# ATTACHMENT H

## TRANSPORTATION IMPACT STUDY

# City of Roseville Soccer Complex

## Transportation Impact Study

Prepared for:
The City of Roseville

June 2022

RS22-4167

FEHR PEERS

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# 1. Introduction

## Purpose

This study describes existing transportation conditions (environmental and regulatory) and analyzes the potential of the proposed City of Roseville Soccer Complex project (the project) to affect the surrounding transportation environment in accordance with current State CEQA Guidelines. The analysis evaluates potential impacts to vehicle miles traveled (VMT) and transit, bicycle, and pedestrian components of the transportation system that may result from the proposed project. Where necessary and feasible, mitigation measures are identified to reduce these impacts.

Additionally, this study presents an evaluation of the project's effects on peak hour traffic operations at nearby study intersections (see Chapter 7). This analysis is presented separately from the transportation impact analysis in accordance with the State CEQA Guidelines, which no longer permit the use of project effects on automobile delay for the purposes of identifying environmental impacts for land use projects. This analysis has been prepared for two primary reasons. First, it directly addresses the proposed project's consistency with City of Roseville General Plan policies related to peak hour traffic operations, including automobile delay and level of service (LOS). Second, it informs an evaluation of project site access and circulation.

## Project Description

**Figure 1** shows the project location. The project would be located within the West Roseville Specific Plan area along the east side of Westbrook Boulevard, south of Blue Oaks Boulevard and north of Pleasant Grove Boulevard. The Pleasant Grove Wastewater Treatment Plant borders the project site to the east. The project site is currently vacant.

Buildout of the project would consist of ten multi-sport fields, two restroom buildings, one concession building, picnic shelters, a 1-acre accessible playground, and a maintenance yard. A total of 610 off-street parking spaces would be provided on the project site, with 360 parking spaces provided in the north parking lot and 250 parking spaces provided in the south parking lot.

Refer to Chapter 4 for a discussion of the project's expected operations during weekdays and on weekends.

