

4.16 TRANSPORTATION

This section describes the existing transportation network of the Specific Plan Area and evaluates the potential impacts associated with the proposed Specific Plan, both at the individual and cumulative levels. The analysis in this section is based in part on the City's General Plan, and on the Traffic Impact Analysis (TIA) prepared by LSA included in Appendix K of this Environmental Impact Report (EIR).

4.16.1 Environmental Setting

4.16.1.1 Specific Plan Area

The Specific Plan Area is located at the western edge of the City and is bounded by the Fresno River to the south, Road 24 and the Madera Municipal Golf Course to the east, Avenue 17 to the north, and Road 22 to the west, as shown in Figure 3-1 of the Project Description.

Roadway Network. Within the City of Madera, all major roadways are classified based on the City's General Plan Circulation Master Plan. Following is a brief description of the roadways located within the Specific Plan Area:

- **Road 23.** Road 23 is a north-south rural road within the City of Madera. Within the study area, Road 23 is currently an undivided rural road with two lanes. In the City's Circulation Master Plan, Road 23 is designated as "Rural Road" under existing conditions. Under the General Plan, Road 23 is designated as a six-lane "Loop Road" between Avenue 17 and Sunset Avenue and as a four-lane "Urban Arterial" between Avenue 13 and Avenue 12. The "Loop Road" is also an arterial roadway with more restrictive access (i.e., less driveways and traffic signals) compared to other arterials.
- **Avenue 17.** Avenue 17 is an east-west undivided arterial within the City of Madera. Within the study area, the number of lanes varies from two to four. In the City's Circulation Master Plan, Avenue 17 is designated as "Urban Arterial" under existing conditions. Under the General Plan, Avenue 17 is designated as a six-lane "Loop Road" between State Route (SR) 99 and Country Club Drive, and between Road 23 and SR 99, and as a four-lane "Loop Road" between Country Club Drive and Lake Street. The "Loop Road" is also an arterial roadway with more restrictive access (i.e., less driveways and traffic signals) compared to other arterials.
- **Avenue 16.** Avenue 16 is an east-west arterial within the City of Madera. Within the study area, Avenue 16 is an undivided arterial with two lanes. In the City's Circulation Master Plan, Avenue 16 is designated as "Urban Arterial" under the General Plan.
- **Cleveland Avenue.** Cleveland Avenue is an east-west divided arterial within the City of Madera. Within the study area, the number of lanes varies from two to six. In the City's Circulation Master Plan, Cleveland Avenue is designated as "Urban Arterial" under existing conditions. Under the General Plan, Cleveland Avenue is designated as a six-lane "Urban Arterial" between Schnoor Avenue and SR 99, and as a four-lane "Urban Arterial" between Granada Drive and Schnoor Street and between Sharon Road and D Street.

The following roadways are located near the Specific Plan Area and are included within the study area of the TIA:

- **Westberry Boulevard.** Westberry Boulevard is a north-south divided arterial within the City of Madera. Within the study area, the number of lanes varies between two and three. In the City's Circulation Master Plan, Westberry Boulevard is designated as "Urban Arterial" under existing conditions. Under the General Plan, Westberry Boulevard is designated as a four-lane "Urban Arterial" between Sunset Avenue and Howard Road.
- **Granada Drive.** Granada Drive is a north-south undivided collector within the City of Madera. Within the study area, the number of lanes varies between two and three. In the City's Circulation Master Plan, Granada Avenue is designated as "Urban Collector" under existing conditions. Under the General Plan, Granada Drive is designated as a four-lane "Urban Collector" between Howard Road and Avenue 13, between Cleveland Avenue and Fresno River, and between Sunset Avenue and Avenue 14.
- **Sunset Avenue.** Sunset Avenue is an east-west undivided collector within the City of Madera. Within the study area, the number of lanes varies from two to four. In the City's Circulation Master Plan, Sunset Avenue is designated as "Urban Collector" under existing conditions. Under the General Plan, Sunset Avenue is designated as a four-lane "Urban Arterial" between Granada Drive and Schnoor Avenue.
- **Howard Road.** Howard Road is an east-west divided arterial within the City of Madera. Within the study area, the number of lanes varies between four and five. In the City's Circulation Master Plan, Howard Road is designated as "Urban Arterial" under existing conditions. Under the General Plan Year 2030 conditions, Howard Road is designated as a six-lane "Urban Arterial" between Schnoor Street and Pine Street and as a four-lane "Urban Arterial" between Granada Drive and Schnoor Street.
- **Olive Avenue.** Olive Avenue is an east-west divided arterial within the City of Madera. Within the study area, the number of lanes varies between four and five. In the City's Circulation Master Plan, Olive Avenue is designated as "Urban Arterial" under existing conditions. Under the General Plan, Olive Avenue is designated as a four-lane "Urban Arterial" between Yosemite Avenue and Madera Avenue (SR 145).
- **SR 99.** SR 99 is a north-south state highway in California, which stretches almost the entire length of the Central Valley. The segment of SR 99 within the study area currently has four lanes (two northbound and two southbound lanes). However, the freeway is currently being widened from four to six lanes south of the Avenue 18½ interchange. Therefore, the freeway has been analyzed as a four-lane facility under existing conditions, but as a six-lane facility, for all other analysis scenarios.

Bikeways and Trails. Several trails are located within the City, which include bikeways and multiuse trails readily available and planned for both pedestrian and cyclist usage. The existing bicycle facilities within the City include Class I, Class II, and Class III facilities:

- Class I bike facilities provide completely separate right-of-way (ROW) and are designated for the exclusive use of bicycles and pedestrians with minimal vehicle and pedestrian cross-flow.
- Class II bike facilities provide restricted ROW and are designated for the use of bicycles with a striped lane on a street or highway.
- Class III bike facilities provide for a ROW designated by signs or pavement markings (sharrows) for shared use with pedestrian or motor vehicles.

The Specific Plan Area currently does not include any bikeways or multiuse trails.

