation system shall complement the policies of the Agricultural Preservation and Land Use Element to protect the County's rural character.
- Goal CIR-2:** The County's transportation system shall provide accessibility to desirable destinations on well-maintained transportation facilities throughout the County. The operation, maintenance, and expansion of the transportation system will consider the needs of Napa County residents of all income levels, ages and abilities, as well as businesses, employees, and visitors.
- Goal CIR-3:** The County's transportation system shall encompass the use of private vehicles, local and regional transit, paratransit, transportation network companies, walking, bicycling, air travel, rail, and water transport. It shall support the implementation of new transportation technologies and travel options to the extent those technologies and options support the County's goals of improving mobility while reducing congestion and emissions.
- Goal CIR-4:** The County supports state, regional, and local efforts to reduce greenhouse gas emissions from the transportation system.

## CIRCULATION POLICIES, OBJECTIVES, AND ACTIONS

Policy CIR-1: The Circulation Map contained in this Element shall show the following roadway types as comprising the planned roadway system. Local roadways need not be shown on the Circulation Map. The Circulation Map is a visual depiction of the County's policy regarding the ultimate width and general location of roadways in the unincorporated area.

**Highways:** Multi-lane roadways designed for travel at relatively high speeds. Some highways have limited access (i.e., only at grade-separated interchanges) and are designed for speeds up to 70 miles per hour. Other highways have at-grade



intersections and may have speed limits in the range of 45 to 60 miles per hour depending on the context. Examples in the general vicinity of Napa County include freeways such as I-80 and State Route 37, and state highways such as State Route 29.

**Arterials:** These are typically two- or four-lane roadways designed primarily for longer-distance travel between major centers of activity, and often with limited direct driveway access. The primary example in unincorporated Napa County is Silverado Trail.

**Rural Collectors:** These are typically two-lane roadways designed primarily to link locally important activity centers and provide a collection system for the local roads. Rural collectors will typically be designed for slower travel speeds than Arterials and may incorporate sharper curves, narrower shoulders, and other features consistent with slower vehicle speeds. Examples in Napa County include Oakville Cross Road and Yountville Cross Road.

**Local Roadways:** Roadways which provide direct access to individual homes and businesses.

Action Item CIR-11.1: The County shall adopt, periodically review, and revise as appropriate specific road and street standards for County roads. These standards shall include overall right-of-way widths, pavement widths, lane and shoulder widths, and other design details. The County's roadway standards shall be developed in consultation with the County Fire Marshal, County Public Works, County Planning, Building and Environmental Services, and other agencies to ensure adequate widths for emergency access and evacuation.

Policy CIR-2: The County shall review this Circulation Element periodically to ensure that it embraces future technological innovations to the extent that those innovations support the County's goals related to mobility, efficiency, equity, and environmental quality.

## Land Use and Development

Policy CIR-3: Consistent with urban-centered growth policies in the Agricultural Preservation and Land Use Element, new residential and commercial development shall be concentrated within existing cities and towns and urbanized areas where sufficient



densities can support transit services and development of pedestrian and bicycle facilities.

Policy CIR-4: Consistent with the County's and region's greenhouse gas emission reduction goals, the County will seek to increase the supply of affordable multi-unit housing development concentrated in proximity to employment centers and services to decrease private drive-alone automobile trips.

Policy CIR-5: The County supports a coordinated approach to land use and circulation planning that increases opportunities for physical activity and promotes public health by prioritizing implementation of improvements to active transportation modes and encouraging mixed-use developments that locate complementary uses within reasonable walking or bicycling distance of each other.

*Note to the Reader: Please see the Housing Element of this General Plan for information on how the County is encouraging the development of workforce housing so that persons employed in the county can avoid long commutes from other areas.*

Policy CIR-6: Applicants requesting discretionary approval for projects with the potential to significantly affect the transportation system shall fund the County's preparation of a Transportation Analysis prior to consideration of their project by the County. If the Transportation Analysis results in identification of adverse impacts as defined in the County's Transportation Impact Study Guidelines, the applicants shall mitigate their projects' impacts and pay their fair share of the full cost of countywide cumulative transportation improvements, based on their projects' contribution to the need for these improvements. Analysis should be consistent with the most current version of the County's Transportation Impact Study Guidelines, including a County review of site plans with a particular focus on project frontage, consistency with the Countywide Pedestrian Plan and Countywide Bicycle Plan, and multi-modal circulation.

Action Item CIR-6.1: In cooperation with the NVTA, develop a countywide transportation impact fee to address cumulative (i.e., not project-specific) impacts associated with new development.

