3.13 TRANSPORTATION

This section describes the applicable federal, State, and local transportation regulations and policies; discusses the existing roadway network and transportation facilities in the vicinity of the Project site; and analyzes the potential impacts from implementation of the Project on transportation. Mitigation measures that would reduce impacts, where applicable, are also discussed. The analysis within this section is based on the analysis and findings of the *Local Access, Safety, and Circulation Study* (Circulation Study) and *the Vehicle Miles Traveled Analysis Memorandum* (VMT Memo) prepared for the Project (Kimley-Horn 2023a and Kimley-Horn 2023b, respectively). These studies evaluate the effects of the Project based on the City CEQA significance thresholds contained within the City of Elk Grove General Plan and Transportation Analysis Guidelines. The Circulation Study and VMT Memo are included as Appendix G of this EIR and incorporated herein.

Pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR) Section 15064.3(a), generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts and a project's effect on automobile delay shall no longer constitute a significant impact under CEQA. Therefore, the transportation analysis herein evaluates impacts using VMT and does not include level of service (LOS) analysis. Although not addressed in this EIR, the analysis of traffic operations (i.e., intersection and freeway LOS analysis) for the Project was conducted by Kimley-Horn and is included in the Circulation Study (Kimley-Horn 2023a) and is provided in Appendix G.

Comments received regarding transportation in response to the notice of preparation (NOP) included requests for a transportation analysis; enhanced transportation services and active transportation amenities; additional Class I bike trails; and complete streets policy and design implementation. Because a project's effects on automobile delay no longer constitute a significant impact under CEQA, comments related to automobile delay (e.g., LOS, congestion) are not addressed in this EIR. All other comments are addressed in the analysis below. See Appendix A for all NOP comments received.

3.13.1 Regulatory Setting

FEDERAL

Federal Highway Administration

The Federal Highway Administration (FHWA), an agency of the U.S. Department of Transportation, provides stewardship over the construction and preservation of the nation's highways, bridges, and tunnels. FHWA also conducts research and provides technical assistance to State and local agencies to improve safety, mobility, and livability and to encourage innovation in these areas. FHWA also provides regulation and guidance related to work zone safety, mobility, and temporary traffic control device implementation.

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) is the State agency responsible for the design, construction, maintenance, and operation of the California State Highway System, as well as the segments of the Interstate Highway System that lie within California. Caltrans District 3 is responsible for the operation and maintenance of State Route (SR) 99 in the vicinity of the Project site. Caltrans requires a transportation permit for any transport of heavy construction equipment or materials that necessitates the use of oversized vehicles on State highways.

The Caltrans Transportation Impact Study Guide (TISG) was prepared to provide guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants regarding Caltrans review of a land use project or plan's transportation analysis using a VMT metric. This guidance is not binding on public agencies, and it is intended to be a

reference and informational document. The TISG replaces the Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System (Caltrans 2020).

Senate Bill 743

Senate Bill 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the State CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to Senate Bill 743. These updates indicated that VMT would be the primary metric used to identify transportation impacts. In December of 2018, OPR published the most recent version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR 2018) that provides guidance for VMT analysis.

In December of 2018, OPR and the State Natural Resources Agency submitted the updated CEQA Guidelines to the Office of Administrative Law for final approval to implement SB 743. The Office of Administrative Law subsequently approved the updated State CEQA Guidelines and, as of July 1, 2020, implementation of CCR Section 15064.3 of the updated State CEQA Guidelines applies Statewide.

REGIONAL

Metropolitan Transportation Plan/Sustainable Communities Strategy

The Sacramento Area Council of Governments (SACOG) is responsible for preparing and updating the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region. In response to this requirement, SACOG completed the 2020 MTP/SCS. The purpose of the 2020 MTP/SCS is to establish regional access and identify mobility goals; identify present and future transportation needs, deficiencies, and constraints within the transportation system; analyze potential solutions; estimate available funding; and propose investments (SACOG 2019). On November 18, 2019, the SACOG Board of Directors adopted the 2020 update to the MTP/SCS. The next update to the MTP/SCS is scheduled for 2025 and is in process.

The Congestion Management Process (CMP) and MTP/SCS are developed as a single integrated document. As part of the MTP/SCS, SACOG's CMP addresses the six-county Sacramento region and the transportation network therein. The CMP focuses on travel corridors with significant congestion and critical access and mobility needs to identify projects and strategies that meet CMP objectives. Transportation projects are nominated by local agencies and analyzed against community priorities identified through public outreach, as well as technical performance and financial constraints.

Metropolitan Transportation Improvement Program

SACOG, the federally designated metropolitan planning organization for the region, prepares and adopts the MTIP approximately every 2 years. The MTIP is a short-term listing of surface transportation projects that receive federal funds, are subject to a federally required action, or are regionally significant. SACOG adopted the 2023-2026 MTIP in September 2022. The 2023-2026 MTIP covers 4 years of programming: federal fiscal years 2023-2026. The project listing in the MTIP provides a detailed description for each individual project in the 2023-2026 MTIP, including those in Sacramento County and the City of Elk Grove.

Regional Bicycle, Pedestrian and Trails Master Plan

SACOG approved the *Regional Bicycle, Pedestrian, and Trails Master Plan* in April 2015 (SACOG 2015). It envisions a complete transportation system that supports healthy living and active communities where bicycling and walking are viable and popular travel choices in a comprehensive, safe, and convenient network. The *Regional Bicycle, Pedestrian, and Trails Master Plan* is intended to guide the long-term decisions for the Bicycle and Pedestrian Funding Program. The projects included in this plan are regionally significant projects that require at least partial regional funding. This plan is not fiscally constrained, so it contains at least 20 years' worth of projects.

Sacramento Region Trail Network Action Plan

SACOG adopted the *Sacramento Region Trail Network Action Plan* in July 2022 (SACOG 2022). It establishes a vision for walking, biking, and rolling throughout the region by planning for a network of trails that reaches key destinations and closes existing gaps. The *Sacramento Region Trail Network Action Plan* establishes the baseline environment, identifies a proposed network of facilities, and sets forth goals for the trail network.

LOCAL

City of Elk Grove General Plan

The most recent updates to the City's General Plan were adopted in September 2023. The Mobility chapter of the General Plan contains policies designed to further the City's mobility strategy. The Mobility chapter incorporates and expands the City's complete streets policies; supports key implementation tools, such as the *Bicycle, Pedestrian, and Trails Master Plan*, and *Transportation Analysis Guidelines,* and the *Climate Action Plan*; and identifies measures to support alternative transportation investments, as well as transit-friendly and active transportation-friendly development (City of Elk Grove 2023a). As detailed above, a project's effect on automobile delay is no longer a consideration when identifying a significant impact under CEQA. Therefore, City General Plan policies related to intersection and roadway performance are not included in this EIR.

The following policies and standards related to transportation are relevant to the CEQA analysis of the Project. It should be noted that the Project would include a new Special Planning Area (SPA) referred to as Zoological Park SPA.

- **Policy MOB-1-1:** Achieve State-mandated reductions in VMT by requiring land use and transportation projects to comply with the following metrics and limits. These metrics and limits shall be used as thresholds of significance in evaluating projects subject to CEQA.

  Projects that do not achieve the daily VMT limits outlined below shall be subject to all feasible mitigation measures necessary to reduce the VMT for, or induced by, the project to the applicable limits. If the VMT for or induced by the project cannot be reduced consistent with the performance metrics outlined below, the City may consider approval of the project, subject to a statement of overriding considerations and mitigation of transportation impacts to the extent feasible, provided some other stated form of public objective including specific economic, legal, social, technological, or other considerations is achieved by the project.

  a) **New Development** – Any new land use plans, amendments to such plans, and other discretionary development proposals (referred to as "development projects") are required to demonstrate a 15 percent reduction in VMT from existing (2020) conditions. To demonstrate this reduction, conformance with the following land use and cumulative VMT limits is required:

     i. **Land Use** – Development projects shall demonstrate that the VMT produced by the project at buildout is equal to or less than the VMT limit of the project's General Plan land use designation, as shown in Table 6-1 [presented as Table 3.13-1 in this EIR].

Table 3.13-1 Vehicle Miles Traveled by Land Use Designation

Land Use Designation	VMT Limit (Daily Per Service Population)
Commercial and Employment Land Use Designations	
Community Commercial (CC)	29.4
Regional Commercial (RC)	29.4
Employment Center (EC)	19.3
Light Industrial/Flex (LI/FX)	24.2
Light Industrial (LI)	24.2
Heavy Industrial (HI)	23.4
Mixed Land Use Designations	
Village Center Mixed Use (VCMU)	18.6
Residential Mixed Use (RMU)	19.7
Transect Based-Land Use Designations	
General Neighborhood Residential (T3-R)	21.2
Neighborhood Center Low (T3)	20.0
Neighborhood Center Medium (T4)	21.1
Neighborhood Center High (T5)	17.0
Public/Quasi Public and Open Space Land Use Designations	
Parks and Open Space (P/OS)	NA[1]
Resource Management and Conservation (RMC)	NA[1]
Public Services (PS)	19.3
Residential Land Use Designations	
Rural Residential (RR)	25.0
Estate Residential (ER)	22.2
Low Density Residential (LDR)	20.2
Medium Density Residential (MDR)	19.6
High Density Residential (HDR)	18.6
Other Land Use Designations	
Agriculture (AG)	25.2
Study Areas	NA[2]
Tribal Trust Lands	NA[3]

Note: VMT = vehicles miles traveled. VMT limit is 85% of average base year VMT per service population for parcels with land use designations.