Transit. Public transportation in the City includes bus and rail service. The Specific Plan Area is serviced by the Madera Area Express System and the Madera County Connection System. The City has an Amtrak station on Road 26 and there are plans to add a possible High-Speed Rail stop in the City in the future. There are plans to relocate the Amtrak station from Road 26 to Avenue 12, east of the Madera Community College.

4.16.1.2 Regulatory Context

Federal Regulations

Federal Highway Administration. The Federal Highway Administration (FHWA) is a major agency of the United States Department of Transportation. In partnership with State and local agencies, the FHWA carries out federal highway programs to meet the nation's transportation needs. The FHWA administers and oversees federal highway programs to ensure that federal funds are used efficiently.

Americans with Disabilities Act of 1990. Titles I, II, III, IV, and V of the ADA have been codified in Title 42 of the United States Code, beginning at Section 12101. Title III prohibits discrimination on the basis of disability in "places of public accommodation" (businesses and nonprofit agencies that serve the public) and "commercial facilities" (other businesses). The regulation includes Standards for Accessible Design, which establish minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility.

Federal Transit Administration. The Federal Transit Administration (FTA) is an authority that provides financial and technical assistance to local public transit systems, including buses, subways, light rail, commuter rail, trolleys, and ferries. The FTA is funded by Title 49 of the United States Code, which states the FTA's interest in fostering the development and revitalization of public transportation systems. The FTA invests approximately \$12 billion annually to support and expand public transit.

State Regulations

Assembly Bill 32 (Global Warming Act of 2006) and Senate Bill 375. Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (Act), requires California to reduce its greenhouse gas (GHG) emissions to levels presented in the year 1990 by 2020. In response, the California Air Resources Board (CARB) is responsible for creating guidelines for this Act. In 2008,

CARB adopted its proposed Scoping Plan, which included the approval of Senate Bill (SB) 375 as a means of achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks helps the State comply with AB 32.

Established through CARB, SB 375 lists four major components and requirements: 1) it requires regional GHG emissions targets; 2) it requires creating a Sustainable Communities Strategy (SCS) that provides a plan for meeting the regional targets; 3) it requires that regional housing elements and transportation plans be synchronized on 8-year schedules; and 4) it requires transportation and air pollutant emissions modeling techniques consistent with guidelines prepared by the California Transportation Commission (CTC).

California Air Resources Board. As previously described, as part of SB 375 compliance, CARB was required to set targets for GHG reductions for each Metropolitan Planning Organization (MPO) within California. CARB provides targets and thresholds for MPOs and assists with regional efforts to achieve the GHG emission reductions contained in each MPO's SCS. It should be noted that CARB does not provide a threshold for reducing Vehicle Miles Traveled (VMT); however, reducing VMT is a strategy for achieving CARB GHG reduction targets.

Assembly Bill 1358 (Complete Streets). The California Complete Streets Act (Act) requires general plans updated after January 30, 2011, to include Complete Streets policies so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, the elderly, and persons with disabilities, as well as motorists. The goal of this Act is to encourage cities to rethink policies that emphasize automobile circulation and prioritize motor vehicle improvements and come up with creative solutions that emphasize all modes of transportation. Complete Streets roadways allow for more transportation options, more non-single-occupancy vehicles, and less traffic congestion. Additionally, increased transit ridership, walking, and biking can reduce air pollution while improving the overall travel experience for road users.

While there is no standard for a Complete Streets design, it generally includes one or more of the following features: bicycle lanes, wide shoulders, well-designed and well-placed crosswalks, crossing islands in appropriate mid-block locations, bus pullouts or special bus lanes, audible and accessible pedestrian signals, sidewalk bulb-outs, center medians, street trees, planter strips, and groundcover. The City's General Plan includes a policy that requires the incorporation of "complete streets" concepts to safely accommodate vehicles, cyclists, pedestrians, diverse and disabled users, and transit.

Senate Bill (SB) 743. On September 27, 2013, Governor Jerry Brown signed SB 743 into law and codified a process that changed transportation impact analysis as part of California Environmental Quality Act (CEQA) compliance. SB 743 directs the California Office of Planning and Research (OPR) to administer new CEQA guidance for jurisdictions that removes automobile vehicle delay and Level of Service (LOS) or other similar measures of vehicular capacity or traffic congestions from CEQA transportation analysis. Rather, it requires the analysis of VMT or other measures that "promote the reduction of greenhouse gas emissions, the development of multi-modal transportation networks, and a diversity of land uses," to be used as a basis for determining significant impacts to circulation in California. The goal of SB 743 is to appropriately

balance the needs of congestion management with statewide goals related to reducing GHG emissions, encourage infill development, and promote public health through active transportation.

Regional Regulations

Your Madera 2042 Regional Transportation Plan/Sustainable Communities Strategy. In 2018, Madera County Transportation Commission (MCTC) updated the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) to reflect the existing and future regional transportation system in Madera County. The 2018 update reflects the horizon or “planning” year of 2042, ensuring that the region’s transportation system and implementation policies/ programs will safely and efficiently accommodate growth envisioned in the Land Use Elements of the Cities of Chowchilla and Madera and Madera County, in the RTP and in the SCS. As the RTPA and MPO for Madera County, MCTC is responsible for development of the RTP and the SCS.

Local Policies

County of Madera General Plan. The County of Madera General Plan is the County’s primary policy planning document. The County’s General Plan includes seven elements that provide an overall framework for development of the county and protection of its natural and cultural resources. The goals and policies contained in the General Plan are applicable throughout the county, except to the extent that County authority is preempted by cities within their corporate limits. The General Plan includes goals, policies, standards, implementation programs, the Land Use Diagram, and the Circulation Plan Diagram, which constitute Madera County's formal policies for land use, development, and environmental quality. Table 4.16.A lists the County’s General Plan policies related to transportation applicable to the proposed Specific Plan.