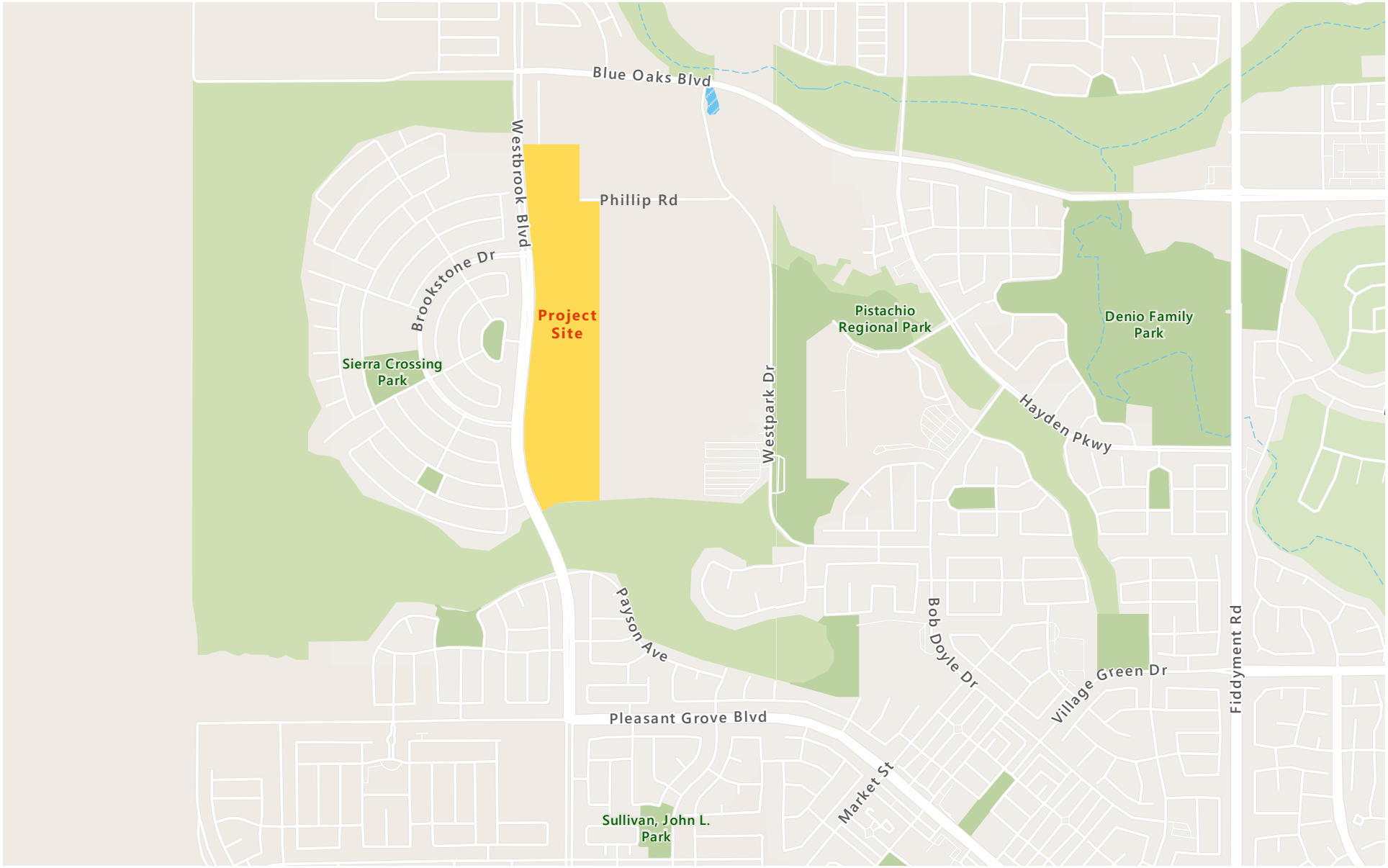



Figure 1

Project Location

# 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 as of April 2022.

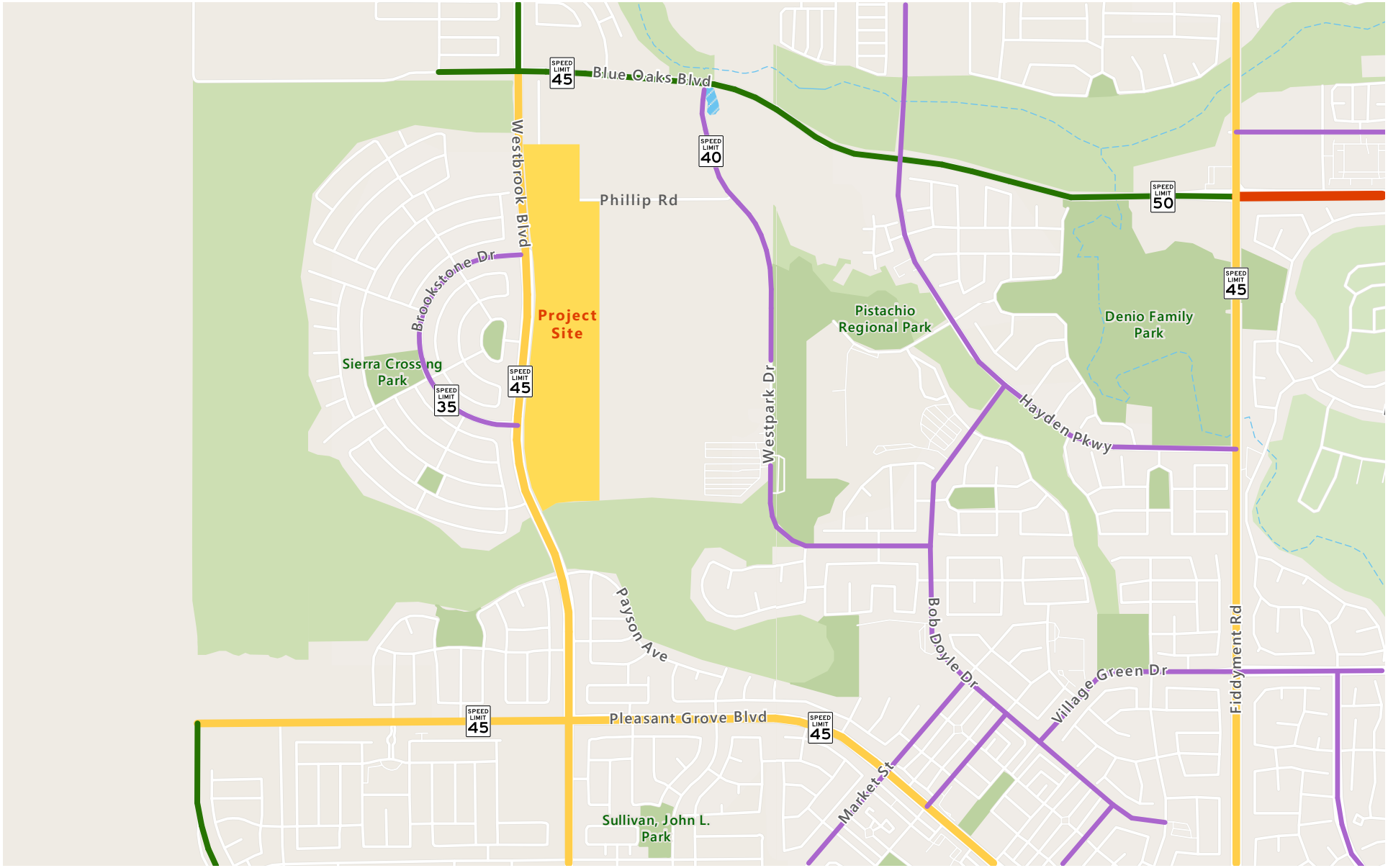
## Roadway System

**Figure 2** illustrates the existing roadway network in the study area including the roadway classifications, number of travel lanes, and posted speed limits. The project site is located within the West Roseville Specific Plan area, which is actively being developed. As a result, the current roadway network is partially built but not fully connected. The following key roadways would serve the project site:

- **Westbrook Boulevard** is a north-south arterial that currently begins a short distance north of Blue Oaks Boulevard and extends for a distance of 2.2 miles to its existing southern terminus south of Pleasant Grove Boulevard. The constructed portion of the roadway has two lanes in each direction, separated by a landscaped median. The posted speed limit is 40 miles per hour (mph). Westbrook Boulevard is planned for widening to six lanes and will ultimately extend from Baseline Road on the south to Sunset Boulevard West on the north (within unincorporated Placer County).
- **Blue Oaks Boulevard** is an east-west major arterial that connects the Cities of Roseville and Rocklin. It begins a short distance west of Westbrook Boulevard in west Roseville and extends 6.5 miles, terminating at Sunset Boulevard in Rocklin. West of Fiddyment Road, it has one lane in each direction separated by a striped median. Posted speed limits on this segment range from 45 to 50 mph. East of Fiddyment Road, it is a six-lane median-divided arterial with a posted speed limit of 45 mph. The State Route (SR) 65/Blue Oaks Boulevard interchange is situated about five miles east of the project site. From this interchange, SR 65 extends north towards the City of Lincoln and south towards Interstate 80. Near the project site, Blue Oaks Boulevard is planned for widening to six lanes.
- **Pleasant Grove Boulevard** is an east-west minor arterial that connects the Cities of Roseville and Rocklin. It begins a short distance west of Westbrook Boulevard in west Roseville and extends east into Rocklin, where it transitions into Park Avenue at the city limits east of Highland Park Drive. Near the project site, it is a four-lane median-divided arterial with a posted speed limit of 45 mph.
- **Phillip Road** is a two-lane roadway that begins at Westpark Drive and extends west into unincorporated Placer County. Phillip Road extends east-west between the project site and Westpark Drive and north-south between the project site and Westbrook Boulevard. The north-south segment of Phillip Road parallels Westbrook Boulevard and measures approximately 14

feet wide. The east-west segment of Phillip Road measures approximately 20 feet wide and primarily serves the Pleasant Grove Wastewater Treatment Plant and the Roseville Energy Park. Near the project site, Phillip Road has unpaved shoulders and lacks sidewalks. Phillip Road is discontinuous where it approaches the Blue Oaks Boulevard/Westbrook Boulevard intersection.

Refer to Chapter 7 (Traffic Operations Analysis) for an analysis of the existing peak hour operations of these roadway facilities.




Roadway Classification (Number of Lanes)

- Arterial (6 lanes)
- Arterial (4 lanes)
- Arterial (2 lanes)
- Collector (2 lanes)

Figure 2

## Existing Roadway System

## Bicycle Facilities

Bicycle facilities are typically categorized in the following classifications:

- **Class I Multi-Use Off-Street Paths** (also known as shared-use paths) are paved trails that are separated from roadways and allow for shared use by both cyclists and pedestrians.
- **Class II On-Street Bike Lanes** are designated for use by bicycles by striping, pavement legends, and signs.
- **Class III On-Street Bike Routes** are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width for bicyclists.
- **Class IV Separated Bikeways** (also known as protected bikeways or cycle tracks) are separated bikeways improve upon buffered bike lanes by providing vertical separation between bike lanes and the adjacent travel lanes. Vertical separation can be provided with concrete curb and gutter, bollards or on-street parking.