VMT limit is average buildout VMT per service population for parcels with land use designations.

[1] These land use designations are not anticipated to produce substantial VMT, because they have no residents and few to no employees. These land use designations therefore have no limit and are exempt from analysis.

[2] Lands within the Study Areas shall be analyzed based upon their ultimate land use designation, not the interim "Study Area" designation.

[3] Tribal Trust Lands are exempt from VMT analysis as they are not subject to City policy.

Source: City of Elk Grove 2023a.

ii. **Cumulative for Development Projects in the Existing City –** Development projects within the existing (2020) City limits shall demonstrate that cumulative VMT within the City for a future project would be equal to or less than the established Citywide cumulative limit of 8,039,802 VMT (total daily VMT).

iii. **Cumulative for Development Projects in Study Areas –** Development projects located in Study Areas shall demonstrate that cumulative VMT within the applicable Study Area would be equal to or less than the established limit shown in Table 6-2 [presented as Table 3.13-2 in this EIR].

Table 3.13-2 Study Area Total Vehicle Miles Traveled Daily Limits

Study Area	VMT Limit (Total VMT at Buildout)
City	8,039,802
North Study Area	27,132
East Study Area	574,028
South Study Area	1,769,671
West Study Area	751,049

Note: Total VMT refers to VMT based on all trips that have one end in a specific location. This is calculated using model origin – destination trip matrix. Fully accounts for entire trip length within SACOG region.
Source: City of Elk Grove 2023a.

- **Policy MOB-1-2:** Consider all transportation modes and the overall mobility of these modes when evaluating transportation design and potential impacts during circulation planning.
- **Policy MOB-1-3:** Strive to implement the roadway performance targets (RPT) for operations of roadway segments and intersections, while balancing the effectiveness of design requirements to achieve the targets with the character of the surrounding area as well as the cost to complete the improvement and ongoing maintenance obligations. The Transportation Network Diagram reflects the implementation of the RPT policy at a macro level; the City will consider the specific design of individual segments and intersections in light of this policy and the guidance in the Transportation Network Diagram.

  To facilitate this analysis, the City shall use the following guidelines or targets. Deviations from these metrics may be approved by the approving authority (e.g., Zoning Administrator, Planning Commission, City Council).

  a) **Vehicular Design Considerations:** The following targets apply to vehicular mobility:

     i. **Intersection Performance** – Generally, and except as otherwise determined by the approving authority or as provided in this General Plan, the City will seek to achieve, to the extent feasible and desired, the peak-hour delay targets identified in [General Plan] Table 6-3.

     ii. **Roadway Performance –** Generally, and except as otherwise determined by the approving authority or as provided in this General Plan, the City will seek to achieve, to the extent feasible and desired, the average daily traffic design targets identified in [General Plan] Table 6-4.

     iii. **Pedestrian and Bicycle Performance –** The City will seek the lowest stress scores possible for pedestrian and bicycle performance after considering factors including design limitations and financial implications.
- **Policy MOB-3-1:** Implement a balanced transportation system using a layered network approach to building complete streets that ensure the safety and mobility of all users, including pedestrians, cyclists, motorists, children, seniors, and people with disabilities.
- **Policy MOB-3-2:** Support strategies that reduce reliance on single-occupancy private vehicles and promote the viability of alternative modes of transport.

  a) **Standard MOB-3-2.a:** Review new development to install conduits for future installation of electric vehicle charging equipment.
- **Policy MOB-3-3:** Whenever capital improvements that alter street design are being performed within the public right-of-way, retrofit the right-of-way to enhance multimodal access to the most practical extent possible.
- **Policy MOB-3-4:** As new roads are constructed, assess how the needs of all users can be integrated into the street design based on the local context and functional classification.

- **Policy MOB-3-5**: Strive to balance needs for personal travel, goods movement, parking, social activities, business activities, and ease of maintenance when planning, operating, maintaining, and expanding the roadway network.
- **Policy MOB-3-6**: Execute complete streets design in accordance with neighborhood context and consistent with specific guidance in community or area plans, as applicable.
- **Policy MOB-3-7:** Develop a complete and connected network of sidewalks, crossings, paths, and bike lanes that are convenient and attractive, with a variety of routes in pedestrian-oriented areas.
- **Policy MOB-3-10:** Design and plan roadways such that the safety of the most vulnerable user is considered first using best practices and industry design standards.
- **Policy MOB-3-11:** Consider the safety of schoolchildren as a priority over vehicular movement on all streets within the context of the surrounding area, regardless of street classifications. Efforts shall specifically include tightening corner-turning radii to reduce vehicle speeds at intersections, reducing pedestrian crossing distances, calming motorist traffic speeds near pedestrian crossings, and installing at-grade pedestrian crossings to increase pedestrian visibility.
- **Policy MOB-3-12**: Provide for safe and convenient paths and crossings along major streets within the context of the surrounding area, taking into account the needs of the disabled, youth, and the elderly.
- **Policy MOB-3-13:** Continue to design streets and approve development applications in a manner that reduces high traffic flows and parking demand in residential neighborhoods.
- **Policy MOB-4-1:** Ensure that community and area plans, specific plans, and development projects promote context-sensitive pedestrian and bicycle movement via direct, safe, and pleasant routes that connect destinations inside and outside the plan or project area. This may include convenient pedestrian and bicycle connections to public transportation.
- **Policy MOB-4-2**: Provide on-site facilities and amenities for active transportation users at public facilities, including bicycle parking and/or storage and shaded seating areas.
- **Policy MOB-4-3**: Prioritize infrastructure improvements that benefit bicycle and pedestrian safety and convenience over vehicle efficiency improvements within and near community facilities, activity centers, and other pedestrian-oriented areas.
- **Policy MOB-4-5:** Encourage employers to offer incentives to reduce the use of vehicles for commuting to work and increase commuting by active transportation modes. Incentives may include a cash allowance in lieu of a parking space and on-site facilities and amenities for employees such as bicycle storage, shower rooms, lockers, trees, and shaded seating areas.
- **Policy MOB-5-6:** The City shall work to incorporate transit facilities into new private development and City project designs including incorporation of transit infrastructure (e.g. electricity and fiber-optic cable), alignments for transit route extensions, new station locations, bus stops, and transit patron waiting area amenities (e.g. benches and real-time traveler information screens).
- **Policy MOB-5-7:** Provide the appropriate level of transit service in all areas of Elk Grove, through fixed-route service in urban areas, and complementary demand response service in rural areas, so that transit-dependent residents are not cut off from community services, events, and activities.
- **Policy MOB-5-13:** Consider the implementation of traffic signal priority, queue jumps, and exclusive transit lanes to reduce transit passenger delay and improve transit speed, reliability and operating efficiency.
- **Policy MOB-7-1**: Prioritize roadway improvements that result in appropriate capacity and multiuser facilities on major arterials consistent with the Transportation Network Diagram
    a) **Standard MOB-7-1.a:** Generally, new roadway construction or road widening shall be completed to the ultimate width as provided in this General Plan and shall also provide required bicycle and pedestrian improvements and paths. However, phased improvements may be allowed based upon the timing of

development and facility demand as determined by the City Engineer or as otherwise provided in this General Plan or an applicable specific plan or other area plan. Regardless, all roadways, pedestrian facilities, and bike routes or bikeways shall be constructed in logical and complete segments, connected from intersection to intersection, to provide safe and adequate access.

- **Policy MOB-7-4:** Require new development projects to provide funding or to construct roadway/intersection improvements to implement the City's Transportation Network Diagram. The payment of adopted roadway development or similar fees, including the City Roadway Fee Program and the voluntary I-5 Subregional Fee, shall be considered compliant with the requirements of this policy with regard to those facilities included in the fee program, provided the City finds that the fee adequately funds required roadway and intersection improvements. If payment of adopted fees is used to achieve 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.
- **Policy NR-4-4:** Promote pedestrian/bicycle access and circulation to encourage residents to use alternative modes of transportation in order to minimize direct and indirect emissions of air contaminants.
- **Policy NR-4-5:** Emphasize demand management strategies that seek to reduce single-occupant vehicle use in order to achieve State and federal air quality plan objectives.
- **Policy SAF-1-6:** Require adequate emergency access for new development projects.
- **Policy SEPA-1-1:** Develop an efficient roadway network across the Plan Area. Major roadways shall continue the street network established by adjacent developments. Local roads should extend the established roadway pattern to the extent feasible.
- **Policy SEPA-1-2:** Establish protocols for the timing and phasing of roadway improvements that reflect the level of development that is occurring.
    a) **Standard SEPA-1-2.d:** All roadways, pedestrian facilities, and bike routes or bikeways shall be constructed in logical and complete segments, connecting from intersection to intersection, to provide safe and adequate access with each phase of development as conditioned with the approval of tentative maps.