Table 4.16.A: Madera County General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
Policy 2.C.1.	The County shall provide for improvements to street and highway facilities as necessary to serve new development and to meet the traffic demands of the county.
Policy 2.C.2.	The County shall develop and manage its roadway system to maintain a minimum Level of Service D on all State and County Roadways. For planning applications, Level of Service shall be measured for roadway segments and shall be based on the capacities shown in Table 2.A.8. The facility classification in this table shall correspond to Table I-3 and Figure I-1, the Circulation Plan Diagram. The County may also require analysis of specific intersections when intersections are deemed to be critical for specific projects or locations; in those cases, Level of Service shall be computed according to the planning methodology as documented in the Transportation Research Board Highway Capacity Manual.

Source: County of Madera General Plan (October 1995).

City of Madera General Plan. The City of Madera General Plan is the City's primary policy planning document. Through its 10 elements, the General Plan provides the framework for the management and utilization of the City's physical, economic, and human resources. Each element contains goals, policies, and implementation measures that guide development within the City. The General Plan strives to maintain and improve Madera's quality of life and implement the community's shared vision for the future. The General Plan is the official policy statement of the City Council to guide development (both public and private), as well as the City's operations and decisions. Table 4.16.B lists General Plan policies related to transportation applicable to the proposed Specific Plan.

4.16.2 Proposed Specific Plan Circulation

As described in Section 3.3.3 of the Project Description in this EIR, the proposed Specific Plan includes a Circulation Plan that includes vehicles, pedestrians, cyclists, and public transit. As described in the proposed Specific Plan, the minimum design speeds to be used for centerline curve radii, super elevation, corner and approach site distances, vertical and horizontal alignment, and sight distances for the Circulation Plan of streets would comply with City standards. The locations and construction of bus turnouts and transit stops may be required within the Specific Plan Area to meet the requirements of the City and MCTC.

The proposed pedestrian circulation system would utilize sidewalks and paseos throughout the Specific Plan Area. Sidewalks would be provided along all streets in the Specific Plan Area and would vary from a minimum width of 5 feet up to 12 feet depending on the street classification. Sidewalks would be constructed of concrete as part of the roadway improvements. Paseos, which will have varying widths from a minimum width of 10 feet up to 15 feet, would be incorporated as part of the open space improvements and would lead to connections throughout the Specific Plan Area.

The Vernon McCullough Fresno River Trail, a multi-purpose pedestrian and bicycle trail, would be extended along the Specific Plan Area's frontage with Fresno River. The proposed Specific Plan would include trail connections to link the multi-purpose trail along the river with the larger on-street bicycle network proposed within the Specific Plan Area. Bicycle paths would provide linkages to the City's master planned bike path system.

4.16.3 Impacts and Mitigation Measures

The following section presents a discussion of the impacts related to transportation and traffic that could result from implementation of the proposed Specific Plan. The section begins with the criteria of significance, which establish the thresholds to determine if an impact is significant. The latter part of this section presents the impacts associated with implementation of the proposed Specific Plan and the recommended mitigation measures, if required. Cumulative impacts are also addressed.

Table 4.16.B: General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
Policy CI-1	<p>Figure CI-1 shows the Circulation Master Plan of the City of Madera. The City will implement this Master Plan through the policies contained in this and other Elements of the Madera General Plan.</p> <p>Action Item CI-1.1 Require the dedication of right of way and the installation of roadway improvements as part of the review and approval of development projects including requests for changes of land use designations.</p> <p>Action Item CI-1.2 Prepare and adopt a comprehensive transit plan to complement the development of Village Centers and provide transit service throughout Madera. The plan should include:</p> <ul style="list-style-type: none"> • Feasibility of BRT facilities and guidelines for system development as appropriate; • Residential, retail and employment thresholds and service targets for BRT and pedestrian village cores; • Other transit use enhancements such as additional buses, new routes, longer hours, greater headways, real-time boarding information, bus turn out lanes, queue jump lanes, exclusive transit lane improvement alignment, mixed flow/exclusive lane use, and "Express Bus" service for commuters.
Policy CI-6	<p>The City shall protect future right-of-way needed for freeways, arterial and collector streets, and interchanges and railroad corridors and crossings from encroachment by development or other incompatible uses or structures.</p>
Policy CI-9	<p>The City will work cooperatively with Caltrans to implement improvements to the state highway system in Madera.</p> <p>Action Item CI-9.1 Review proposed development projects with Caltrans to facilitate the acquisition of right of way for ultimate improvements and to avoid and/or minimize potential traffic conflicts between State facilities, city streets, and private drives.</p>
Policy CI-10	<p>The City will maintain a high level of coordination with the County of Madera and Caltrans, through the Madera County Transportation Commission, in implementing the Circulation Master Plan. The City will participate in the planning of regional roadway and transportation facilities, particularly those that indirectly or directly affect Madera, including the State Route 152-East/Freeway 65 corridor.</p>
Policy CI-11	<p>Development projects shall be required to provide funding or to construct roadway/intersection improvements to implement the City's Circulation Master Plan. The payment of established traffic impact or similar fees shall be considered to provide compliance with the requirements of this policy with regard to those facilities included in the fee program, provided that the City finds that the fee adequately funds all required roadway and intersection improvements. If payment of established fees is used to provide compliance with this policy, the City may also require the payment of additional fees if necessary to cover the fair share cost of facilities not included in the fee program.</p>
Policy CI-12	<p>New development shall provide funding acceptable to the City for the construction and permanent maintenance of all roadway facilities. Potential funding mechanisms may include assessment districts, community facility districts, or other methods.</p>
Policy CI-13	<p>Where the installation of a single-loaded street cannot be avoided (such as in locations where lands on one side of a roadway are not planned to be developed), the City will include funding in its impact fees to provide for the construction of the portion of the roadway located on lands which are not being developed.</p>
Policy CI-15	<p>To the extent possible, major traffic routes for residential areas should be separate from those used by the city's industrial areas, with the purpose of avoiding traffic conflicts and potential safety problems. Residential areas should not be accessed primarily through an industrial area, even if residential and industrial traffic are not in conflict.</p>