**Figure 3** displays existing bicycle facilities within the project vicinity. Class II bike lanes are present on Westbrook Boulevard (including along the Westbrook Boulevard project site frontage), Blue Oaks Boulevard, and Pleasant Grove Boulevard. A Class I shared-use path connects the Brookstone neighborhood west of the project site with neighborhoods to the south, Nichols Park, and Chilton Middle School.

## Pedestrian Facilities

At present, given that the study area is partially built out, the existing pedestrian network is intermittent. Generally, sidewalks are present along roadway frontages on which development has occurred, including the westerly Westbrook Boulevard frontage from Octave Drive north to approximately 1,000 feet south of Blue Oaks Boulevard as well as on internal roadways within the Brookstone neighborhood.

Currently, sidewalks are not present along the project site Westbrook Boulevard frontage, with the exception of the easterly side of both the northerly and southerly Westbrook Boulevard/Brookstone Drive intersections. Additionally, sidewalks are not present on either side of Phillip Road between Westbrook Boulevard and Westpark Drive or on the southerly side of Blue Oaks Boulevard between Westbrook Boulevard and Hayden Parkway.

Blue Oaks Boulevard between Westbrook Boulevard and Fiddyment Road is a planned six-lane arterial. As of April 2022, the southerly half section has been constructed from Fiddyment Road westerly to beyond Hayden Parkway. From there, only the northerly half section has been constructed. This explains the lack of continuous sidewalks on both sides of the street (i.e., as they would be “throw-away” if built on the south side of the street west of Westpark Drive, for instance).

Marked crosswalks are present on the north, south, and west legs of both the northerly and southerly Westbrook Boulevard/Brookstone Drive all-way stop-controlled intersections.

## Transit Service and Facilities

Roseville Transit, operated by the City of Roseville, provides fixed route bus, dial-a-ride, and paratransit services throughout the City. Fixed-route bus service is not currently provided within the project site vicinity. The nearest bus stop is located on Pleasant Grove Boulevard at Market Street (Route M), which is approximately 1.5 miles southeast of the project site. Roadways within the study area have been designed with bus turnouts to accommodate future fixed-route bus service. Farside bus turnouts are currently present on both northbound and southbound Westbrook Boulevard at Brookstone Drive South.

Roseville Transit dial-a-ride service provides point-to-point service to locations within Roseville city limits, including the project site. The service is available to the general public. A single-ride fare for the general public is $3.75. Passengers may also purchase 10-ride passes or discount fares for eligible passengers. Rides can be reserved between one and fourteen days in advance of the ride.

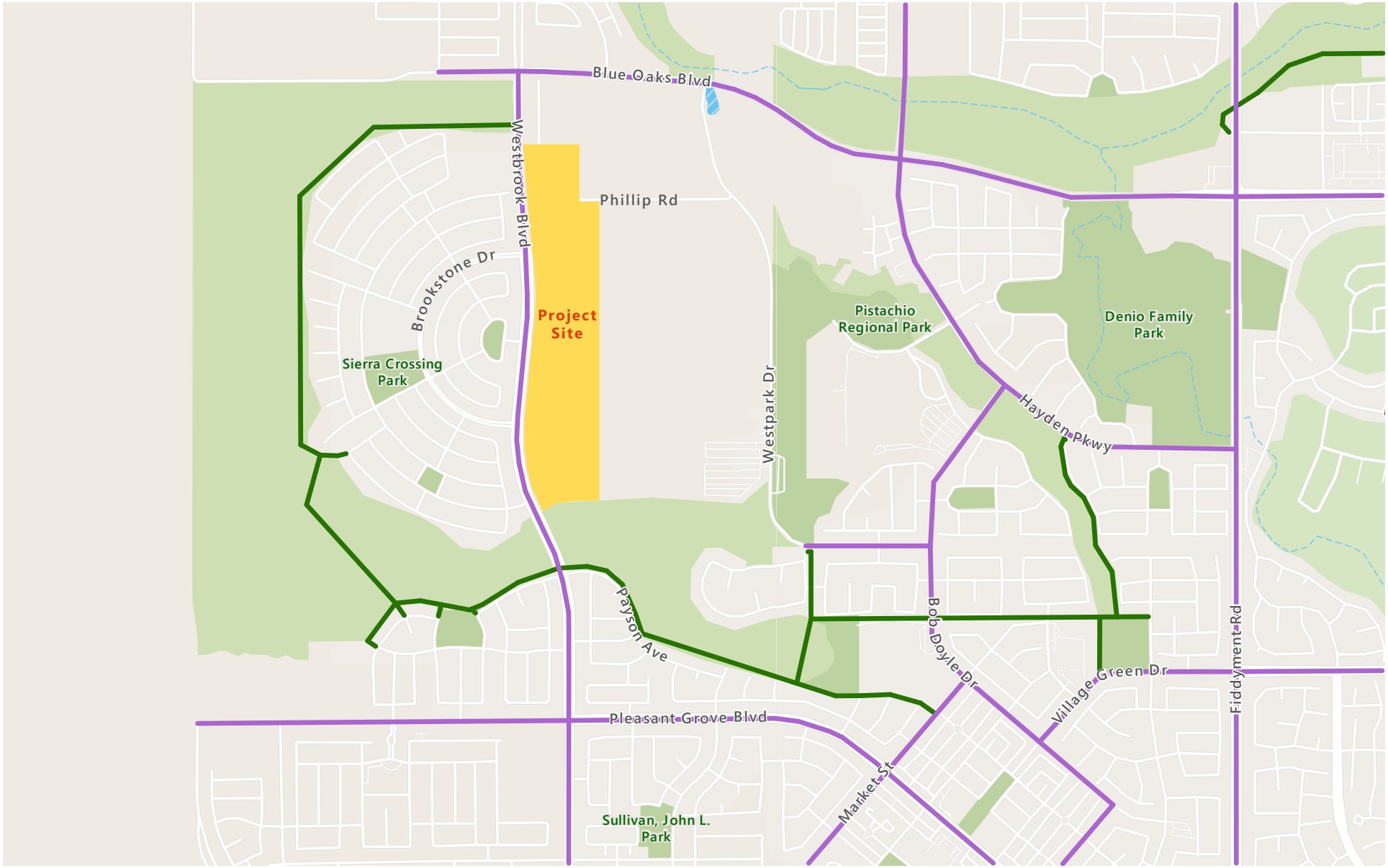



Figure 3

## Existing Bicycle Facilities

# 3. Regulatory Setting

Existing transportation policies, laws, and regulations that would apply to the project are summarized below. This information provides a context for the impact discussion related to the project's consistency with applicable regulatory conditions and development of significance criteria (presented in Chapter 5) for evaluating project impacts.