Livable Employment Community Plan

The intent of development within the Livable Employment Community Plan (LEA) Community Plan Area would be to provide a walkable urban area in the City with a variety of mobility options and neighborhood streets. The LEA Special Planning Area (the LEA Form Based Code) includes requirements related to transportation such as the number of bicycle parking stalls for various land uses and activities, as well as required street sections, which include a variety of pedestrian, bicycle, and vehicular improvements.

City of Elk Grove Transportation Analysis Guidelines

The City of Elk Grove *Transportation Analysis Guidelines* (City of Elk Grove 2023b) establish the protocol for transportation analysis studies and reports based on the current state-of-the-practice in transportation planning and engineering. As detailed above, a project's effect on automobile delay is no longer a consideration when identifying a significant impact under CEQA. Therefore, the portions of the *Transportation Analysis Guidelines* not directly applicable to CEQA are not included in this EIR.

The *Transportation Analysis Guidelines* include guidance for transportation analysis as it pertains to the City General Plan VMT policy significance thresholds (i.e., General Plan Policy MOB-1-1) for CEQA analysis of future projects. The *Transportation Analysis Guidelines* include guidance and requirements for VMT analysis of development projects, including project screening, analysis methodology, significance criteria, impact assessment, and mitigation strategies. The *Transportation Analysis Guidelines* also include guidelines and requirements for multimodal (bicycle, pedestrian, and transit) transportation analysis, hazards related to design, on-site circulation, and construction.

The *Transportation Analysis Guidelines* and City General Plan specify total daily VMT and VMT per service population as the basis for VMT analysis. The following describes these two VMT metrics and their intended use, which implement the policies of the General Plan cited above:

- **VMT per service population:** Includes the sum of all VMT produced by individual land uses in a project, divided by the sum of total residents living in the project. The VMT per service population metric is used to assess a project against specific land use VMT limits.
- **Total daily VMT:** Includes the sum of all daily VMT produced by all uses within the City and the applicable Study Area.

The *Transportation Analysis Guidelines* include a VMT Screening Map that identifies areas in the City that are exempt from further VMT analysis. These include sites that have been pre-screened through citywide VMT analysis. Pre-screened areas are shown in white and have been determined to result in 15 percent or below the average service population VMT established for that land use designation if built to the specifications of the Land Use Plan. The *Transportation Analysis Guidelines* also include VMT screening criteria for land use projects. The screening criteria indicates a project is exempt if it is:

- A project located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor.
- For projects located within ½ mile of an existing major transit stop, the presumption of less than significant impact would not apply if project-specific or location-specific information indicates that the project will still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:
  - Has a floor area ratio of less than 0.75.
  - Includes substantially more parking for use by residents, customers, or employees of the project than required by the City such that it discourages transit use by making it too convenient to drive.
- A residential project of <10 dwelling units;
- A commercial, office, or industrial project of <50,000 square feet;
- A mixed-use project containing <10 dwelling units and <50,000 square feet of commercial, office, or industrial space;
- A project that is high density low-income housing on a high-density housing site as designated in the Housing Element (City of Elk Grove 2023b).

Additional details related to the VMT calculation process are included in Appendix E of the *City of Elk Grove Transportation Analysis Guidelines*. The Project does not meet any of the City's VMT screening criteria and requires a VMT analysis.

City of Elk Grove Municipal Code

Chapter 12 of the Elk Grove Municipal Code (EGMC) provides regulations related to street improvements and construction. Chapter 16 provides regulations related to Fire Prevention including the City's adoption of the 2022 California Fire Code. Chapter 22 includes design and improvement standards including those related to roadway network design, and Chapter 23 provides regulations related to bicycle parking design and development standards.

City of Elk Grove Bicycle, Pedestrian, and Trails Master Plan

In May 2021, the City Council adopted the *Bicycle, Pedestrian, and Trails Master Plan* (BPTMP) (City of Elk Grove 2021b). The BPTMP updates the 2014 plan to establish a long-term vision for improving walking, bicycling, and equestrian uses in Elk Grove and identify a short-term action plan of implementable projects, programs, and policies. The BPTMP provides a strategy to develop citywide walking, bicycling, and equestrian networks that provide access between residential neighborhoods, schools, transit, and jobs (City of Elk Grove 2021b). These network improvements are combined with a menu of options for recommended education, encouragement, and evaluation programs to

provide a holistic approach to improving active transportation in Elk Grove. Additionally, the BPTMP identifies a plan to implement these projects and programs through prioritization and phasing to ensure implementation is manageable and achievable.

City of Elk Grove Climate Action Plan

The *City of Elk Grove Climate Action Plan 2019 Update* (CAP) was adopted in February 2019 by the City and was incorporated into the current General Plan. Subsequently, the CAP was updated in December 2019. The CAP includes greenhouse gas emission reduction targets, strategies, and implementation measures developed to help the City reach these targets. The following policies and standards related to transportation are relevant to the CEQA analysis of the Project (City of Elk Grove 2019a).

- Measure TACM-3 (Intercity Transportation Demand Management) focuses on the implementation of transportation demand measure (TDM) strategies to reduce the use of single-occupancy vehicle trips, with a target of achieving a 15-percent reduction in local commute traffic.
- Measure TACM-4 (Pedestrian and Bicycle Travel) focuses on the implementation of the Bicycle, Pedestrian, and Trails Master Plan and increased bicycle parking standards, with a target to integrate pedestrian-oriented design and bicycle parking in new development.
- Measure TACM-7 (Traffic Calming Measures) focuses on increasing the number of streets and intersections that have traffic calming measures, with a target of achieving 25 percent of streets and 25 percent of intersections including traffic calming measures by 2030.

City of Elk Grove Transportation Demand Management Plan Guidelines

To aid the development of transportation demand management (TDM) plans, the City developed the TDM Plan Guidelines (City of Elk Grove 2019b). As detailed in the TDM Plan Guidelines, new nonresidential and mixed-use projects with greater than 50,000 square feet of nonresidential use may be required to develop TDM Plans that promote the use of alternative transportation modes and reduce single-occupancy vehicle trips by employees.

These guidelines identify TDM measures by category that include marketing and promotion, bike facilities, transit benefits, commuter benefits, and parking facilities. The TDM Plan Guidelines outline the requirements for each TDM plan and identify the following for each TDM measure:

- Measure Requirements – describes the transportation amenity being provided, the amount/frequency of the amenity, and the property owner's responsibilities. Each TDM measure is assigned a point value between 1 and 5. The higher the value, the more effective the measure is at reducing vehicle travel.
- Compliance Requirements – identifies the required actions and obligations of the applicant or property owners for compliance with the TDM measure during the development review phase of a project.
- TDM Plan Annual Progress Report – identifies the annual reporting requirement for the property owners' TDM coordinator, which includes the number of employees participating in the plan (i.e., by measure) and the commute mode share of employees, along with other performance measures that demonstrate performance.

City of Elk Grove Standard Construction Specifications

The City of Elk Grove Standard Construction Specifications (amended May 17, 2022) provide direction, provisions, and requirements for construction projects in the City of Elk Grove. Section 6 describes Legal Relations and Responsibilities, and Section 12 of the Standard Construction Specifications provides requirements for Construction Area Traffic Control.

City of Elk Grove Improvement Standards

The City of Elk Grove Improvement Standards provide guidance and design standards primarily for the purpose of helping land developers with their subdivision projects. The City of Elk Grove Improvement Standards (amended May 17, 2022) require a five-foot bike lane on minor arterials and an eight-foot sidewalk with new development along minor arterial roadways.

3.13.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which Project-specific impacts are evaluated. The environmental setting for transportation includes baseline descriptions for roadway, bicycle, pedestrian, and transit facilities.

ROADWAY SYSTEM

The roadway network serving the City consists of the following roadway classifications:

- **Principal arterials:** Principal arterials provide limited access on high-speed roads with a limited number of driveways and intersections. Principal arterials also allow bicycles, and pedestrians may be permitted in limited locations. Principal arterials are generally designed for longer trips at the county or regional level.
- **Major arterials:** Major arterials provide controlled access for all transportation modes to enter and leave the urban area. In addition, significant intra-area travel, such as between residential areas and commercial or business areas, should be served by this system. Major arterials can include sidewalks for pedestrian connections, linking land uses to transit. They may have street parking or bike lanes. Arterials range in size from two to eight lanes. Major arterials in the rural area are subject to the separate Rural Roads Improvement Standards and may have separate pedestrian pathways, but no sidewalks.
- **Minor arterials/collectors:** Minor arterials/collectors are two-lane roadways providing access to all transportation modes, with a focus on local access. Pedestrian connections link land uses to local destinations and transit. The right-of-way associated with arterials/collectors may feature medians, parking lanes, and bike lanes. Arterials/collectors in the rural area are subject to the separate Rural Roads Improvement Standards and may have separate pedestrian and multiuse pathways, but no sidewalks, and may have reduced speed requirements. This classification also includes primary and secondary residential streets.
- **Local roads:** Local roads provide direct access to most properties and provide access to the higher roadway classifications described above. They are generally designed to discourage through traffic. Local roads are typically two lanes and are designed for low vehicle speeds. In the urban area of the City, they include pedestrian sidewalks. In rural areas, there are no sidewalks (City of Elk Grove 2021b).