Policy CIR-7: The County shall seek to discourage increases in commuter traffic passing through the County on all roadways except I-80 by increasing the supply and affordability of housing in the County, by designing County roadways to meet local rather than



regional needs, and by supporting improvements to regional roadways that significantly affect the County (such as State Route 37).

Policy CIR-8: Developers of new land uses shall provide adequate parking or demonstrate that adequate parking exists to meet their anticipated parking demand and shall not provide excess parking that could stimulate unnecessary vehicle trips or commercial activity exceeding the site's capacity. Consideration of shared parking opportunities is encouraged.

Action Item CIR-8.1: Update the County's parking requirements for all land uses, including wineries, to support carpool/vanpool options, to avoid over-supply of visitor and employee parking, and to set parking maximums in appropriate areas to support commute trip reduction goals.

Policy CIR-9: The County will encourage the provision of electric vehicle charging stations as part of major housing and employment development projects.

Policy CIR-10: When parking is removed as a result of roadway improvement projects, surveys will be conducted before the project begins to evaluate demand for the parking that will be removed. County staff will review the survey results and will consider the level of parking demand, the nearby opportunities for shared parking options, and the applicable County Zoning Code parking standards in determining whether the parking lost due to the improvements must be replaced.

Policy CIR-11: Facilities supporting multi-modal access, including but not limited to designated areas for pick-up/drop-off activities, shall be integrated into the site layout of development projects, frontage improvements, and public projects, wherever such facilities are appropriate and can be physically accommodated. The Countywide Bicycle Plan and Countywide Pedestrian Plan shall be referenced in determining appropriate bicycle and/or pedestrian treatments at specific locations. Amenities serving public and private transportation providers and multi-modal connections between private properties are encouraged, particularly in circumstances where such amenities and connections could provide an alternative to vehicular travel on public roadways and where the amenity or connection would reduce VMT.

Policy CIR-12: All developments along fixed transit routes shall provide appropriate amenities designed to support transit use, such as bus turnouts or other access points located in coordination with NVTA, bus shelters, and comfortable routes for transit users



to walk between the development and the nearest bus stop. The County shall require installation of relevant amenities as a condition of approval of discretionary permits.

Action Item CIR-12.1: Update the County Zoning Code to include requirements and standards related to transit amenities in development projects.

Policy CIR-13: Maintain Napa County Airport as a general aviation facility and avoid land use conflicts via land use compatibility planning and by ensuring appropriate reviews of land use decisions by the Airport Land Use Commission.

### Preserving Rural Character

Policy CIR-14: Roadways outside the urbanized areas of the County shall reflect the rural character of the County.

Policy CIR-15: The County's roadway modifications and capacity expansion should minimize disruption to neighborhoods, communities, and agriculture.

Policy CIR-16: Roadway modifications and capacity expansions shall be designed to conform to existing landforms and shall include landscaping and/or other treatments to ensure that aesthetics and rural character are preserved.

Policy CIR-17: The County supports beautification programs for roadways in the unincorporated area. Roadway beautification shall be consistent with the character of the area in which the roadway is located and with other County policies related to preserving the character of the County including policies on signage as defined in the Community Character Element.

Policy CIR-18: The County will work with NVTA, transportation network companies, and other private transportation providers to develop innovative approaches to providing transportation service to the County's rural areas without the need for additional roadway lanes or other improvements that would detract from the visual and community character of these areas.

Action Item CIR-18.1: County staff shall participate in the periodic updates of the NVTA Strategic Transportation Plan (STP), and use that forum for consideration



and development of innovative strategies related to the movement of people and services in a manner consistent with the existing rural road network. The County shall seek input from experts in sustainability, smart growth, and land use planning in developing potential new strategies. The County supports innovations that increase service areas, expand hours of operation, and reduce the cost of trips made by transit or multiple-occupant vehicle.