## State

### California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS). Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the SHS would need to be approved by Caltrans. The following Caltrans planning documents emphasize the State of California's focus on transportation infrastructure that supports mobility choice through multimodal options, smart growth, and efficient development.

- *Smart Mobility 2010: A Call to Action for the New Decade* (Caltrans, 2010a).
- *Complete Streets Implementation Action Plan* (Caltrans, 2010b).
- *California Transportation Plan 2040* (Caltrans, 2016a).
- *Strategic Management Plan 2015-2020—2019 Update* (Caltrans, 2019a).

Caltrans' Local Development – Intergovernmental Review Program (LD-IGR) provides guidance on the evaluation of traffic impacts to State highway facilities. The *Vehicle Miles Traveled-Focused Transportation Impact Study Guide* (Caltrans, May 20, 2020) provides guidance on the evaluation of traffic impacts to State highway facilities. This study guide provides guidance to Caltrans Districts, lead agencies, tribal governments, developers, and consultants based on changes to the agency's review process for transportation analysis of land use projects and plans under the updated State CEQA Guidelines. The guide outlines how Caltrans will review land use projects with a focus on supporting state land use goals, state planning priorities, and GHG emission reduction goals. It also identifies the possible transportation impacts on the SHS and potential non-capacity increasing mitigation measures for land use projects. The guide also emphasizes that VMT analysis is the primary review focus of Caltrans and references OPR's Technical Advisory as a basis for its guidance, referencing screening thresholds that would identify projects presumed to have a less-than-significant transportation impact. Notably, it recommends use of the thresholds in the Technical Advisory for land use projects. Caltrans supports streamlining for projects that meet these screening thresholds because they help achieve VMT reduction and mode shift goals.

The *Interim Local Development Intergovernmental Review Safety Review Practitioners Guidance* (Caltrans, December 18, 2020) provides updated guidance to Caltrans Districts, lead agencies, developers, and consultants conducting safety review for proposed land use projects and plans that would affect the State Highway System. The interim guidance recommends that safety analyses include a review of three primary elements related to transportation safety—design standard compliance, collision history, and collision risk (consistent with the Federal Highway Administration's Systemic Approach to Safety). The interim guidance does not establish specific analysis methods or significance thresholds for determining safety impacts under CEQA. Additionally, Caltrans notes that local agencies may use the interim guidance at their own discretion as a guide for review of local facilities. Finally, the interim guidance states that Caltrans District traffic safety staff will use available data to determine if the proposed project may influence or contribute to significant impacts to the State Highway System.

### Senate Bill 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop new guidelines that address transportation metrics under CEQA. Enacted as part of SB 743 (2013), PRC section 21099, subdivision (b)(1), directed the OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Subdivision (b)(2) of PRC section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, 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 [CEQA], except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. The updated CEQA Guidelines were adopted on December 28, 2018; and according to the new CEQA Guidelines Section 15064.3, VMT replaced congestion as the metric for determining transportation impacts. The guidelines state that "lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide."



To provide guidance to agencies implementing the new CEQA requirements, OPR published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018. The Technical Advisory describes considerations agencies may use in selecting VMT metrics, calculation methodologies, and significance thresholds. The Technical Advisory does not mandate the use of specific metrics, methodologies or significance thresholds, because agencies have discretion to select those that are appropriate for the local land use and transportation context.

# Local

## City of Roseville 2035 General Plan

The following policies from the *City of Roseville 2035 General Plan* (2020) are applicable to the project.

- **Policy CIRC1.4:** Maintain a system of truck routes to provide for the safe and efficient movement of goods and to avoid impacting residential neighborhoods.
- **Policy CIRC3.1:** Promote transit service that is convenient, cost-effective, and responsive to the challenges and opportunities of serving Roseville and surrounding communities, and explore opportunities for transit innovation and service improvements.
- **Policy CIRC3.5:** Consider access to health care, community services and employment, and the needs of persons who may be transit-dependent when making decisions regarding transit service.
- **Policy CIRC3.7:** Pursue transit routes that optimize ridership.
- **Policy CIRC4.1:** The City will review and condition projects as appropriate, to reduce travel demand per capita and per employee by promoting increased density near transit, improving the quality of non-vehicular transportation options, providing incentives for non-vehicular travel, encouraging the mixing of complementary land uses in proximity to one another, and using other feasible methods.
- **Policy CIRC4.3:** Specific Plan Amendments and land use development projects not included in a Specific Plan shall be evaluated for consistency with the City's VMT Impact Standards.
- **Policy CIRC4.4:** If the evaluation required by CIRC4.3 finds a Specific Plan Amendment or land use development project not included in an adopted Specific Plan is inconsistent with thresholds established within the City's VMT Impact Standards, on-site land use, transportation, and urban design-related VMT-reducing features should be prioritized to demonstrate consistency. If feasible on-site features cannot achieve the VMT threshold, Specific Plan Amendments and land use development projects outside Specific Plan Areas may demonstrate equivalent consistency through off-site actions or fair-share fee contributions, or if consistency cannot be achieved, shall implement all feasible measures.

- **Policy CIRC5.1:** Develop a comprehensive and safe system of recreational and commuter bicycle routes and trails that provides connections between the City's major destinations (including employment) and housing areas and between its existing and planned bikeways.
- **Policy CIRC6.1:** Establish and maintain a safe and continuous pedestrian network that provides connections between residential areas and commercial retail and services, employment, public services, parks, and public transit.
- **Policy CIRC6.3:** Enhance pedestrian-friendly street environments and design public spaces and destinations in a way that encourages walking.
- **Policy CIRC6.4:** Sidewalks shall be required in all new Specific Plan Areas, with new roadway construction, and with roadway expansion.
- **Policy CIRC6.5:** In reviewing proposed development projects and implementing public projects, the City will incorporate standards designed to protect the security of pedestrians and minimize the potential for collisions involving pedestrians.

### West Roseville Specific Plan

The *City of Roseville West Roseville Specific Plan (WRSP)* (Amended March 17, 2021) guides the development of approximately 3,162 acres located to the west of Fiddyment Road.