Access to the Project site is provided by the following key roadways:

- **SR 99** is a north-south freeway that traverses California and connects Tehama County in the north and Kern County to the south. Near the Grant Line Road interchange, east of the Project site, SR 99 is a six-lane freeway and transitions to four-lanes.
- **Kammerer Road** is an east-west bi-directional principal arterial that extends from SR 99 to Bruceville Road. Grant Line Road becomes Kammerer Road approximately 0.25 miles after the Grant Line Road/SR 99 interchange. Kammerer Road has six lanes between SR 99 and Lent Ranch Parkway and narrows to a two-lane facility to the west. There are Class II bicycle facilities along the eastern end of Kammerer Road between Promenade Parkway and Lotz Parkway. Sidewalks are also present along approximately 0.75 miles of the northern side of Kammerer Road between Promenade Parkway and Lotz Parkway.
- **Promenade Parkway** is a northeast-southwest bi-directional six-lane major collector located east of the Project site. Promenade Parkway intersects Kyler Road, Bilby Road, and Kammerer Road. There are sidewalks and Class II bicycle lanes present along both sides of the parkway.
- **Classical Way** is an east-west bi-directional two-lane local road within the Sterling Meadows subdivision to the east of the Project. Classical Way intersects Lotz Parkway at its western end. As part of the Project, Classical Way would be extended west as a four-lane facility to the future planned B Drive. There are currently no pedestrian or bicycle facilities present.

- **Lotz Parkway** is a planned arterial roadway that parallels SR 99 from the Elk Grove Automall south to Kammerer Road. Lotz parkway currently exists as an undivided bi-directional two-lane roadway and is planned to expand in stages to a four-lane facility. Lotz Parkway will intersect Kammerer Road at its southern end. There is a sidewalk along the eastern side of the road, and there are no bicycle facilities present.
- **Kyler Road** is an east-west bi-directional two-lane local road located east of the Project site. Kyler Road intersects with Lotz Parkway which would provide direct access to the Project site. There are sidewalks along each side of the road, and no bicycle facilities are present.
- **Bilby Road** is an east-west bi-directional four-lane local road located east of the Project site. The western end of Bilby Road intersects with Lotz Parkway which would provide direct access to the Project site. There are sidewalks and Class II bike lanes along each side of the road.
- **Upbeat Way** is a northwest-east bi-directional two-lane local road located east of the Project site. Upbeat Way intersects with Philharmonic Way to the west and Allegra Drive to the east. There is a sidewalk present on the northern side of the street, and there are no bicycle facilities.
- **Allegra Drive** is a north-south bi-directional two-lane local road located east of the Project site. Allegra Drive intersects with Upbeat Way and Bilby Road. There is a sidewalk present on the eastern side of the street, and no bicycle facilities are present.
- **Philharmonic Way** is a north-south bi-directional two-lane local road located east of the Project site. Philharmonic Way intersects with Kyler Road to the north and Upbeat Way to the south. There are sidewalks along each side of the street, and no bicycle facilities are present.

TRANSIT SYSTEM

Prior to July 2021, transit services within the City consisted of the City e-tran fixed-route bus system, operated under contract to the City by Sacramento Regional Transit (SacRT). However, in July 2021, the ownership and operation of the system was transferred (annexed) to Regional Transit, who operates the system in parallel with their mainline regional transit services elsewhere in Sacramento County. SacRT provides fixed-route local and commuter services and maintenance operations for Elk Grove. SacRT also operates a paratransit service called e-van within Elk Grove City limits that addresses federal Americans with Disabilities Act (ADA) requirements for fixed-route service and primarily serves ADA-eligible passengers.

The nearest bus stop to the Project site, which serves the E110 local route, is located near the Kyler Road/Promenade Parkway intersection, approximately 0.45 miles east of the Project site. Local Route E110 provides northbound service from southeast Elk Grove to Cosumnes River College and operates between the hours of approximately 6:15 a.m. and 9:30 p.m. The southbound service from Consumnes River College to southeast Elk Grove operates from approximately 6:45 a.m. and 10:00 p.m. Buses run on approximately 30-minute headways for the majority of the span of service. Hourly service is provided on Saturdays from approximately 7:00 a.m. to 6:00 p.m. Local Route E110 does not operate on Sundays or major holidays.

BICYCLE AND PEDESTRIAN SYSTEM

The bicycle network serving the City consists of the following bicycle facility classifications as described in the BPTMP:

- **Class I Shared Use Paths:** Class I shared use paths are paved trails completely separate from the street. They allow two-way travel by people walking and bicycling and are considered the most comfortable facilities for children and inexperienced bicyclists as there are few potential conflicts with people driving.
- **Class II Bicycle Lanes:** Class II bicycle lanes are striped preferential lanes in the roadway for one-way bicycle travel. Some bicycle lanes include a striped buffer on one or both sides of the lane to increase separation from the traffic lane or from parked cars, where people may open doors into the bicycle lane.

  - **Class II Bicycle Lanes with Green-Colored Pavement:** Striped lanes for bicyclists that includes green-colored pavement, either as a corridor treatment along the length of a bike lane or in conflict areas.
  - **Class II Buffered Bicycle Lanes:** Bicycle lanes that includes a striped "buffer" area either between the bicycle lane and travel lane or between the bicycle lanes and parked cars.
- **Class III Bicycle Routes:** Class III bicycle routes are signed routes where people bicycling share a travel lane or shoulder with people driving. Because they are shared facilities, bicycle routes are typically appropriate only on quiet, low-speed streets with relatively low traffic volumes.

  Some bicycle routes include shared lane markings or "sharrows" that recommend proper bicycle positioning in the center of the travel lane and alert drivers that bicyclists may be present. Others include more robust traffic calming features to promote safety and comfort for people bicycling and are known as "bicycle boulevards."
- **Class IV Separated Bikeways:** Class IV separated bikeways are on-street bicycle facilities that are physically separated from motor vehicle traffic by a vertical element or barrier such as a curb, bollards, or vehicle parking aisle. They can allow for one- or two-way travel on one or both sides of the roadway.

As of 2021, the City's pedestrian and bicycle network consisted of 961.6 miles of sidewalks, 35.2 miles of Class I shared use paths, 91.6 miles of Class II bicycle lanes, 11.2 miles of Class III bicycle routes, and 0.5 miles of Class IV Separated bikeways (City of Elk Grove 2021b: 14, 18). Sidewalks are present throughout the residential subdivisions to the east of the Project site. There are no bicycle or pedestrian facilities along the undeveloped parcel frontages adjacent to Kammerer Road or Lotz Parkway. The City of Elk Grove BPTMP proposes Class II buffered bicycle lanes and Class I multi-use paths along Kammerer Road, south of the Project site. Additionally, the City of Elk Grove Improvement Standards require a five-foot bike lane on arterial roads.

3.13.3 Environmental Impacts and Mitigation Measures

This section describes the analysis techniques, assumptions, and results used to identify potential significant impacts of the Project on the transportation system. Transportation impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant or potentially significant.

METHODOLOGY

The following methodologies were used to evaluate impacts of the Project.

Conflicts with City Circulation System Programs and Policies

The analysis compares consistency of Project transportation operations with City programs and policies set forth in the City General Plan and CAP that address the roadway system and vehicle trip reductions. As detailed above, a project's effect on automobile delay is no longer a consideration when identifying a significant impact under CEQA; thus, consistency with City General Plan policies related to intersection and roadway performance are not included here. However, the Circulation Study is included as Appendix G and addresses the Project's impact on intersection and roadway performance and the associated consistency with City General Plan Policy MOB-1-3. The Circulation Study recommends the following contribution as a result of the traffic analysis it conducted:

- As defined by the City, the Project contributes to additional deficiency at the intersection of Kammerer Road and Promenade Parkway during the Cumulative (2050) scenario, which includes full Project buildout. As the Project is not deemed to create this deficiency (instead it is attributed to robust development south of Kammerer Road anticipated in the future TDM), no improvement or modification is required at this time.

Bicycle and Pedestrian Analysis

The bicycle and pedestrian analysis evaluates whether the Project disrupts existing or planned bicycle or pedestrian facilities or conflicts with adopted City non-auto plans, guidelines, policies, or standards.

Transit Analysis

The transit analysis evaluates whether the Project disrupts existing or planned transit facilities and services or conflicts with adopted City nonauto plans, guidelines, policies, or standards.

VMT Analysis

The City uses VMT per service population and total daily VMT as the basis for VMT analysis. The two VMT metrics and their intended application to project-level VMT analysis are described in Section 3.13.1, "Regulatory Setting."