Table 4.16.B: General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
Policy CI-16	Proposals to allow left turn lanes from collector and arterial streets shall be evaluated on a case-by-case basis and allowed only where an engineering analysis confirms that traffic operations and safety conditions are not negatively impacted.
Policy CI-17	Shared driveways, driveway consolidation, reciprocal access easements, and cross access easements to commercial centers shall be required along arterials and collector roads in new development projects and in the redevelopment or redesign of existing development to minimize traffic hazards associated with driveways and curb cuts.
Policy CI-18	Direct access from a residential lot onto an arterial, collector, or local/branch collector is allowed only where there is no feasible alternative. Back out driveways onto arterial, collector, and local/branch collector streets are prohibited even if access is allowed.
Policy CI-21	Installation and maintenance of curb, gutter, sidewalk and paving on Local streets shall be the responsibility of affected property owners.
Policy CI-22	<p>The City shall seek to maintain Level of Service (LOS) C at all times on all roadways and intersections in Madera, with the following exceptions:</p> <ul style="list-style-type: none"> a) On arterial roadways or roadways with at-grade, railroad crossings that were experiencing congestion exceeding LOS C during peak hour travel times as of the date this General Plan Update is adopted the City shall seek to maintain LOS D or better. b) This policy does not extend to freeways (where Caltrans policies apply) or to private roadways. c) In the Downtown District (as defined in the Land Use Element of this General Plan), the City shall seek to maintain LOS D. <p>Action Item CI-22.1 Consider, during the review of proposed development projects, how to shift travel demand away from the peak period, especially in those situations where peak traffic problems result from a few major generators (e.g., outlying employment locations).</p> <p>Action Item CI-22.2 Perform routine, ongoing evaluation of the efficiency of the urban street traffic control system, with emphasis on traffic signal timing, phasing and coordination to optimize traffic flow along arterial corridors. Use traffic control systems to balance arterial street utilization (e.g., timing and phasing for turn movements, peak period and off-peak signal timing plans).</p> <p>Action Item CI-22.3 As funding allows, expand traffic signal timing and synchronization programs where emission reduction benefits can be demonstrated.</p>
Policy CI-23	Projects contributing traffic to roadways exceeding the desired level of service per Policy CI-22 may be required to fund system wide traffic improvements, including cumulative traffic mitigation at off-site locations (as applicable), and to assist in promoting non-vehicular transportation as a condition of project approval.
Policy CI-24	<p>The City shall seek to use a modified grid system for the roadway network, particularly in new development. The City defines a “modified grid” road system as follows:</p> <ul style="list-style-type: none"> • The roadway system shall have a system of arterial roadways in the form of a grid of arterials that will distribute traffic evenly and will avoid excessive concentrations of traffic in any given area. • Arterials should be generally spaced at one (1) mile increments and collector roads generally at one-half (½) mile increments. • Collector and smaller roadways shall be designed to encourage access to retail centers from residential areas. • Residential blocks shall be designed to limit traffic speeds and encourage pedestrian and bicycle safety through the design of the roadways or the use traffic calming measures (such as narrower streets).

Table 4.16.B: General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
	<ul style="list-style-type: none"> The grid system may be modified as necessary to adjust for topography, watercourses, existing development, or other factors as deemed appropriate by the City.
Policy CI-27	<p>The City shall encourage pedestrian circulation and access around the City and at the neighborhood level through the design of roadways and pedestrian facilities.</p> <p>Action Item CI-27.1 Expand the availability and visibility of bicycle infrastructure such as bike racks and bike storage facilities.</p> <p>Action Item CI-27.2 Consider opportunities for lower-income individuals to have access to bicycles, through community-sponsored programs such as “bicycle sharing” or bicycle giveaways to children.</p>
Policy CI-28	<p>New development areas shall include pedestrian and bicycle facilities and connections to public transit systems, commercial centers, schools, employment centers, community centers, parks, senior centers, and high-density residential areas.</p> <p>Action Item CI-28.1 Establish a transit and/or multimodal impact fee to be applied to new development to fund public transit infrastructure and other multimodal accommodations.</p>
Policy CI-29	<p>The City shall create a connected system of on- and off-street trails and paths for pedestrians and bicycles throughout Madera in both existing and new development areas, with a focus on on-street bike trails on collector roads, and off-street trails in parkways and along the Fresno River and other waterways.</p>
Policy CI-30	<p>Where it deems appropriate, the City may require the dedication of additional right of way to accommodate pedestrian, bicycle, alternative transportation (transit), additional travel lanes, safety or efficiency-related improvements, or other similar uses.</p>
Policy CI-31	<p>The City’s roadway cross-sections shall incorporate “complete streets” concepts and be designed to safely accommodate vehicles, cyclists, pedestrians, diverse and disabled users, and transit. “Complete streets” are defined as streets that are designed for a variety of users rather than having a focus on the automobile.</p> <p>Action Item CI-31.1 Develop “Complete Street” standards for new arterial, collector, and local street construction. “Complete street” standards should include options for narrower travel way widths (on existing streets only, where needed to fit all uses into the existing right of way) and curb return radii, bike lanes, landscape strips, sidewalks that complement adjacent land uses, bus turnouts, and similar features. Note: Proposed narrower travel way widths may not apply to State Highways.</p>
Policy CI-32	<p>To maintain walkability and pedestrian safety, the City shall consider roadway width and roadway design features such as islands, pedestrian refuges, count down timers, and other such mechanisms. This policy applies to new roadway construction and existing roadways where pedestrian hazards may occur due to roadway design or width.</p> <p>Action Item CI-32.1 Update the City’s Standards and Specifications to include the items in Policy CI-32.</p>
Policy CI-33	<p>The needs of pedestrians and bicyclists shall be routinely considered and, where practical, accommodated in all roadway construction and renovation projects.</p>