Figure 4-1 of the WRSP illustrates the planned land uses within the WRSP area. The project site encompasses the following three parcels:

- W-50E – 3.1 acres of Park uses
- W-60A – 25.2 acres of Park (Sports Complex) uses
- W-60B – 30 acres of Light Industrial uses

Figure 7-1 of the WRSP illustrates the planned roadway system within the WRSP area. At buildout, the WRSP identifies the following major roadway facilities within the project site vicinity:

- Blue Oaks Boulevard is planned for a six-lane arterial.
- Westbrook Boulevard (previously referred to as West Side Drive) is planned for a six-lane arterial.
- Pleasant Grove Boulevard is planned for a four-lane arterial.
- New traffic signals are planned for the intersections of Blue Oaks Boulevard/Westbrook Boulevard, Blue Oaks Boulevard/Westpark Drive, Westbrook Boulevard/Brookstone Drive North, and Westbrook Boulevard/Brookstone Drive South.

The WRSP requires the provision of sidewalks on all WRSP area roadways. Planned bikeways include Class II bike lanes on all arterial and collector roadways (including Westbrook Boulevard, Pleasant Grove Boulevard, and Blue Oaks Boulevard) and a network of off-street Class I shared-use paths.

### Traffic Impact Fee Programs

The City currently participates in four traffic mitigation fee programs to fund capital projects in Roseville and south Placer County. Within the City, traffic impact fees are used to fund improvements contained in the Capital Improvement Program (CIP). The funding for those improvements is nexus-based and is designed to fund improvements. The fee structure considers both the number and length of trips generated by new land developments. As such, it is considered a type of VMT-based fee program. The traffic mitigation fees are collected by the participating agencies at building permit issuance. The payment of Roseville impact fees in lieu of improvements has typically been determined to be acceptable mitigation for transportation impacts caused by a project.

### City of Roseville Bicycle Master Plan

The *City of Roseville Bicycle Master Plan* (2008) includes the following policies that are relevant to the project:

- Support facilities that encourage bicycling should, to the extent feasible, be made a standard component of all new public and private projects.
- Provide short-term bike parking (bike racks) conveniently located at businesses entrances and safe, secure long-term covered bike parking (lockers, cages, rooms) at employment sites.
- Where construction operations occur near Class II or III bikeways, the developer/contractor will be responsible for maintaining clear and clean paths of travel.
- Street maintenance overlay projects and other construction projects within the public right-of-way and along designated bikeways shall be reviewed for conformance with the Bicycle Master Plan. Where existing facilities are not in conformance with the Bicycle Master Plan and current City standards, the facilities may be brought up to standards where determined feasible by the Public Works Director/City Engineer.

Figure 5 of the Bicycle Master Plan illustrates future proposed bicycle facilities throughout the City. Within the project site vicinity, the Bicycle Master Plan identifies new Class II bike lanes and a new Class I shared-use path on Westpark Drive. Additionally, the Bicycle Master Plan identifies a new Class I shared-use path along Kaseberg Creek (generally traversing east-west along the northerly side of Blue Oaks Boulevard).

### City of Roseville Pedestrian Master Plan

The *City of Roseville Pedestrian Master Plan* (2011) was adopted by the City Council to establish policies, projects, and programs that improve the pedestrian system in Roseville and increase walking for transportation, recreation, and health. The Pedestrian Master Plan includes goals, policies, and implementation measures for pedestrian improvements and programs; a recommended pedestrian network; and a Capital Improvements Program (CIP) that establishes a 20-year framework for

improvements to the pedestrian environment. The Pedestrian Master Plan includes the following policies that are relevant to the project:

- Provide continuous and direct pedestrian connections between residential areas, schools, shopping areas, public services, employment centers, parks, and public transit stops.
- Include sidewalks in the planning and design of all new, reconstructed or widened streets. Sidewalks should be installed on both sides of the street, unless circumstances call for an exception.
- Sidewalks and street crossings should provide access for all people, regardless of physical abilities, consistent with the Americans with Disabilities Act (ADA) and ADA Transition Plan.

Figure 8 of the Pedestrian Master Plan illustrates ranked sidewalk gap closure projects throughout the City. The Pedestrian Master Plan does not identify ranked sidewalk gap closure projects within the project site vicinity.

### City of Roseville Final Short-Range Transit Plan 2018–2025

The *City of Roseville Final Short-Range Transit Plan (SRTP) 2018-2025* (LSC 2018) provides a detailed business plan to guide transit improvements in the City. The plan reviews demographics and transit needs, evaluates effectiveness and efficiency of existing services, analyzes a wide range of system options, and provides operational, capital and institutional plans, including an implementation plan. The City's plan was prepared jointly with the development of parallel SRTPs for Placer County Transit, Auburn Transit, and the Western Placer Consolidated Transit Service Agency. The plan acknowledges there are many large development projects in West Roseville that could increase transit demand in the area by 2025. To this end, Figure 25 of the SRTP shows three concept bus routes that would operate on Blue Oaks Boulevard, Pleasant Grove Boulevard, or Vista Grande Boulevard west of Fiddyment Road.

The SRTP recommends a detailed transit master planning process for West Roseville. As noted on page 170 of the SRTP, "While general land uses and policies have been defined for these areas (including the need for transit services and the provision of funding strategies for transit), specific routes, stops and schedules will depend on more detailed planning to be developed over the next several years. Once this detail is available, transit master planning for these areas should be conducted. An additional route into the area along the Blue Oaks Boulevard corridor will ultimately be warranted."

### City of Roseville Design and Construction Standards

Section 4 of the *2021 Amendments to City of Roseville Design and Construction Standards* provides guidance for how to analyze VMT impacts of proposed land developments within the City. The following



guidance and recommendations are contained in that document (City of Roseville 2021a: TS16 through TS22):

- A project may be screened from additional VMT analysis if it meets any of nine distinct screening criteria.
- A quantitative study of VMT analysis is generally required if the project does not meet any of the conditions for screening. For non-residential projects, analysis should be based on VMT per service population, where service population consists of the total number of residents and employees. The service population methodology includes home-based production VMT and VMT from all other sources, including trips attracted from homes outside of the area into the area for work, shopping, or other purposes and trips with neither end at the home (such as from work to shopping). VMT is based on the full length of each trip, including distance outside of the City. VMT estimates are to be produced using the City of Roseville travel demand model.
- An alternative metric (e.g., VMT/employee) may be applied if it relies on the data and analysis of the current citywide VMT analysis and is reviewed and approved by the City.
- Factors to convert Roseville travel forecasting model inputs (i.e., square footage) to employment (as used in development of the General Plan) are presented in Table VMT-1 of the General Plan.
- The analysis conducted for VMT studies shall be documented in a report for review by the City, with supporting tables and figures. It shall be the intent of the VMT study to evaluate the reasonable worst-case impacts for the proposed development allowed by zoning unless a specific use/user is identified by the applicant.
- A project would have a significant impact if it exceeded a threshold of which is 15 percent below existing Citywide development VMT (baseline VMT per service population for non-residential projects).
- If a proposed project can be shown to result in a net overall decrease in total City VMT when compared to baseline VMT, the project would lead to a less-than-significant transportation impact.
- If screening is not used, explanation should be provided on how VMT was calculated. This should include a description of metrics, models and tools, inputs for the analysis, and thresholds used.
- If it is concluded that the project would exceed the significance threshold, a list of feasible mitigation measures which would either reduce impacts to below the threshold, or reduce impacts to the extent feasible shall be provided, beginning with on-site measures. The VMT-reducing effects of each measure shall be quantified to the extent feasible.