The City aims to achieve a reduction in VMT and has developed a VMT analysis process for land use projects as described in the following four steps:

- Step 1 (Project Type) – Determine if the project is ministerial or discretionary or if the project is exempt from VMT analysis. Because of the type and operating characteristics of the Project, it exceeds the exemption limits. The Project is not exempt from VMT analysis.
- Step 2 (Project Location) – Determine if VMT analysis is necessary based on project location and determine the project's VMT limit by land use designation. The Project site is not located in a low-VMT area and is not eligible for prescreening based on project location.
- Step 3 (Analyze Project VMT) – Determine the project's VMT and compare it to the VMT limit by land use designation (from Step 2) to determine if VMT mitigation is necessary.
- Step 4 (Project VMT Limit Compliance) – Identify VMT reduction mitigation measures and the significance of VMT impacts with mitigation.

This analysis is based on the VMT Memo prepared by Kimley-Horn (Appendix G). Pursuant to Section 2 of the City's *Transportation Analysis Guidelines*, the Project requires a transportation analysis because of its unique land uses and operating characteristics. Additionally, the Project does not meet the City's VMT screening criteria. Therefore, a VMT analysis for the Project was calculated to determine the Project's VMT impacts.

The City's VMT thresholds were developed using the City's version of SACOG's SACSIM19 model, EGSIM20 (City of Elk Grove model). Because of the unique nature of the Project, the City of Elk Grove model does not include an analogous land use category that can reasonably represent the Project's trip generation and trip distribution characteristics. Additionally, the *Transportation Analysis Guidelines* and General Plan do not provide specific guidance on the use of an alternative VMT methodology that does not include the use of the Elk Grove model. Therefore, an off-model methodology was used to estimate Project VMT and threshold criterion. Consistent with the OPR guidance (OPR 2018), Project VMT was analyzed using a net change significance criterion comparing the regional VMT under existing conditions (operation of the Sacramento Zoo) to Project conditions (operation of the New Zoo). A significant impact would occur if the Project would result in a net increase in regional VMT when compared to the existing baseline.

The methodology and significance criterion used to evaluate the Project VMT are consistent with the methods described in Table 10, "VMT Methods," and Table 11, "VMT Metrics" (City of Elk Grove 2023b) of the *Transportation Analysis Guidelines* in that the analysis:

- forecasts VMT based on all the trips that have one end in the Project location,
- calculates trips based on the product of number of trips and their respective trip length,
- includes all Project trip types both external and internal to the City,
- provides a full accounting of trip length,
- reports total daily VMT for the purpose of assessing the Project against a total limit, and
- analyzes the short-term VMT impacts expected when the Project opens (Kimley-Horn 2023b: 2).

Average daily trip length, number of trips, and VMT for the Project were calculated by:

- developing a distribution of the share of an existing representative sample of annual zoo visitors and the distance from their home zip code to the Sacramento Zoo, calculated in 5-mile increments;
- redistributing existing zoo visitors to new home zip codes based on the 5-mile increment distribution and New Zoo Project location in Elk Grove;
- determining the driving distance between the new home zip code and the Project site for each patron and employee within the redistributed representative sample using TransCAD shortest path algorithms and directly proportioning visitors assigned to each zip code within each 5-mile bin based on the inverse distance from the visitors'/employees' new zip code to the Project location;
- using Sacramento Zoo trip length and annual visitor data to develop a relationship to predict the number of times a zoo patron would visit based on the distance they live from the zoo and using this regression equation to assign the number of zoo visits to each patron from the redistributed representative annual sample;
- scaling the total number of the estimated visits from the redistributed representative population to represent the average daily visits to the New Zoo holding the total number of annual visitors constant between the Sacramento Zoo and Project conditions;
- calculating the weighted average trip length of the visitors and employees; and
- multiplying twice the average trip length by the average daily visits to determine total daily VMT.

The difference in total daily VMT between existing conditions (operation of the existing Zoo in Land Park) and Project conditions (New Zoo in Elk Grove), under Phase 1 (opening year) and future phases (full buildout) was used to assess any impacts caused by the Project. See Appendix G for the detailed VMT methodology.

Transportation Hazards and Emergency Access Analysis

This analysis evaluates whether the Project operations could create transportation hazards or inadequate emergency access from Project site design. This analysis is based on the Circulation Study (Appendix G).

THRESHOLDS OF SIGNIFICANCE

The significance criteria used to evaluate Project impacts on transportation under CEQA are based on Appendix G of the State CEQA Guidelines, as well as thresholds of significance adopted in the City General Plan and the *Transportation Analysis Guidelines*. The following significance criteria were used to identify Project-specific impacts on the transportation and circulation system for the Project.

Bicycle and Pedestrian Facilities

An impact on bicycle and pedestrian facilities would be significant if implementation of the Project would:

- disrupt existing or planned bicycle facilities or conflict with adopted City nonauto plans, guidelines, policies, or standards;
- add trips to an existing transportation facility or service (e.g., bike path) that does not meet current design standards;
- degrade the Bicycle Streetscore LTS ("Bicycle LTS" [level of traffic stress] refers to the comfort associated with operating bicycles along roadways or the mental ease people experience while riding on them. Bicycle LTS criteria establish a "weakest link" approach because roadways are classified based on their segments with the highest LTS, assuming that only those bicyclists who are comfortable riding under the higher stress would travel on that road.);
- fail to provide accessible and safe pedestrian connections between buildings and to adjacent streets and facilities;
- disrupt existing or planned pedestrian facilities or conflict with adopted City nonauto plans, guidelines, policies, or standards;

- add trips to an existing transportation facility or service (e.g., bike path or sidewalk) that does not meet current design standards; or
- degrade the Pedestrian Streetscore LTS ("Pedestrian LTS" refers to the pedestrian comfort associated with a roadway or intersection).

Transit Facilities

An impact on transit facilities would be significant if implementation of the Project would:

- create demand for public transit services above the crush load capacity that is provided or planned or
- disrupt existing or planned transit facilities and services or conflict with adopted City non-auto plans, guidelines, policies, or standards.

VMT

An impact on VMT would be significant if implementation of the Project would:

- result in a net increase in total VMT under Phase 1 or future phase scenarios, as detailed in the "Methodology" section.

Transportation Hazards Related to a Geometric Design Feature or Incompatible Uses

An impact on transportation hazards related to a geometric design feature would be significant if implementation of the Project would:

- result in designs for on-site circulation, access, and parking areas that fail to meet City or industry standard design guidelines or
- fail to provide adequate accessibility for heavy vehicles on-site.

Emergency Access

An impact on emergency access would be significant if implementation of the Project would:

- result in inadequate emergency access.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: Result in Impacts on Bicycle, Pedestrian, and Transit Facilities and City Policies

The Project includes the implementation of off-site bicycle and pedestrian facilities along the Project frontage on Road B, on Lotz Parkway, and along the northern perimeter of the Project site consistent with the City of Elk Grove General Plan, BPTMP, and Improvement Standards. The Project would be designed to accommodate future transit service extensions. Additionally, the Project would not permanently alter the physical transportation network external to the Project site such that the bus stops serving these routes would be adversely affected. The impact on bicycle, pedestrian, and transit facilities would be **less than significant.**

Bicycle and Pedestrian Facilities

Various pedestrian and bicycle facilities would be constructed as part of the Project. The New Zoo would include several pedestrian paths to facilitate internal Project site circulation, including navigation through the parking areas. Designated pedestrian paths through and designated access points to the New Zoo would allow for efficient pedestrian circulation on the Project site. Additionally, the Project would include off-site pedestrian improvements. A new Class I bicycle and pedestrian trail would be located along the west side of Lotz Parkway from Shed C channel to Classical Way and then would follow Classical Way to the entrance of the New Zoo (see Figure 2-20, "Proposed Bicycle and Pedestrian Facilities"). Construction of these pedestrian pathways would allow pedestrian access to and throughout the Project site consistent with City standards.

The Project would provide multiple points of access. However, the main point of entry for guests visiting the New Zoo would be from Classical Way. Additional access to the Project site for employees would be provided by Kammerer Road, Lotz Parkway, and a new roadway, referred to as B Drive (see Figure 2-15, "New Zoo Perimeter Gates"). There are Class II bicycle facilities along the eastern end of Kammerer Road between Promenade Parkway and Lotz Parkway and along Bilby Road east of the Project site. Additionally, there is a Class I shared use path located on the eastern side of Lotz Parkway (Kimley-Horn 2023a: 40). These existing pathways would provide access to the Project site.