## Transportation Demand Management

Policy CIR-19: The County strongly supports Transportation Demand Management (TDM) strategies as a means of accommodating economic growth while moderating the negative effects of personal vehicle travel on the County's transportation infrastructure and on the quality of life of County residents and visitors. Non-residential development in the County shall include TDM strategies to reduce single-occupant vehicle use, thereby encouraging more energy-efficient forms of transportation and contributing toward the County's greenhouse gas emission reduction goals. The County may require ongoing monitoring of vehicle trips to non-residential developments, in order to evaluate the effectiveness of the TDM strategies employed. TDM strategies to be considered include but are not limited to:

- Subsidized transit passes or other incentives for transit usage;
- Participation in a neighborhood or employer-sponsored shuttle program;
- Provision of multi-modal connections to nearby transit stops, neighboring properties, or other destinations;
- On-site accommodation for bicyclists (such as bicycle parking facilities and showers/lockers for employees who bicycle);
- Incentives for carpool/vanpool participation, and/or priority parking for carpool/vanpool users;
- Alternative work schedules/telecommuting;
- Participation in a subsidized car share or ride share program; and,
- Modifications to parking policies, such as parking pricing, reduced supply, or financial incentives for employees who do not use a parking space.

Policy CIR-20: The County shall update its Transportation System Management Ordinance (Chapter 10.28 of the County Code) to include measures that reduce commute trips



to workplaces within the unincorporated County and a program to oversee implementation.

Action Item CIR-20.1: The County will support implementation of a harvest season ride-matching or ridesharing service pilot program.

Action Item CIR-20.2: The County will promote telecommuting at office-based businesses throughout the County.

Action Item CIR-20.3: The County will periodically report to the Board of Supervisors on the results of the monitoring of vehicle trips and the evaluation of TDM effectiveness at non-residential developments.

*Note to the Reader: Increasing the use of energy-efficient forms of transportation is closely related to the goals and policies contained in the Conservation Element to reduce the emission of air pollutants and greenhouse gases.*

Policy CIR-21: Transportation services shall address the needs of non-drivers and those without cars living in rural areas. Services may include community-focused and private transit and paratransit services as well as ridesharing and ridesourcing services.

Policy CIR-22: As a major employer, the County of Napa shall demonstrate leadership in the implementation of programs encouraging the use of transit, walking, and bicycling by its employees, as well as the use of alternative fuels. Example programs may include:

- Preferential carpool parking and other ridesharing incentives;
- Flexible working hours or telecommuting where consistent with job duties and customer service needs;
- A purchasing program that favors hybrid, electric, or other non-gasoline vehicles;
- Assisting in the development of demonstration projects for alternative fuel technologies such as ethanol, hydrogen, and electricity;
- Secure bicycle parking; and
- Transit incentives.

Policy CIR-23: The County shall encourage the use of public transportation by tourists and visitors and will work with wineries, the local hospitality industry, and the cities and town





to develop incentives that encourage the use of these options and the development of private transit services.

## Transportation Improvements

Policy CIR-24: The County will work with the cities and town through the NVTA to coordinate seamless transportation systems and improve the efficiency of the transportation system by coordinating the construction of planned roadway, bicycle, pedestrian, and other transportation systems.

Policy CIR-25: The planning and design of all County transportation facilities shall comply with the County's adopted Complete Streets Policy (Resolution 2013-01), which expresses the County's commitment to a transportation system that serves users of all ages, abilities, and modes of travel, that is sensitive to the local context, and that applies the best available design guidelines and standards. Recommendations contained in relevant bicycle, pedestrian, transit, and other multi-modal plans shall be incorporated, and transportation projects shall be reviewed by the relevant Advisory Committee(s) early in the planning stage to ensure accommodation of Complete Streets features.

Policy CIR-26: The County shall periodically evaluate how well the transportation network of Napa County serves each major category of user (including transit users, motorists, bicyclists, pedestrians, and freight movers). Baseline data will be collected, followed by periodic data collection efforts to evaluate changes over time.

Policy CIR-27: The County seeks to provide a roadway system that maintains current roadway capacities in most locations and is efficient in providing local access. The following list of improvements, illustrated as the County's ultimate road network in Figure CIR-1, has been supported by policy makers within the County and all five incorporated cities/town. Some of these routes are controlled by other agencies (such as Caltrans or a city); in those cases, the County will coordinate with the other agencies to plan and implement these improvements. .

- Construct an interchange or other grade-separated facility at the intersection of State Route 12, Airport Boulevard, and State Route 29



("Airport Junction"), within the most efficient footprint, to increase capacity and reduce vehicle conflicts.