# 4. Project Travel Characteristics

This section describes the expected travel characteristics of the proposed project, including its trip generation and trip distribution.

## Project Description

Buildout of the project would consist of ten multi-sport fields, two restroom buildings, one concession building, picnic shelters, a 1-acre accessible playground, and a maintenance yard. Over 950 off-street parking spaces would be provided on the project site, with 543 parking spaces provided in the northerly parking lot and 419 parking spaces provided in the southerly parking lot.

Project programming and operations would be as follows:

- During weekdays, the complex would be used for practices that run from 3 PM to 10 PM. According to the City, it is anticipated that the complex would operate with up to five 1.5-hour practice timeslots beginning at 3 PM, 4:30 PM, 6 PM, 7:30 PM, and 9 PM. Additionally, the City anticipates that each practice timeslot would accommodate up to two teams per field, which would result in up to 20 teams utilizing the complex during each practice timeslot. A total of 100 teams could practice at the facility in a single weekday.
- During weekends, the complex would be used for tournaments and league play. The tournaments would include both regional/national draws and local draws. Games would run from 8 AM to 8 PM. The City anticipates that parking fees would be collected from teams as part of the tournament registration process and not on-site during tournaments. This is important for two reasons. First, the lack of on-site parking payment would reduce the likelihood that people would park off-site to avoid parking costs. Second, the lack of on-site parking payment transactions would eliminate delays incurred to entering vehicles typically associated with cash, credit card, etc. payment transactions.

Vehicular access to and from the project site would be provided via Westbrook Boulevard and Phillip Road. For the northerly parking lot, the Westbrook Boulevard/Brookstone Drive North intersection would provide ingress and egress and Phillip Road would provide egress only. For the southerly parking lot, the Westbrook Boulevard/Brookstone Drive South intersection would provide ingress and egress. The northerly and southerly parking lots would not be connected via an internal roadway or drive aisle.

The project would include the following modifications to both the northerly and southerly Westbrook Boulevard/Brookstone Drive intersections:

- Construction of a new east leg. The westbound approach would include two lanes – a shared through-left lane and a right-turn lane.
- Construction of a northbound right-turn pocket with a storage length of approximately 220 feet.

The project does not propose to modify the existing all-way stop-control or marked crosswalks at either the northerly or southerly Westbrook Boulevard/Brookstone Drive intersection.

The project would construct new sidewalks along the Westbrook Boulevard project site frontage, as well as a new north-south pedestrian path through the center of the project site. The project would include bus parking within the on-site parking lots.

The project site would occupy a portion of the existing Phillip Road alignment. With the implementation of the project, the east-west segment of Phillip Road would have a new westerly terminus at the project's northerly parking lot (i.e., this segment of Phillip Road would extend between Westpark Drive and the project site). The north-south segment of Phillip Road would not provide access to the project site.

# Trip Generation

This study utilizes locally derived trip generation data to estimate project trip generation, consistent with the approach utilized in the *Final Transportation Impact Study for Placer Valley Sports Complex in Roseville, CA* (March 2016).

## Need for Locally Derived Trip Generation Data

The *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) is a nationally recognized source of trip generation information for a wide variety of land use types. This resource includes the Soccer Complex (488) Land Use Category. However, the data points used to derive the trip rates associated with this land use category are limited, and critical information regarding the trip rates is not provided (e.g., the 60-minute period corresponding to the peak hour, the degree of peaking within the peak hour, etc.).

The *Trip Generation Handbook, 3rd Edition* (Institute of Transportation Engineers, 2017) recommends that local data be used when data points are limited. The analysis methodology presented in this study follows this guidance.

## Data Collection at Saturday Tournaments

Fehr & Peers conducted Saturday traffic counts and field observations at the following soccer tournaments:

- Rick Hitch Roseville Tournament at Maidu Regional Park on Saturday, August 15, 2015
- Placer United Girls Cup at Cherry Island Soccer Complex on Saturday, October 24, 2015

This section describes each tournament in detail, data collection methods, resulting data, and conclusions.

### *Overview of Soccer Tournaments*

**Table 1** provides details for the two tournaments, including the date, number of soccer fields in use, game times, parking conditions, etc.

Although the soccer tournaments held at Cherry Island Soccer Complex and Maidu Regional Park were similar in some respects, they were also different in many key respects including:

- Number of fields – Cherry Island had 10 fields in use, whereas Maidu had 5 fields in use.
- Parking price – Cherry Island charged $8 to park on-site and also had free on-street parking, whereas parking at Maidu was free.
- Field Location/Accessibility – Cherry Island may be considered by many to have fewer quality restaurants and stores within a 15-minute drive than Maidu Regional Park. Additionally, it is likely that Cherry Island provided a more robust snack bar than Maidu given the larger size of the event. Finally, the primary entry to Maidu (signalized access from a four-lane arterial) provides greater ease of access than the two unsignalized accesses onto the two-lane streets serving Cherry Island.
- Soccer Team Change of Venue – Whereas the majority of teams playing at Maidu for the Rick Hitch Tournament played both games at that location, nearly 50 percent of teams who played a game at Cherry Island also played a game at a different location on that same Saturday.
- Origin of Soccer Teams – Whereas 83 percent of teams in the Rick Hitch Tournament (played at Maidu Regional Park and other venues) were from the SACOG region, only 37 percent of teams in the Placer United Girls Cup (played at Cherry Island and other venues) were from the SACOG region. The out of area teams traveled from the San Francisco Bay Area, Fresno, San Luis Obispo, Central San Joaquin Valley, and Nevada.