No bicycle or pedestrian facilities are present along the undeveloped parcel frontages adjacent to Kammerer Road or Lotz Parkway. However, as detailed in Chapter 2, "Project Description," the Project would include the implementation of a Class IV separated bikeway, as well as a separate pedestrian sidewalk along the east side of B Drive from the Shed C Channel to the New Zoo entrance. A Class I shared use path would be constructed along the west side of Lotz Parkway from Shed C channel to Classical Way and then would follow Classical Way to the entrance of the New Zoo. The proposed bicycle facilities would increase access to the site (see Figure 2-20, "Proposed Bicycle and Pedestrian Facilities"). Bicycle facility improvements would conform to applicable design standards in the BPTMP and City Improvement Standards, in compliance with the City Improved Standards Policy 4-18 (City of Elk Grove 2022a: 36). Additionally, consistent with the City General Plan Policies MOB-3-3 and MOB-4-2, Climate Action Plan Measure TACM-4, and Section 23.58.100 of the EGMC, the Project would provide 120 bicycle parking stalls and two bicycle parking areas on the site. These improvements would further promote bicycle access to the Project site.

The BPTMP proposes the construction of a Class I shared use path and a Class II buffered bicycle lane along the segment of Kammerer Road that extends from the SR 99 interchange to Bruceville Road (City of Elk Grove 2021b: Figure 12). The Project does not propose development of bicycle facilities along the Project site frontage of Kammerer Road; however, the 34-mile Capital SouthEast Connector Project is in progress and would provide a regional bicycle and pedestrian connection via Kammerer Road (City of Elk Grove 2021b). The Capital SouthEast Connector Project includes a bidirectional Class I shared use path along the northern extent of Kammerer Road and Class II bicycle lanes in both directions, consistent with the BPTMP (Caltrans 2023: 138). The Project would provide additional pedestrian and bicycle access to the site, and future development of pedestrian and bicycle facilities near the site is anticipated as part of the Capital SouthEast Connector Project. Therefore, the Project would not conflict with the planned bicycle facilities or adopted City active transportation plans, guidelines, policies, or standards.

Transit Service

SacRT operates Bus Route 110, which has stops approximately 0.45 mile east of the Project site. The Project would not permanently alter the physical transportation network external to the Project site such that the bus stops serving Route 110 would be adversely affected. Additionally, a light rail extension to the Project site has been conceptualized as part of previous City initiatives, although the connections would likely not be part of the transit network at the time of the New Zoo opening (Kimley-Horn 2023a: 40).

The design of the main entrance curb to the New Zoo could potentially facilitate the extension of public transit services to the Project site in the future by reserving sufficient right of way for bus access and pick up/drop off of passengers (Kimley-Horn 2023a: 41). The Project's general hours of operations are expected to be 9:00 a.m. to 9:00 p.m. The Project could increase demand for transit ridership during opening hours of the New Zoo. However, the uses associated with the New Zoo would not add a substantial number of riders during peak commute times when transit has higher ridership. Therefore, the SacRT bus system has sufficient capacity to accommodate the additional riders anticipated to be generated by the Project. Furthermore, according to the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA*, "when evaluating impacts to multimodal transportation networks, lead agencies generally should not treat the addition of new transit users as an adverse impact" (OPR 2018: 19).

Therefore, the Project would not create demand for public transit services above the crush load capacity of the transit system; would not disrupt existing or planned transit facilities and services; and would not conflict with adopted City transit plans, guidelines, policies, or standards.

Summary

The Project includes the construction of bicycle and pedestrian facilities along the Project frontage consistent with the City General Plan, BPTMP, and Improvement Standards. Additionally, the Project would not adversely affect any

existing or planned bicycle facilities or transit stops in the vicinity of the Project site, and it involves the implementation of a transit center along Kammerer Road south of the Project site. The impact on bicycle, pedestrian, and transit facilities would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.13-2: Result in an Exceedance of City of Elk Grove General Plan VMT Thresholds

Full buildout of the Project would result in an estimated net increase of 30,040 daily VMT when compared to VMT from the existing Sacramento Zoo in Land Park. The net increase in VMT would result in a significant impact as it could conflict with the Citywide cumulative limit of 8,039,802 VMT under General Plan Policy MOB-1-1. Implementation of Mitigation Measures 3.13-2a and 3.13-2b would require the New Zoo to subsidize employee transit and provide a local transit stop. However, implementation of these mitigation measures would not reduce the total daily VMT to below VMT from the existing Sacramento Zoo. Therefore, the Project's impact to VMT with would be **significant and unavoidable.**

Upon opening of the New Zoo, the exiting Sacramento Zoo would close, and animals would be transported to the New Zoo while others would be transported to other Association of Zoos and Aquariums (AZA) accredited zoos. CEQA Guidelines Section 15064.3(b) identifies four criteria for analyzing the transportation impacts of a project. Relevant to calculating trips is Section 15064.3, subdivision (a), which states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks (OPR 2018). Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT), but need not be. Therefore, larger on-road vehicles that would be used for the transport of animals and do not fall within the categories of cars and light trucks do not need to be considered in calculations of trips or VMT. Even so, these types of trips would be intermittent and infrequent nature and would only occur once as the animals are transferred from the existing Sacramento Zoo upon its closure. Additionally, the number of new operational vehicle trips and trip lengths associated with animal transport cannot be precisely predicted at this time nor are they expected to substantially contribute to the Project's overall operational VMT.

Furthermore, SB 743's intention is to better promote Statewide policies that combat climate change by reducing greenhouse gas emissions and particulates; encourage infill development and a diversity of land uses instead of sprawl; and promote multi-modal transportation networks by reducing the time and cost for projects that allow California residents to drive less. Thus, for the reasons stated above, and because trips and VMT associated with the transport of animals between the Sacramento Zoo and the New Zoo or other AZA-accredited zoos does not meet the overall purpose of SB 743 which intends to reduce driving from passenger vehicles, it is not evaluated herein.

Average daily visitor, average daily employee, and total daily VMT for full buildout of the Project are shown in Table 3.13-3. As the New Zoo expands, employment would increase from approximately 150 employees to a total of 300 employees at full buildout. The addition of employees would result in an increase in daily employee VMT of 3,866. Additionally, it can be assumed that a proportional increase in attendance would follow during future phases and that daily visitor VMT would increase by 26,174 as compared to VMT to the existing Sacramento Zoo in Land Park.

Table 3.13-3 Existing Zoo and Project Future Phases Daily VMT

Scenario	Daily Visitor VMT	Daily Employee VMT	Total Daily VMT
Existing Sacramento Zoo	10,686	3,485	14,171
New Zoo Full Buildout	36,860	7,351	44,211
Expected Increase in Net VMT	**26,174**	**3,866**	**30,040**

Note: VMT = vehicle miles traveled

Source: Kimley-Horn 2023b.

As shown in Table 3.13-3, the estimated net increase of total daily VMT resulting from implementation of future phases would be 30,040VMT, or a 212-percent increase of net total daily VMT as compared to VMT from the Sacramento Zoo (existing conditions). As described in the "Methodology" section, an increase in VMT over existing conditions would result in a potential impact and could conflict with the Citywide cumulative limit of 8,039,802 VMT under General Plan Policy MOB-1-1. The Project would be required to implement Mitigation Measures 3.13-2a and 3.13-2b to reduce Project VMT. However, required mitigation would not be sufficient to reduce net daily VMT below existing conditions. The Project would result in an increase of net daily VMT with implementation of Mitigation Measures 3.13-2a and 3.13-2b, and the impact would be **significant and unavoidable**.

Mitigation Measures

Mitigation Measure 3.13-2a: Subsidize Transit for New Zoo Employees

The New Zoo shall provide a subsidized or discounted transit program to provide free transit passes (or reimburse for transit passes) for employees when requested by the employee.

Mitigation Measure 3.13-2b: Provide a Local Transit Stop:

The New Zoo, in coordination with the City and SacRT, shall construct a bus stop within the immediate vicinity of the Project site, allowing the extension of SacRT bus services to the Project. The Project applicant shall coordinate with SacRT to ensure that the transit stop is located and designed in accordance with applicable design and safety standards. The applicant shall coordinate with SacRT on the implementation of the service extension.

Significance after Mitigation

Table 3.13-4 presents the most recent (2021) California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing GHG Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (Handbook) measures for reducing greenhouse gas emissions within the transportation sector. Most of the measures quantified in the CAPCOA Handbook aim to reduce VMT and encourage mode shifts from single-occupancy vehicles to shared (e.g., transit) or active modes of transportation (e.g., bicycle) (CAPCOA 2021). As shown in Table 3.13-4, all transportation measures that are applicable or feasible given the implementation scale, nature of the Project, and/or limited jurisdictional authority of the Project applicant to implement are required and included as mitigation measures.