Table 4.16.B: General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
Policy CI-34	<p>Where sufficient right-of-way is available, bicycle lanes should be added to City roadways when repaving or upgrading of the roadway occurs, provided that the bicycle facility would implement the City’s Bicycle Master Plan. The City shall encourage Caltrans to follow these same guidelines on state highways in Madera.</p> <p>Action Item CI-34.1 The City shall implement the Bicycle Master Plan through repaving, restriping, providing additional paving for bicycle lanes, or other methods as appropriate.</p>
Policy CI-35	The City shall encourage grade-separated crossings or enhanced at grade crossings where Class I bicycle facilities intersect arterial roadways at key locations to maximize the safety and attractiveness of bicycling and walking routes. Underpasses are preferable to overpasses in new development areas.
Policy CI-36	The City shall encourage an increase in bicycle ridership and pedestrian trips over automobile traffic, as a way to improve traffic safety, air quality and the health of Madera residents.
Policy CI-37	The City encourages the use of ridesharing and other Transportation Demand Management (TDM) tactics for reducing area traffic congestion and improving air quality.
Policy CI-41	Circulation planning for all modes of travel (vehicle, transit, bicycle, pedestrian, etc.) shall be coordinated with efforts to reduce air pollution and greenhouse gases.
Policy CI-42	<p>The City will facilitate employment opportunities that minimize the need for private vehicle trips, including:</p> <p>Incorporating provisions for live/work sites and satellite work centers in appropriate locations in the zoning ordinance; and</p> <p>Encouraging telecommuting options with new and existing employers through project review and incentives, as appropriate</p>
Policy CI-44	Public facilities should be phased in a logical manner, which avoids “leapfrog” development and encourages the orderly development of roadways, water and sewer, and other public facilities. The City shall not provide public financing or assistance for projects that do not comply with City master plans.
Policy CI-45	The City will assist developers who construct facilities consistent with this General Plan and with the City’s Master Plans and policies with seeking a fair share reimbursement from later developments when they connect to, and/or benefit from, those facilities.
Policy CI-46	Interim infrastructure facilities may be used only if specifically approved by the City Council. No City funds will be used to construct interim facilities, nor will such facilities be eligible for reimbursement by the City.
Policy CI-47	All major development projects shall identify the size and cost of all infrastructure and public facilities and identify how the installation and long-term maintenance of infrastructure will be financed consistent with the policies in this General Plan.
Policy CI-49	<p>The City shall require secure financing for all components of the transportation system through the use of special taxes, assessment districts, developer dedications, or other appropriate mechanisms in order to provide for the completion of required major public facilities at their full planned widths or capacities in one phase. For the purposes of this policy, “major” facilities shall include the following:</p> <p>Any roadway of a collector size or above, including any roadway shown on the Circulation Plan in this General Plan;</p> <p>Wells, water transmission lines, treatment facilities, and storage tanks;</p> <p>All sewer trunk and interceptor lines and treatment plants or treatment plant capacity;</p> <p>Reclaimed water distribution lines;</p> <p>Ongoing maintenance.</p> <p>The City shall use its financial capacity to facilitate implementation of this policy if necessary, including, but not limited to:</p> <p>Issuing bonds or other forms of municipal financing as it deems appropriate;</p>

Table 4.16.B: General Plan Policies Related to Transportation

Policy/Action Item Number	Policy/Action Item
	Using City funds directly, with repayment from future development fees; Creating special assessment districts, Mello-Roos Community Facility Districts, etc.; Fee programs; Developer financing.
Policy CI-50	The City shall establish a transit and/or multimodal impact fee to be applied to new development to fund public transportation infrastructure and other multimodal accommodations.
Policy CI-51	Except when prohibited by state law, the City shall require that sufficient capacity in all public services and facilities will be available on time to maintain desired service levels and avoid capacity shortages, traffic congestion, or other negative effects on safety and quality of life.
Policy CI-52	All new residential development shall be required to annex into City of Madera Community Facilities District 2005-01, or any subsequent CFD created in its place. The purpose of the CFD is to collect special assessments from new residential development to offset the cost of providing eligible municipal services to that development.

Source: City of Madera General Plan (October 2009).

4.16.3.1 Significance Criteria

The thresholds for impacts related to transportation and traffic used in this analysis are consistent with Appendix G of the State CEQA Guidelines. Development of the proposed Specific Plan would result in a significant impact related to transportation if it would:

- Threshold 4.16.1** **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;**
- Threshold 4.16.2** **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);**
- Threshold 4.16.3** **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or**
- Threshold 4.16.4** **Result in inadequate emergency access;**

4.16.3.2 Project Impacts

The following discussion describes the potential impacts related to transportation and traffic that could result from implementation of the proposed Specific Plan.

- Threshold 4.16.1** **Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

The Specific Plan Area would continue to be accessible via the surrounding roadways described in Section 4.16.1.1, and the proposed Specific Plan would continue to utilize the existing roadway network. The proposed Specific Plan’s reasonably anticipated development as analyzed in this EIR

would include up to 10,783 dwelling units composed of single-family detached and attached homes multifamily dwelling units, approximately 260,000 square feet (sq. ft.) of business park uses, approximately 1.2 million sq. ft. square feet of village mixed use, and 3 elementary schools serving 2,100 students to the Specific Plan Area.¹

The proposed Specific Plan would replace existing (mostly agricultural) uses and is anticipated to be built in three phases. Phase I would consist of the southeastern quadrant of the Specific Plan Area and is anticipated to be completed by 2029. Phase I includes the Links Ranch Subdivision Project, a 214-unit residential project approved by the City in 2021. Phase II would consist of the northwestern quadrant of the Specific Plan Area and is anticipated to be completed by 2039. Phase III would consist of the southwestern quadrant of the Specific Plan Area and is anticipated to be completed by 2049. Under the full build-out (Phase III) condition, the proposed Specific Plan would generate 89,647 net daily trips, with 6,841 net trips occurring during the a.m. peak hour and 7,597 net trips occurring during the p.m. peak hour.

Transit. There are no existing dedicated transit facilities within the Specific Plan Area or in the immediate vicinity of the Specific Plan Area. As identified in the proposed Specific Plan, accessibility and mobility within the Specific Plan would accommodate future transit facilities including expansions of transit routes and new transit stops, and implementation of the proposed Specific Plan would not substantially conflict with plans or policies supporting public transit or transit facilities. In addition, Action Item CI-1.2 of the City's General Plan requires the City to prepare and adopt a comprehensive transit plan to complement the development of Village Centers, which includes the proposed Specific Plan Area. The proposed Specific Plan includes a Circulation Plan to facilitate public transit and multi-modal transportation in the Specific Plan Area. As a result, a less-than-significant impact would occur. No mitigation is required.