- Improve the intersection of SR 221/SR 12/SR 29 ("Soscol Junction") to increase capacity and reduce vehicle conflicts.
- Improve the intersection of SR 12/SR 121/SR 29 ("Carneros Junction") to increase capacity and reduce vehicle conflicts.
- Consider widening SR 221 between SR 12 and SR 121 to improve traffic flow.
- In coordination with the City of American Canyon, consider widening or other improvements to SR 29 between SR 221 and the Solano County line to improve traffic flow.
- In coordination with the City of American Canyon, relieve traffic congestion along SR 29 by completing reliever routes; examples include the completion of Devlin Road between Soscol Ferry Road and Green Island Road, and evaluating the potential to connect Newell Road to South Kelly Road.
- Work with relevant agencies to investigate options for synchronizing traffic signals to improve traffic flow and reduce vehicle emissions.
- Explore opportunities for operational improvements along SR 29 and along Silverado Trail to reduce conflicts and improve traffic flow; examples may include center two-way left-turn lanes, additional turn lanes at intersections, consideration of roundabouts, and other measures that could reduce vehicle conflicts.
- Consistent with the Countywide Pedestrian Plan and the Countywide Bicycle Plan, install safety-related improvements on rural roads and highways, such as new signals, bike lanes, bikeways, shoulder widening, or softening sharp curves.

Action Item CIR-27.1: Work with the NVTa, other agencies, and project applicants and developers to fund and implement the improvements listed in Policy CIR-27.

Action Item CIR-27.2: In coordination with NVTa and Caltrans, develop a South Napa Congestion Management Plan to coordinate improvements along SR 29 between the Solano County line and SR 221, to address future growth and demand created by the potential conversion of SR 37 to a toll road.



*Note to the Reader: Please see also Policy CC-11 in the Community Character Element of this General Plan, which addresses aesthetic improvements to SR 29 to be pursued jointly with the City of American Canyon.*

Policy CIR-28: While not suitable for all intersections, roundabouts have a wide variety of applications, and Napa County will consider them as an alternative for intersection improvements (see the current version of the County's Transportation Impact Study Guidelines for more information).

### **Pedestrian and Bicycle**

Policy CIR-29: The County shall work with private developers, Caltrans, NVTA, local jurisdictions, and other agencies to implement the priorities identified in the Countywide Bicycle Plan.

*Note to the Reader: Please see the Recreation and Open Space Element for additional policies and objectives related to off-street trails, including prohibitions on the use of eminent domain for recreational facilities.*

Policy CIR-30: Bicycle facilities consistent with the Countywide Bicycle Plan shall be added to County roadways when repaving or upgrading of the roadway occurs. Where existing right-of-way is insufficient, the County shall require dedication of adequate right-of-way and, if appropriate, installation of the facilities at the property frontage as conditions of discretionary permit approval. The County shall encourage Caltrans to follow these same guidelines on state highways in Napa County.

Policy CIR-31: Where they are not needed for other transportation purposes and where such use would implement the Countywide Bicycle Plan or other County-adopted master plan, newly abandoned rail rights-of-way shall be considered for alternative uses such as public transit routes, bicycle paths, or pedestrian/hiking routes, provided that they are compatible with adjacent uses and sufficient funding is available for right-of-way acquisition, construction, and long-term maintenance.

Policy CIR-32: The County shall work with private developers, NVTA, local jurisdictions, and other agencies to implement the priorities identified in the Countywide Pedestrian Plan.



## Transit

Policy CIR-33: The County shall work with the NVRTA and other transit agencies in adjoining counties to develop effective connections between public transit in Napa County and regional transportation networks (such as BART, SMART, Baylink, airports, etc.) via rail, bus, bicycle, and other means to serve the needs of local residents, commuters, and visitors.

Policy CIR-34: The County shall support efforts of NVRTA and local and regional transit agencies to expand cost-effective transit options for Napa residents, employees and visitors; examples may include increasing the availability and accessibility of transit information, exploring options for allowing commuter service to operate on the Napa Wine Train right-of-way, and developing additional interregional transit solutions (consistent with Measures TR-4, TR-5 and TR-8 of the County's Climate Action Plan).

## Vehicle

Policy CIR-35: Roadway improvements at entrances to the County shall be carefully considered, and additional lanes shall be added only where necessary for improving traffic safety and only if the additional lanes will not exacerbate traffic congestion elsewhere in the County. Key entrances where capacity will generally not be increased include:

- State Route 128 from Yolo County
- State Route 29 from Lake County
- Petrified Forest Road from Sonoma County
- State Route 121 from Sonoma County
- Butts Canyon Road from Lake County

Other entrances, as determined by the County, may also be given special consideration.

Policy CIR-36: The County shall maintain and apply consistent highway access standards regarding new driveways to minimize interference with through traffic while providing adequate local access. The County shall also maintain and apply consistent standards (though not exceeding public road standards) regarding road widths, turn lanes, and other improvements required in association with new development.