Table 3.13-4 Transportation Sector Measures to Reduce VMT

	VMT Reduction Measure	Maximum Potential VMT Reduction	Feasible/Applicable to the Project?	Notes
T-1	Increase Residential Density	30% from project VMT	NA	The Project does not include residential uses.
T-2	Increase Job Density	30% from project VMT	NA	This measure is a communitywide strategy and is not applicable.
T-3	Provide Transit-Oriented Development	31% from project VMT	NA	The Project is not a residential or office project.
T-4	Integrate Affordable and Below Market Rate Housing	28.6% from project/site multifamily residential VMT	NA	The Project does not include residential uses.
T-5	Implement Commute Trip Reduction Program (Voluntary)	4% from project/site employee commute VMT	Yes	See Mitigation Measure 3.13-2a.
T-6	Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring)	26% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]
T-7	Implement Commute Trip Reduction Marketing	4% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]

	VMT Reduction Measure	Maximum Potential VMT Reduction	Feasible/Applicable to the Project?	Notes
T-8	Provide Ridesharing Program	8% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]
T-9	Implement Subsidized or Discounted Transit Program	5.5% from employee/resident	Yes	See Mitigation Measure 3.13-2a.
T-10	Provide End-of-Trip Bicycle Facilities	4.4% from project/site employee commute VMT	Yes	End-of-Trip bicycle facilities would be provided as part of the Project. See Chapter 2, "Project Description."
T-11	Provide Employer-Sponsored Vanpool	20.4% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]
T-12	Price Workplace Parking	20% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]
T-13	Implement Employee Parking Cash-Out	12% from project/site employee commute VMT	No	The Project's number of employees (i.e., up to 300 employees, including seasonal) too small for implementation.[1]
T-14	Provide Electric Vehicle Charging Infrastructure	—	NA	This measure does not affect VMT.
T-15	Limit Residential Parking Supply	13.7% from residences' VMT	NA	The Project does not include residential uses.
T-16	Unbundle Residential Parking Costs from Property Cost	15.7% from project VMT	NA	The Project does not include residential uses.
T-17	Improve Street Connectivity	30% from vehicle travel in the plan/community	Yes	The Project would include improvements to Lotz Parkway, Kammerer Road, and Classical Drive, improving street connectivity. See Chapter 2, "Project Description."
T-18	Provide Pedestrian Network Improvement	6.4% from vehicle travel in the plan/community	Yes	Pedestrian facility improvements would be provided as part of the Project. See Chapter 2, "Project Description."
T-19-A	Construct or Improve Bike Facility	0.8% VMT from vehicles on parallel roadways	Yes	Bicycle facility improvements would be provided as part of the Project. See Chapter 2, "Project Description."
T-19-B	Construct or Improve Bike Boulevard	0.2% from vehicles on roadway	Yes	Bicycle facility improvements would be provided as part of the Project. See Chapter 2, "Project Description."
T-20	Expand Bikeway Network	0.5% from vehicles on roadway	Yes	Bicycle facility improvements would be provided as part of the Project. See Chapter 2, "Project Description."
T-21-A	Implement Conventional Carshare Program	0.15% from vehicle travel in the plan/community	No	This is a plan/communitywide strategy and is not feasible.
T-21-B	Implement Electric Carshare Program	VMT reduction not quantified—see CAPCOA handbook	No	This is a plan/communitywide strategy and is not feasible.
T-22-A	Implement Pedal (Non-Electric) Bikeshare Program	0.2% from vehicle travel in the plan/community	No	This is a plan/communitywide strategy and is not feasible.

	VMT Reduction Measure	Maximum Potential VMT Reduction	Feasible/Applicable to the Project?	Notes
T-22-B	Implement Electric Bikeshare Program	0.06% from vehicle travel in the plan/community	No	This is a plan/communitywide strategy and is not feasible.
T-22-C	Implement Scootershare Program	0.07% from vehicle travel in the plan/community	No	This is a plan/communitywide strategy and is not feasible.
T-23	Provide Community-Based Travel Planning	2.3% from vehicle travel in the plan/community	No	The Project does not include residential uses. This measure applies to residences.
T-24	Implement Market Price Public Parking (On-Street)	30% from vehicle travel in the plan/community	No	This is a plan/communitywide strategy and is not feasible.
T-25	Extend Transit Network Coverage or Hours	4.6% from vehicle travel in the plan/community	No	The City does not have jurisdiction over the operation of transit service.
T-26	Increase Transit Service Frequency	11.3% from vehicle travel in the plan/community	No	The City does not have jurisdiction over the operation of transit service.
T-27	Implement Transit-Supportive Roadway Treatments	0.6% from vehicle travel in the plan/community	Yes	A transit center would be provided as part of the Project. See Chapter 2, "Project Description." See Mitigation Measure 3.13-2b.
T-28	Provide Bus Rapid Transit	13.8% from vehicle travel in the plan/community	No	The City does not have jurisdiction over the operation of transit service.
T-29	Reduce Transit Fares	1.2% from vehicle travel in the plan/community	No	The City does not have jurisdiction over the operation of transit service.
T-30	Use Cleaner-Fuel Vehicles	—	No	This measure does not affect VMT.
T-31[2]	Increase Vehicle Occupancy of Visitors	11.6% from vehicle travel to the site	No	This measure does not have a feasible method for enforcement.

Notes: NA = not applicable; VMT = vehicle miles traveled

[1] These commute reduction measures would not be feasible for the Project due to the number of employees proposed for the New Zoo, geographic distribution of employee residences, and employee schedules. The 300 employees for the New Zoo would reside throughout the Sacramento region and would not be concentrated in a single area that would be advantageous for carpooling or other similar measures. Employee schedules would not be conducive to commute reduction measures because employees have varied work schedules depending on their role at the New Zoo. For example, some employees would have an earlier morning shift, others would have a mid-day shift, and some would work overnight at the site.

[2] Although not a CAPCPA measure T-31 is included in to show infeasibility of increasing vehicle occupancy to reduce VMT. This measure would require either preferred parking for carpooling or, in the event of a paid-parking system, a free or reduced rate for carpooling. This measure would not be feasible as it would either require some form of documentation to verify that passengers in a vehicle were from multiple households (which would not be possible in the case of a vehicle with one parent chaperone and children from multiple households) or would impact a revenue opportunity to support construction of the Project.

Source: CAPCOA 2021.

A description of the individual effects of each mitigation measure's impact on VMT reduction is provided below. Although the information on the potential reduction in VMT from each measure is provided, it should be noted that the VMT-reducing benefits of implementing each measure are considered the maximum VMT benefit and are not additive when multiple measures are applied. There may be diminishing returns when certain measures are implemented together to reduce VMT. For each measure applied, it is likely that a lesser effect would be observed (CAPCOA 2021: 36). VMT reduction measures listed in Table 3.13-4 that are included as part of the Project design have been incorporated into the Project daily VMT.

- Mitigation Measure 3.13-2a: Subsidize Transit for New Zoo Employees for New Zoo Employees: The implementation of subsidized or discounted transit would result in an estimated up to 5.5-percent employee VMT reduction. Reducing the out-of-pocket costs for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT.

- **Mitigation Measure 3.13-2b: Provide a Local Transit Stop**: The implementation of a bus stop, in combination with incentives to travel to the Project site by transit, such as a reduced cost to use transit, would potentially reduce the number of vehicle trips to and from the Project site. A 10-percent nonauto mode split would result in a 7.6-percent reduction in Project VMT, which would reduce the identified significant impact to less than significant under opening year conditions but would not reduce the Project VMT impact under the full buildout scenario (Kimley-Horn 2023b: 6).

The implementation of Mitigation Measures 3.13-2a and 3.13-2b would reduce average daily visitor VMT and employee VMT, which would reduce the total daily VMT generated by the Project. However, there is no additional feasible mitigation available to reduce net Project VMT by 162 percent to below existing VMT conditions from the existing Sacramento Zoo. Although the addition of a local transit stop within the immediate vicinity of the Project site, in combination with reduced transit fares, could result in an additional 6-percent reduction in Project VMT, it cannot be guaranteed that maximum reductions of VMT would be reached with implementation of the mitigation. Therefore, even with the implementation of Mitigation Measures 3.13-2a and 3.13-2b, the impact on VMT would be **significant and unavoidable**.

Impact 3.13-3: Substantially Increase Hazards Due to a Geometric Design Feature or Incompatible Uses

The Project would involve the construction and operation of a zoological park and associated off-site roadway and circulation improvements. It would be subject to, and constructed in accordance with, applicable roadway design and safety guidelines. Because the Project could increase safety hazards related to increased queueing and vehicular activity during the Project's opening month**,** implementation of Mitigation Measure 3.13-3 would require the Project applicant to develop and implement a traffic management plan to address increased queuing anticipated during the New Zoo's opening month and special events and to optimize safe and efficient travel for pedestrians, bicyclists, and vehicles. Implementation of this mitigation measure would reduce this impact to **less than significant**.

Construction

The effects of Project construction as they relate to transportation safety hazards would be temporary. Project construction activities are expected to occur in phases over approximately the next 20 years. Construction of Phase 1 is anticipated to begin in summer 2025 and last approximately 36 months. As described in Chapter 2, "Project Description," Project construction would generally occur 5–6 days per week Monday through Saturday from 7:00 a.m. to 7:00 p.m. to comply with Sections 6.32.100.E and 6.32.140.A of the EGMC. Therefore, during this time, construction activities, such as the implementation of off-site roadway improvements and the movement of heavy vehicles in the vicinity of the Project site, could result in increased transportation hazards.