Bicycles. There are no existing dedicated bicycle facilities within the Specific Plan Area, in the immediate vicinity of the Specific Plan Area, or along the surrounding roadways. As identified in the proposed Specific Plan, bicycle lanes and off-street trails would be included within the Specific Plan Area that would create accessibility and mobility within the Specific Plan Area and increase the overall accessibility within the City. In addition, a multi-purpose pedestrian and bicycle trail would be provided along the Fresno River area along the southern boundary of the Specific Plan Area. The proposed Specific Plan would construct trail connections to link the multi-purpose trail along the Fresno River with the larger on-street bicycle network within the Specific Plan Area and the Vern McCullough Fresno River trail located along the Fresno River, east of the Specific Plan Area. The bicycle paths would provide linkages to the City's master planned bike path system. As a result, the proposed Specific Plan would accommodate bicyclists, and implementation of the proposed Specific Plan would not substantially conflict with plans or policies supporting bicycles or bicycle facilities. As a result, a less-than-significant impact would occur. No mitigation is required.

Pedestrian Facilities. There are no existing dedicated pedestrian facilities within the Specific Plan Area, in the immediate vicinity of the Specific Plan Area, or along the surrounding roadways. The proposed Specific Plan would include a pedestrian circulation system utilizing sidewalks and paseos

¹ The number of students within the Specific Plan Area was developed using rates from ITE Trip Generation Manual (10th Edition). Land Use 520, "Elementary School" was used.

throughout the Specific Plan Area. Sidewalks would be provided along all streets in the Specific Plan Area and would be a minimum of five feet in width. Sidewalks would be constructed as part of roadway improvements that are constructed, and paseos, a minimum of 10 feet in width and accommodating pedestrians, would be incorporated as part of open space improvements. The sidewalks and paseos would provide pedestrian connections throughout the Specific Plan Area. In addition, the proposed Specific Plan would include trail connections to link the multi-purpose trail along the Fresno River with the larger on-street pedestrian network within the Specific Plan Area and the Vern McCullough Fresno River trail located along the Fresno River, east of the Specific Plan Area. The proposed Specific Plan would not conflict with plans or policies of the General Plan and listed above in Section 4.16.1.2. As a result, a less-than-significant impact would occur. No mitigation is required.

Roadways. Study intersections and roadway segments analyzed in the TIA are within the jurisdictions of the City of Madera and the County of Madera. Intersections located at freeway on-ramps and off-ramps are under the jurisdiction of Caltrans.

The City of Madera uses LOS C as its minimum LOS criteria for intersections and roadway segments. As stated in the Circulation and Infrastructure Element of the City of Madera General Plan, LOS D is applicable to arterial roadways, or roadway segments with at-grade railroad crossings that were experiencing congestion exceeding LOS C during peak hour travel times as of the date the General Plan Update is adopted. LOS D is also applicable to intersections and roadway segments in the Downtown District as defined in the Land Use Element of the City's General Plan. The County of Madera uses LOS D as the minimum LOS criteria for all State and County roadways.

At study intersections and roadway segments under the jurisdiction of the City of Madera, a significant impact occurs when the LOS falls below the target LOS of C or D with the addition of project traffic or when a project contributes to an unsatisfactory condition (LOS D, E, or F). Caltrans considers an acceptable LOS to be between LOS C and D at all intersections under its jurisdiction (delay of 45 seconds at signalized intersections and delay of 30 seconds at unsignalized intersections). However, for freeway segments and ramp merge/diverge areas, the Caltrans Guide for the Preparation of Traffic Impact Studies (2002) states that transition between LOS C and D may not be feasible and allows the local jurisdictions to set the LOS threshold based on local conditions. Caltrans does not have significant impact criteria for study intersections, freeway segments, and freeway merge/diverge areas. Therefore, a significant impact occurs when a project causes an unsatisfactory condition or when the project contributes to an existing deficiency.

As identified in the TIA, upon completion of Phase I in 2029, the proposed Specific Plan would conflict with LOS standards at 17 intersections and 4 roadway segments. With the implementation of the improvements listed in the TIA (see Tables 9-C and 9-H in the TIA), most of the intersections and roadway segments are forecast to operate at a satisfactory LOS, while the LOS at one intersection cannot be improved due to right-of-way constraints and because the intersection is located in Caltrans' jurisdiction.

Upon completion of Phase II in 2039, the proposed Specific Plan would conflict with LOS standards at 24 intersections and 12 roadway segments. With the implementation of the improvements listed in the TIA (see Tables 9-D and 9-I in the TIA), most of the intersections and roadway segments are

forecast to operate at a satisfactory LOS, while the impacts to one intersection cannot be improved due to right-of-way constraints and because the intersection is located in Caltrans' jurisdiction.

Upon completion of Phase III in 2049, the proposed Specific Plan would result in deficiencies in LOS at 37 intersections and 16 roadway segments. With the implementation of the improvements listed in the TIA (see Tables 9-E and 9-J in the TIA), most of the intersections and roadway segments are forecast to operate at a satisfactory LOS, while the impacts to two intersections cannot be improved due to right-of-way constraints and because the intersections are located in Caltrans' jurisdiction.

Table 9-A of the TIA summarizes the recommended improvements for study intersections under all scenarios. Tables 9-B through 9-E of the TIA illustrate the post-improvement intersection levels of service for the different scenarios. Table 9-F of the TIA summarizes the recommended improvements for roadway segments under all scenarios. As shown in these tables, some of the intersections in some scenarios cannot be fully improved to meet the LOS standards because of right-of-way constraints. Where such physical improvements were identified, the intersection and roadway segments were also reviewed to determine whether physical improvements would require significant encroachments on existing adjacent development or other improvements. Based on the results of this review and analysis, improvements have been recommended for impacted study intersections and roadway segments where consistent with the General Plan and existing adjacent development.