**Table 1: Overview of Observed Soccer Tournaments in Sacramento Region**

| Characteristics | Rick Hitch Tournament at Maidu Regional Park | Placer United Girls Cup at Cherry Island Soccer Complex |
|---|---|---|
| Date of Count | Saturday, August 15, 2015 | Saturday, October 24, 2015 |
| Number of Fields in Use | 5 | 10 |
| Location | Roseville | Sacramento County |
| Game Times | 8:00, 9:15, 10:30, 11:45, 1:00, 2:15, and 3:30 | 8:00, 9:20, 10:40, 12:00, 1:20, 2:40, and 4:00 |
| Use of fields throughout day | Games played continuously on all fields for first 6 time slots. Slightly reduced use for 7th slot. | Games played continuously on all fields tor all 7 time slots. |
| Tournament Games Also Held at Other Venues | Yes | Yes |
| Soccer Team Change of Venue | Vast majority of teams played all Saturday games at Maidu | 44 teams played two Saturday games at Cherry Island. 40 teams played one Saturday game at Cherry Island and one game at a different venue. 10 teams played a single Saturday game at Cherry Island. |
| Parking Fee | Free | $8 for vehicles parking on-site. No fee for vehicles parked on-street. |
| Adequacy of Parking Supply | Abundant parking was available | Parking demand nearly reached capacity. Some attendees had to park far from complex and walk. |
| Weather Conditions | Dry | Dry |
| Site proximity to nearby restaurants and amenities | 5 minute drive to various restaurants and stores along Douglas Blvd. | 5 minute drive to restaurants along Watt Avenue |
| Percentage of Local (within SACOG region) vs. Non-Local Teams | 83% | 37% |

Note: Observed a.m. and p.m. peak hours for the existing University Mall were 8:00 a.m. to 9:00 a.m. and 4:30 p.m. to 5:30 p.m., respectively. University Mall was approximately 93 percent occupied at the time of the trip counts, equivalent to 96.436 occupied KSF.

Source: Fehr & Peers, 2015.

*Overview of Data Collection Process*

**Table 2** describes the data collection process undertaken to perform traffic counts at each tournament. Fehr & Peers retained the count firm National Data Services (NDS) to assist with these efforts.

Field observations indicated that the parking areas for both facilities were well utilized during the counts. At Maidu Regional Park, although the main lots (closest to the fields) were often full, parking was always available along the gravel parking aisle on the south portion of the park. Fehr & Peers did not notice any recurring patterns of motorists entering the area, not finding parking, and then exiting to find a more remote space. However, some soccer-related groups were observed (and recorded) who chose to park in a parking area just beyond the traffic count location and walk to the fields.

Cherry Island Soccer Complex provides both paved parking as well as several unpaved areas within the complex. On-street parking is permitted along the site frontage on U Street and 28th Street, but not on the opposite side of the street ("No Parking" signs are posted).

In summary, the physical characteristics of each site, coupled with the use of experienced traffic count personnel, allowed for a high-quality empirical observations of the travel demand associated with each soccer tournament.

*Traffic Count Results*

**Table 3** displays the estimated daily and peak hour trip generation of each soccer tournament on each count day. Key findings from this table include:

- The Rick Hitch Tournament at Maidu Regional Park was estimated to generate about 4,000 daily vehicles trips (2,000 inbound and 2,000 outbound). The peak hour of travel occurred from 10:15 to 11:15 AM with 537 trips (48 percent inbound and 52 percent outbound).
- The Placer United Girls Cup at Cherry Island Soccer Complex was estimated to generate about 4,300 daily vehicle trips (2,135 inbound and 2,174 outbound). The peak hour of traveled occurred from 9:00 to 10:00 AM with 540 trips (59 percent inbound and 41 percent outbound).

Additionally, 15-minute arrival and departure traffic flows were recorded during each tournament. Key findings from this data include:

- The Rick Hitch Tournament at Maidu Regional Park showed fairly modest peaks in 15-minute arrivals, but much more pronounced spikes in 15-minute departure flows beginning at 9:15 AM, 10:30 AM, 11:45 AM, and 1 PM. These periods correspond with the completion of the first four games of the day being played simultaneously on all fields.



- Similar to the Maidu observations, the Placer United Girls Cup at Cherry Island Soccer Complex showed spikes in departure flows at 9:15 AM, 10:45 AM, 12:00 PM, 1:15 PM, 2:30 PM, and 4:00 PM. These peaks occurred slightly later (by 15 minutes) due to the longer duration between successive games at Cherry Island versus Maidu.
- The Cherry Island counts indicated that 48 percent of all inbound traffic arrived before 10 AM. In contrast, 37 percent of all inbound traffic at Maidu arrived before 10 AM. The Cherry Island counts also showed a spike in departing traffic from 5:15 to 5:45 PM, in which 352 vehicles (16 percent of total) departed. The Maidu counts did not show a similar end of day spike in outbound travel.
- Between 10 AM and 2:30 PM, Maidu Regional Park generated 367 more trips than Cherry Island despite having half the number of fields.

**Table 2: Overview of Traffic Data Collection**

| Characteristics | Rick Hitch Tournament at Maidu Regional Park | Placer United Girls Cup at Cherry Island Soccer Complex |
|---|---|---|
| Date of Count | Saturday, August 15, 2015 | Saturday, October 24, 2015 |
| Count Duration [1] | 7 AM to 5 PM. In addition, parked vehicles were counted prior to 7 AM and after 5 PM. | 7 AM to 6 PM. In addition, parked vehicles were counted prior to 7 AM and after 6 PM. |
| Other Activities On-Site | Adult softball on two nearby fields. Traffic counters separately classified vehicles associated with adult soccer and softball. | None |
| Description of Parking Facilities | Large surface lot near fields with two entry/exits. Secondary parking at nearby Maidu School. | On-site parking with entry/exit off U Street and exit-only off 28th Street. On-street parking permitted on U Street and 28th Street. |
| Data Collection Techniques | Traffic count personnel were stationed at each entry/exit lot. A camera was situated at the driveway entry to Maidu School. | Cameras were situated at the U Street and 28th Street driveways. Traffic count personnel were situated on U Street and 28th Street to record parking maneuvers. |
| On-Site Data Collection Oversight | John Gard, P.E. | David Stanek, P.E. |

Note: [1] Vehicles present at each facility prior to the beginning of the count or after the end of the count period were considered tournament-related and included as part of the daily traffic estimate.
Source: Fehr & Peers, 2015.

**Table 3** displays the trip generation rates per field for each soccer tournament. This table shows that the Rick Hitch Tournament at Maidu Regional Park had a measured trip rate that was nearly twice the rate observed for the Placer United Girls Cup at Cherry Island Soccer Complex.