Policy CIR-37: The County seeks to maintain operations of roads and intersections in the unincorporated county area that minimize travel delays. Operational analysis shall be conducted according to the latest version of the Highway Capacity Manual and as described in the current version of the County's Transportation Impact Study Guidelines. In general, the County seeks to maintain Level of Service (LOS) D on arterial roadways and at signalized intersections, as the service level that best aligns with the County's desire to balance its rural character with the needs of supporting economic vitality and growth.

In situations where the County determines that achieving LOS D would cause an unacceptable conflict with other goals and objectives, minimizing collisions and the adequacy of local access will be the County's priorities. Mitigating operational impacts should first focus on reducing the project's vehicular trips through modifying the project definition and/or applying TDM strategies, and then secondarily should consider physical infrastructure changes. Proposed mitigations will be evaluated for their effect on collisions and local access, and for their effectiveness in achieving the maximum potential reduction in the project's operational impacts (see the County's Transportation Impact Study Guidelines for a list of potential mitigation measures).

The following roadway segments are exceptions to the LOS D standard described above:

- State Route 29 in the unincorporated areas between Yountville and Calistoga: LOS F is acceptable.
- Silverado Trail between State Route 128 and Yountville Cross Road: LOS E is acceptable.
- State Route 12/121 between the Napa/Sonoma county line and Carneros Junction: LOS F is acceptable.
- American Canyon Road from I-80 to American Canyon City Limit: LOS E is acceptable.

Policy CIR-38: In support of state and regional goals to reduce greenhouse gas emissions and encourage active transportation modes, the County will implement programs to reduce the number of vehicle miles traveled (VMT) on local roadways and regional routes in the County. In addition to those TDM strategies to reduce single-



occupant vehicle use listed in Policy CIR-19, the County will support measures that eliminate or reduce the length of vehicle trips. Such measures could include:

- Increased efforts toward construction of affordable and workforce housing units, and additional incentives for construction of farm labor housing in the County;
- Coordination between local agencies, including local chambers of commerce, the County, cities and town, to facilitate business partnerships and interconnectivity using shared transportation facilities, such as shuttles;
- Increased parking reductions from that currently allowed in the zoning ordinance, for any two or more developments that offer opportunities for pedestrian activity between them, such as shared parking lots and privately-maintained pedestrian paths;
- Transportation system impact fee incentives for discretionary and private development projects for which the County and project applicant agree that the applicant will construct planned pedestrian and bicycle transportation facilities, including but not limited to bicycle lanes and multi-use paths.

Policy CIR-39: All applicants for development projects or modifications thereto shall be required to evaluate the VMT associated with their projects, in order to determine the projects' environmental impacts pursuant to the California Environmental Quality Act. Applicants shall specify feasible measures to reduce a proposed project's VMT and shall provide an estimate of the VMT reduction that would result from each measure. Projects for which the specified VMT reduction measures would not reduce unmitigated VMT by 15 or more percent shall be considered to have a significant environmental impact.

Action Item CIR-39.1: Update the County's Local Procedures for Implementation of the California Environmental Quality Act to develop screening criteria for projects that would not be considered to have a significant impact to VMT and that would not, therefore, be subject to VMT reduction requirements.

Policy CIR 40: The County shall update its Transportation Impact Study (TIS) Guidelines to specify a methodology for evaluating a project's VMT and a list of potential mitigation measures for achieving VMT reductions from a project. The County shall



periodically monitor vehicle trips at built projects to assess the effectiveness of specified VMT reduction measures and shall periodically modify the list in the TIS Guidelines to reflect ongoing best practices in VMT reduction.

Policy CIR-41: Recognize the importance of the County's commercially-zoned properties in providing businesses with opportunities to locate throughout the County, thereby reducing distances that residents of the unincorporated areas must drive to retail or service-based destinations.

### Other

Policy CIR-42: Preserve rail corridors and the navigable sections of the Napa River as regional transportation assets, encouraging and not precluding their future use for recreational travel as well as for the movement of passengers and goods.

Policy CIR-43: Roadway, culvert, and bridge improvements and repairs shall be designed and constructed to minimize fine-sediment and other pollutant delivery to waterways, to minimize increases in peak flows and flooding on adjacent properties, and where applicable to allow for fish passage and migration, consistent with all applicable codes and regulations.

Policy CIR-44: The County supports runway and other technological improvements to Napa County Airport to improve its safety and usefulness as a civil aviation center.

Policy CIR-45: The County supports the preservation of Angwin Airport (Parrett Field) for general aviation.