Tables 9-G through 9-J of the TIA illustrate the proposed roadway segment improvements and the corresponding levels of service for the different scenarios. As shown in these tables, multiple roadway segments are either currently built out or additional improvements are infeasible. The feasibility of the recommended improvements is based on the City's General Plan classification, as stated in the Measure "T" Strategic Plan (adopted July 20, 2016), the City's Capital Improvement Plan (CIP) (for the fiscal years 2018–2019 to 2022–2023), or the City's Development Impact Fee (DIF) Program, and also considers availability of right-of-way. As such, many of these segments which have either already been built to the General Plan classification or do not have adequate right-of-way would continue to operate at a deficient LOS as no further mitigations are feasible. As a result, the proposed Specific Plan would conflict with established standards for LOS, and a significant impact would occur.

Impact TRA-1: The Specific Plan would generate vehicle trips that would result in roadway facilities operating in a deficient level of service (LOS) and, as a result, would conflict with established standards.

Mitigation Measure TRA-1.1: As a condition of future project entitlements approved for projects within the Specific Plan Area, improvements identified in Table 9-A of the Traffic Impact Analysis (TIA) shall be implemented by the City.

Level of Significance Without Mitigation: Significant and unavoidable. The TIA prepared for the proposed Specific Plan identifies potential conflicts to the City's established LOS standards for roadways in Madera. Where feasible, the proposed Specific Plan would improve or contribute a fair share allotment to improve the deficient roadway to meet roadway standards of the City, County, and Caltrans. The improvements identified by the TIA would be implemented as a condition of

project approval and consistent with the likely Development Agreements agreed upon by the City and the Project Applicant as well as future development agreements. However, some roadways would not be able to be improved due to right-of-way constraints. As a result, implementation of the proposed Specific Plan would conflict with adopted policies that cannot be addressed, and a significant and unavoidable impact would occur.

Threshold 4.16.2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

On December 28, 2018, the California Office of Administrative Law cleared the revised CEQA Guidelines for use. Among the changes to the guidelines was removal of vehicle delay and LOS from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT, not LOS. VMT is calculated by multiplying the number of vehicle trips by the estimated number of miles driven per trip. Projects that create a significant impact based on VMT would be required to mitigate their impacts through Transportation Demand Measures (TDMs) such as car sharing, improved transit, and enhanced bicycle infrastructure. Lead agencies are allowed to opt in to the revised transportation guidelines, but the new guidelines must be used starting July 1, 2020.

In accordance to updated guidelines, local jurisdictions throughout California have begun a departure from considering LOS as the only measure of a transportation system's effectiveness. However, the City has not yet established thresholds related to VMT. Once VMT thresholds are established by the City, project impacts will be evaluated against established thresholds to determine the significance and identify mitigation measures, similar to LOS methodology. Specific details about thresholds and methodologies for project impact evaluation and mitigations will be identified by the City in the near future.

In the absence of adopted thresholds, the State law provides guidance to evaluate the impacts related to vehicles miles traveled. California Public Resources Code Section 15064.3(b)(4) states (in part) that:

A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household, or in any other measure.

To provide an abundance of information on the effects of the proposed Specific Plan, this analysis includes Total Population VMT, Total Employment VMT, VMT per capita (population), VMT per employee and VMT per service population. For context, the VMT resulting from the proposed Specific Plan is compared to the larger Madera County.

VMT calculations for the countywide baseline conditions (2019) were derived from the MCTC Travel Demand Forecasting (TDF) model. The data are presented in terms of daily VMT per capita, VMT per employee and VMT per service population for the entire County for the existing (2019) conditions and project VMT per capita, VMT per employee and VMT per service population under the model horizon year (2042) conditions.

OPR guidance has provided direction on the treatment of CEQA traffic analyses for land use plans in the Technical Advisory (TA). The TA reiterates previous direction regarding individual land use assessments:

- Analyze the VMT outcomes over the full area over which the plan may substantively affect travel patterns (the definition of region).
- VMT should be counted in full rather than split between origins and destinations (the full impact of the project VMT).

The TA also states, “A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office or retail land uses would in aggregate exceed the respective thresholds recommended above.” This recommendation refers to 85 percent of the existing city or regional average, and no net gain for residential, office, and retail land uses.

However, OPR is recommending a focus on specific trip purposes (i.e., home-based trips for residential projects and work-based trips for office projects). Depending on the modeling platform, at least four other trip types are recognized as contributors to large-scale plan-level analyses. Homebased origins would have interactions with other non-work-based destinations. Therefore, if homebased trips are the focus of a plan-level assessment, a great deal of VMT would not be accounted for in the estimation of total VMT. Therefore, to assess a land plan, the total VMT for the plan should be identified for all trip types and all potential VMT contributors within the plan area.

The SB 375 process and the Regional Targets Advisory Committee (RTAC) GHG goal setting has established a baseline GHG emissions reduction that local Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) can achieve.

These achievements are provided in the integration of land use planning and transportation, not solely through the imposition of regulation on passenger cars and light-duty trucks. The CARB reviews the GHG reduction strategies and has approved the most recent round of GHG emission reductions for MPOs and RTPAs around the State. Therefore, the recommended methodology for conducting VMT assessments for land plans is to compare the existing VMT per capita, VMT per employee and VMT per service population for the region with the expected horizon year VMT per capita, VMT per employee and VMT per service population for the land plan area. The recommended target is to achieve a lower VMT per capita, VMT per employee and VMT per service population in the horizon year with the proposed land plan than occurs for the existing condition.

As mentioned above, the TA recommends analyzing the effect of a land use plan over the area where the plan substantially affects the travel pattern. It is estimated that the effect of the proposed Specific Plan would mostly be contained within Madera County. Therefore, for purposes of this analysis, the County has been considered as the region.