The Project would include the construction of a new two-lane street, referred to as B Drive, that would extend south from the Souza Dairy project across Shed C toward Kammerer Road. The Project would also involve several intersection improvements along Lotz Parkway, including the conversion of the intersection of Lotz Parkway and Classical Way to a roundabout, the construction of an intersection and signal at Lotz Parkway and Overture Drive to add the service driveway into the Project site, modification of the intersection and signal at Lotz Parkway and Bilby Road, and modification of Lotz Parkway to add an unprotected left-turn movement into the Project site just south of the Shed C crossing. The Project would also include partial improvements at the intersection of B Drive and Kammerer Road, allowing for right-turn access to and from Kammerer Road. Intersection improvements and modifications during Project construction would have the potential to increase hazards related to the movement of construction equipment and/or potential lane closures, which could result in conflicts between vehicles and alternative modes of transportation.

Although there is potential for increased transportation safety concerns during Project construction, intersection and driveway improvements would comply with applicable City of Elk Grove Standard Construction Specifications (2022) and Improvement Standards. Additionally, the Project would be required to meet all City requirements related to construction activities, including provisions set forth in the City Standard Construction Specifications. Section 6-13, "Public Safety and Traffic Control," of the Standard Construction Specifications identifies policies and safety standards

that are the responsibility of the Project contractor, including maintaining emergency access, safe movement of construction equipment entering and leaving the Project site, and traffic controls and signage during construction. Implementation of these construction practices would ensure safe movement of automobiles and pedestrians during construction, reducing traffic construction hazards. Additionally, Section 6-14.02 of the Standard Construction Specifications, "Traffic Control Plans," requires contractors to develop and submit a traffic control plan to the City for review before the start of Project construction to demonstrate that appropriate traffic control measures would be used for vehicles, bicyclists, and pedestrians affected by construction (City of Elk Grove 2022b: 55). Therefore, the Project is not anticipated to substantially increase hazards during construction activities. This impact would be **less than significant**.

Operations

Access to the Project site would be provided from Kammerer Road, Lotz Parkway, Classical Way, and B Drive. The main point of entry for guests would be provided from both Classical Way and B Drive. Employee access to the Project site would be provided via Lotz Parkway.

All roadway and access improvements associated with development of the Project would be subject to, and constructed in accordance with, applicable City and industry standard roadway design and safety guidelines. Additionally, all intersections and driveways along existing and proposed roadways would be required to provide adequate sight distance in accordance with City Improvement Standards Section 4-8. Furthermore, the Project would be subject to City review processes, which would ensure that the Project design would comply with all applicable design standards related to transportation safety. Any off-site improvements associated with the Project would be subject to review by City staff and required to meet all applicable roadway design standards.

The Project is anticipated to result in peak visitation during the opening month and large events. Modest amounts of queueing are anticipated during these times. Spillback beyond the provided queuing storage during opening weekend and opening month is anticipated and may increase safety hazards for guests navigating in and around the Project site (Kimley-Horn 2023a: 36). Queueing impacts are anticipated to include spillback from the main entrance gates onto Classical Way and from Classical Way through the adjacent Lotz Parkway intersections (Kimley-Horn 2023a: 38). Queueing that extends into surrounding intersections would disrupt pedestrian, bicycle, and vehicular movement and potentially increase conflicts between vehicles, bicyclists, and pedestrians. Additionally, drivers may use nearby residential streets for parking and alternative circulation routes, increasing the opportunity for transportation conflicts in the neighborhoods surrounding the Project site. Mitigation Measure 3-13.3 would require preparation and implementation of a traffic management plan for the opening month and special events to facilitate vehicular navigation in the vicinity of the Project site and optimize safe and efficient circulation for pedestrians, bicyclists, and vehicles. The City would review the traffic management plans to ensure that safe movement is maintained for all modes of transportation during the opening month and special events. This impact would be **less than significant**.

Summary

The Project would be required to follow all City and industrywide safety standards and regulations related to construction activities, including those specified in the City of Elk Grove Standard Construction Specifications Manual. Additionally, the Project contractor would be required to prepare a traffic control plan that would be approved by the City before construction to reduce transportation-related hazards during construction. Project design would be required to meet local design standards, and Project plans would be subject to review by City staff to ensure that the applicable design standards and regulations are met to minimize transportation hazards during operations. Although the Project would be designed to meet City standards, the Project could result in substantial queueing in the vicinity of the Project site during the opening month and large events. Substantial queuing during these events could disrupt bicycle, pedestrian, and vehicular movement, increasing the potential for safety hazards. Mitigation Measure 3.13-3 would require preparation and implementation of traffic management plans to reduce transportation hazards during events. This impact would be **less than significant**.

Mitigation Measures

Mitigation Measure 3.13-3: Prepare and Implement Traffic Management Plans for the Opening Month and Special Events

The New Zoo shall be responsible for preparing a traffic management plan (TMP) and providing it to the City for approval by the Public Works Director (or their designee) before opening day/weekend or other special events occurring at the New Zoo that may result in queuing spillover. The TMP shall include specific interventions for traffic conditions associated with the New Zoo opening and any other special events determined to warrant a TMP. The New Zoo shall be responsible for implementing the interventions to which the Public Works Director has agreed. All traffic controls shall be installed in accordance with the California Manual on Uniform Traffic Control Devices and applicable City regulations. At a minimum, the TMP shall include the following strategies:

- Flaggers shall be provided to control traffic when necessary or requested by the City in compliance with Section 6-13.06 of the City's Standard Construction Specifications 2022 or latest equivalent (City of Elk Grove 2022b: 52).
- Changeable Message Signs shall display one or more alternating messages along likely patron access routes to broadcast up-to-date information regarding desired routing. The signs shall be in place no less than 72 hours before the date of the event or 5 business days in advance of a detour and shall remain in place for the duration of the event in compliance with Section 12-3.02 of the City's Standard Construction Specifications 2022 or latest equivalent (City of Elk Grove 2022b: 103).
- Wayfinding strategies, including permanent and temporary signs, shall be implemented to provide directions on access to the New Zoo for pedestrians, bicyclists, and vehicles.
- Emergency access shall be maintained at all times, and emergency apparatus routes during the opening month and special events shall be reviewed by the City's emergency service department for approval.

Significance after Mitigation

Less than significant.

Impact 3.13-4: Result in Inadequate Emergency Access

The Project would be required to meet standards and regulations identified in the 2022 California Fire Code as adopted by the City of Elk Grove, including provisions related to maintaining emergency access during construction and operations. Additionally, the Project design would be subject to review by City emergency services and responsible agencies, ensuring that the Project would be designed to meet all applicable emergency access design standards. Implementation of Mitigation Measure 3.13-3 to address substantial queuing during the opening month and special events would reduce this impact to **less than significant.**

Construction

As discussed for Impact 3.13-3, pursuant to Section 6-14.02 of the EGMC, the Project contractor would be required to submit a traffic control plan to the City that demonstrates safe traffic handling for all modes of transportation during construction activities. Additionally, the contractor would be required to follow all safety protocols during construction as detailed in the City of Elk Grove Standard Construction Specifications. This would include Section 6-13.03, which states that uninterrupted passage of emergency vehicles through the work zone shall be provided regardless of the controlled traffic conditions in place at the time (City of Elk Grove 2022b: 51). Therefore, the Project is not anticipated to result in inadequate emergency access during construction.

Operations

The Project site would have six vehicle gates for entry into the New Zoo facilities. Gate 1, located along Lotz Parkway at the northeast corner of the Project site, would serve as an emergency entrance/exit. Additionally, the proposed drive aisle around the perimeter of the New Zoo, which would be used for deliveries and distribution (see Figure 2-16), would allow emergency vehicles further access to the site. As detailed in the discussion of Impact 3.13-3, the Project would be designed in accordance with City design standards established in the Improvement Standards

Manual. Additionally, the Project would be required to comply with the 2022 California Fire Code as adopted by reference in the EGMC, Section 17.04.010. Appendix D of the 2022 California Fire Code provides additional requirements for fire apparatus access roads, including minimum dimensions to allow for adequate access and turning radii for emergency vehicles accessing the Project site during operations. Additionally, the Project would be subject to review by the City's emergency services and responsible agencies, ensuring that the Project is equipped to provide adequate access for emergency responders. Furthermore, Mitigation Measure 3.13-3, detailed above, would require the development and implementation of a TMP related to increased queuing anticipated during the New Zoo's opening month and special events. The TMP would require that sufficient emergency access be provided at all times and be approved by the City. Therefore, implementing the Project would not result in inadequate emergency access during operations.

Summary

The Project would include a designated emergency entrance/exit and would be required to follow all State and City standards and regulations to ensure that any potential impacts on emergency vehicles are minimized during construction and maintained during operations. Additionally, Mitigation Measure 3.13-3 would require that emergency access be provided during the New Zoo's opening month and during special events, when increased queuing is anticipated. Therefore, implementing the Project would not result in inadequate emergency access, and the impact would be **less than significant**.

Mitigation Measures

Mitigation Measure 3.13-4

Implement Mitigation Measure 3.13-3 - Prepare and Implement Traffic Management Plans for the Opening Month and Special Events.

Significance after Mitigation

Less than significant.