For the proposed Specific Plan, VMT per capita, VMT per service population and VMT per employee within the Specific Plan Area under horizon year (2042) were compared with corresponding values for the existing (2019) regional VMT per capita, VMT per service population and VMT per employee respectively. Table 4.16.C shows the proposed Specific Plan’s VMT per capita, VMT per service

Table 4.16.C: Existing (2019) Regional and Horizon Year (2042) VMT Comparison

Metric	Existing (2019) Regional Average	Horizon Year (2042) Average of the proposed Specific Plan	Percentage Difference
VMT per Capita	14.64	11.04	-24.6
VMT per Service Population	23.18	18.52	-20.1
VMT per Employee	24.92	16.04	-35.6

Source: Travel Demand Forecasting Model (MCTC 2018).

population and VMT per employee estimates under the horizon year (2042), and corresponding values for the region under existing (2019) conditions. As shown in Table 4.16.C, horizon year (2042) proposed Specific Plan’s VMT per capita is 24.6 percent lower than the existing (2019) regional average. Similarly, horizon year VMT per service population for the proposed Specific Plan is 20.1 percent lower than the existing (2019) regional average. The proposed Specific Plan’s horizon year VMT per employee is 35.6 percent lower than existing (2019) regional average. This lower VMT per employee results from the mix of land uses proposed within the Specific Plan Area as well as employment opportunities that are provided in the Specific Plan Area.

Although the City is yet to adopt thresholds for VMT impacts, the proposed Specific Plan would not have a significant transportation impact based on the OPR TA. The proposed Specific Plan would have a lower VMT per capita, VMT per service population and VMT per employee when compared to the regional average and therefore would not have a significant VMT impact.

For additional information regarding the methodology of the VMT analysis as well as detailed VMT calculation worksheets, please refer to Section 11.0 of the TIA (included as Appendix K of this Draft EIR).

Level of Significance Without Mitigation: Less than significant. No mitigation is required.

Threshold 4.16.3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Implementation of the proposed Specific Plan would increase the amount of vehicle traffic, which would require the improvement and expansion of the roadway network in the Specific Plan Area. The proposed Specific Plan identifies a circulation plan composed of a system of roadways, bikeways, trails, and sidewalks that would be constructed along with policy direction to facilitate transportation in the Specific Plan Area. New transportation facilities would be designed according to applicable federal, State, and local design standards, which would minimize traffic hazards.

Additionally, the proposed Specific Plan’s Circulation Plan would efficiently and safely move vehicles, pedestrians, cyclists, and public transit through and around the Specific Plan Area. Existing agricultural uses are located within and directly adjacent to the Specific Plan Area. Improvements to the roadways within the Specific Plan Area, including the minimum design speeds to be used for centerline curve radii, super elevation, corner and approach site distances, vertical and horizontal

alignment, and sight distances for the Circulation Plan of streets would be required to comply with City standards. As a result, the design of transportation facilities would improve safety and reduce conflicts by encouraging reduced vehicle speeds on roadways and would not result in an increase in hazards due to incompatible uses (such as agricultural operations). Further, design of all circulation improvements would be reviewed by the City's Engineering and Planning Departments for consistency with standards as part of the approval process. As a result, implementation of the proposed Specific Plan would not increase hazards due to design features or incompatible uses, and a less-than-significant impact would occur. No mitigation is required.

Level of Significance Without Mitigation: Less than significant. No mitigation is required.

Threshold 4.16.4 Would the project result in inadequate emergency access?

Implementation of the proposed Specific Plan would increase the amount of vehicle traffic, which would require the improvement of the City's roadway system within the Specific Plan Area and the surrounding area. An enhanced roadway network that accommodates forecasted travel demand, through improvements identified in the TIA, would also provide adequate emergency access. The proposed Specific Plan includes land uses that could be used for public services, such as police and fire facilities. In addition, emergency access would be reviewed by the City's Engineering and Planning Departments for adequacy as part of the approval process. As a result, implementation of the proposed Specific Plan would result in a less-than-significant impact related to emergency access. No mitigation is required.

Level of Significance Without Mitigation: Less than significant. No mitigation is required.

4.16.3.3 Cumulative Impacts

A proposed project would have a significant effect on the environment if it – in combination with other projects – would contribute to a significant cumulative impact related to transportation. The cumulative impact analysis for transportation considers the larger context of future development of the City of Madera as envisioned by the General Plan and relied upon the projections of the General Plan and General Plan EIR. Cumulative impacts on transportation would be those impacts that result from continued buildout of the General Plan.

The proposed Specific Plan includes objectives and design guidelines intended to enhance the transportation network within the Specific Plan Area and thereby extending the City's overall accessibility. The proposed Specific Plan would be consistent with the plans and policies of existing documents as it relates to transit, bicycles, and pedestrian facilities, as described in Section 4.16.1.2. The proposed Specific Plan would increase opportunities for enhanced transit, bicycles, and pedestrian facilities that would increase the connectivity of the City and further implement the City's General Plan policies.

The TIA identifies roadways that would conflict with LOS standards of the City, County, and Caltrans with implementation of the proposed Specific Plan. In most cases, in combination with cumulative conditions, the roadways and segments would be improved to meet the standards of the City, County, and Caltrans. However, four intersections in Caltrans' jurisdiction cannot be improved to

meet Caltrans' standards due to right-of-way constraints. As discussed above, implementation of the proposed Specific Plan would result conflicts to policies related to LOS standards that would not be able to be improved due to limited right-of-way or existing constraints. As a result, a significant and unavoidable cumulative impact would occur.

The proposed Specific Plan would increase vehicle trips within the Specific Plan Area and within the Planning Area of the General Plan. However, implementation the proposed Specific Plan would be required to meet the City's standards regarding emergency access. Additionally, improvements identified in the TIA would be implemented to the extent feasible to reduce potential cumulative impacts related to emergency access.

Level of Significance Without Mitigation: Significant and unavoidable. The proposed Specific Plan would result in LOS deficiencies of roadways that would conflict with policies that establish LOS standards. Although improvements would be made to many intersections and roadway segments to reduce potential LOS deficiencies, due to the lack of available roadway right-of-way, the proposed Specific Plan would result in continued conflicts with adopted roadways.

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