This data has yielded the following key conclusions:

- The Rick Hitch Tournament at Maidu Regional Park had a 'per field' trip rate of nearly twice the rate observed at the Placer United Girls Cup at Cherry Island Soccer Complex. The difference in trip rates between these tournaments is a function of local versus regional team participation. This will be a critical distinction when analyzing the travel characteristics of the proposed project.
- The Rick Hitch Tournament showed substantially greater levels of mid-day departure and return activity than the Placer United Girls Cup. The Placer United Girls Cup had a greater proportion of early arrivals and late departures associated with a longer duration of stay.

**Table 3: Results of Traffic Data Collection**

| Characteristics | Rick Hitch Tournament at Maidu Regional Park | Placer United Girls Cup at Cherry Island Soccer Complex |
|---|---|---|
| Date of Count | Saturday, August 15, 2015 | Saturday, October 24, 2015 |
| *Daily Conditions* | | |
| Total Trips | 4,000 vehicles (50% in / 50% out)[1] | 4,300 vehicles (50% in / 50% out)[2] |
| *Peak Hour of Generator* | | |
| Busiest Hour of Travel | 10:15 – 11:15 AM | 9:00 – 10:00 AM |
| Inbound Trips | 263 vehicles (49%) | 317 vehicles (59%) |
| Outbound Trips | 274 vehicles 51%) | 223 vehicles (41%) |
| Total Trips | 537 vehicles | 540 vehicles |

Note: [1] Actual count consists of 1,941 inbound trips and 1,877 outbound trips recorded between 6:45 AM and 5:00 PM. Daily estimate of 2,000 inbound trips based on some vehicles that had already been parked prior to 6:45 AM, and infrequent parking along Johnson Ranch Drive (which was not counted). Field observations revealed that a number of vehicles were still parked on-site after 5 PM.
[2] Actual count consists of 2,135 inbound trips and 2,174 outbound trips recorded between 7 AM and 6:00 PM (including parked vehicles prior to 7 AM and after 6 PM). Minor discrepancy in inbound versus outbound travel likely due to inherent challenges of counting parking maneuvers.
Source: Fehr & Peers, 2015.

### Weekday Practice Trip Generation

As described previously, the complex would accommodate practices during the evenings on weekdays. The complex would operate with up to five 1.5-hour practice timeslots beginning at 3 PM, 4:30 PM, 6 PM, 7:30 PM, and 9 PM, and each field would accommodate up to two teams during each practice timeslot. Altogether, the complex would accommodate up to 20 teams during each practice timeslot, and up to 100 teams during a weekday.

For the purposes of this study, the City indicated that the weekday practice trip generation estimates should assume full use of the complex to avoid understating the trip generation potential of the project. Additionally, the weekday practice trip generation estimates incorporate the following key characteristics:

- Each team would have an average of 16 players and 2 coaches present at practice, for a total of 18 personnel per team. This would result in a total of 360 personnel on-site during a single practice timeslot, and a total of 1,800 personnel during a typical weekday.
- Two-thirds of the players would be picked-up/dropped-off while one-third of the players would be driven by parents, family, etc. who would remain on site for the entire practice.
- Carpooling would result in an average vehicle occupancy (AVO) of 1.2 players per vehicle for player-generated vehicle trips and an AVO of 1.1 coaches per vehicle for coach-generated vehicle trips.

Existing weekday PM peak period traffic volume data (discussed in Chapter 7), indicates that the peak hour of adjacent street traffic is 4:30 PM to 5:30 PM. For the purposes of this study, the weekday PM peak hour project trip generation represents departure activity for the first practice timeslot at 3 PM and arrival activity for the practice timeslot at 4:30 PM.

### Estimated Project Trip Generation

**Table 4** displays the Saturday daily and AM peak hour trip generation of each type of soccer tournament, as well as the weekday daily and PM peak hour trip generation during a typical weekday with practices held at the complex.

**Table 4: Roseville Soccer Complex Project – Vehicle Trip Generation**

| Analysis Scenario | Occupied Fields | Daily | Peak Hour[1] | | |
|---|---|---|---|---|---|
| | | | In | Out | Total |
| Weekday[2] | 10 | 4,800 | 480 | 480 | 960 |
| Saturday (Tournament)[3] | 10 | 8,000 | 537 | 537 | 1,074 |

Note: [1] Peak hours defined as 4:30 PM to 5:30 PM for weekdays and 10:15 AM to 11:15 AM for Saturday tournaments.
[2] Weekday estimates derived based on the following parameters:
Weekday practices would utilize all 10 fields during each of three practice timeslots at 3 PM, 4:30 PM, 6 PM, 7:30 PM, and 9 PM.
Each field would accommodate two teams per field during each practice timeslot.
Each team would have an average of 16 players and 2 coaches present at practice, for a total of 18 personnel per team.
Two-thirds of the players would be picked-up/dropped-off and one-third of the players would be drive/park.
Average vehicle occupancy (AVO) would be 1.2 for players and 1.1 for coaches.
[3] Estimates derived from observations recorded at the Rick Hitch Tournament at Maidu Regional Park on Saturday, August 15, 2015.
Source: Fehr & Peers, 2022.

## Trip Distribution

**Figure 4** displays the expected distribution of trips for a local/semi-regional soccer tournament. The percentages on Figure 8 are based on the following:

- Proportion of teams that are 'local' (83 percent within SACOG region) versus 'non-local' (17 percent) (i.e., stay overnight in a hotel is as customary for two-day soccer tournaments) based on an assessment of the residence of teams that participated in the Rick Hitch Tournament.
    - For 'non-local' teams, the anticipated hotels (based on advertised hotels on the Roseville Youth Soccer website) used for overstay nights (and routing from those hotels) was considered. For the majority of hotels, Pleasant Grove Boulevard would be the preferred east-west route to access the Westbrook Boulevard to arrive at the site.
    - For 'local' teams, the distribution first considered the proportion of teams that were from the north (i.e., Lincoln, Yuba-Sutter), east (i.e., Auburn, Loomis, Truckee, etc.), which would use SR 65. Local teams from the west and south were also considered. Of particular focus was the proportion of local teams that would travel through the I-5/I-80 interchange, which Google maps and other GIS applications would recommend travel be via State Route 99 to Riego Road.

- Once the overall spatial distribution of trips is determined, their final route choice was determined based on travel time surveys of available route choices.

**Figure 5** shows the expected distribution of weekday soccer practices. Based on the project description, it is anticipated that the majority of attendees would come from local residential areas (i.e., from within the South Placer area or portions of unincorporated Sacramento County).

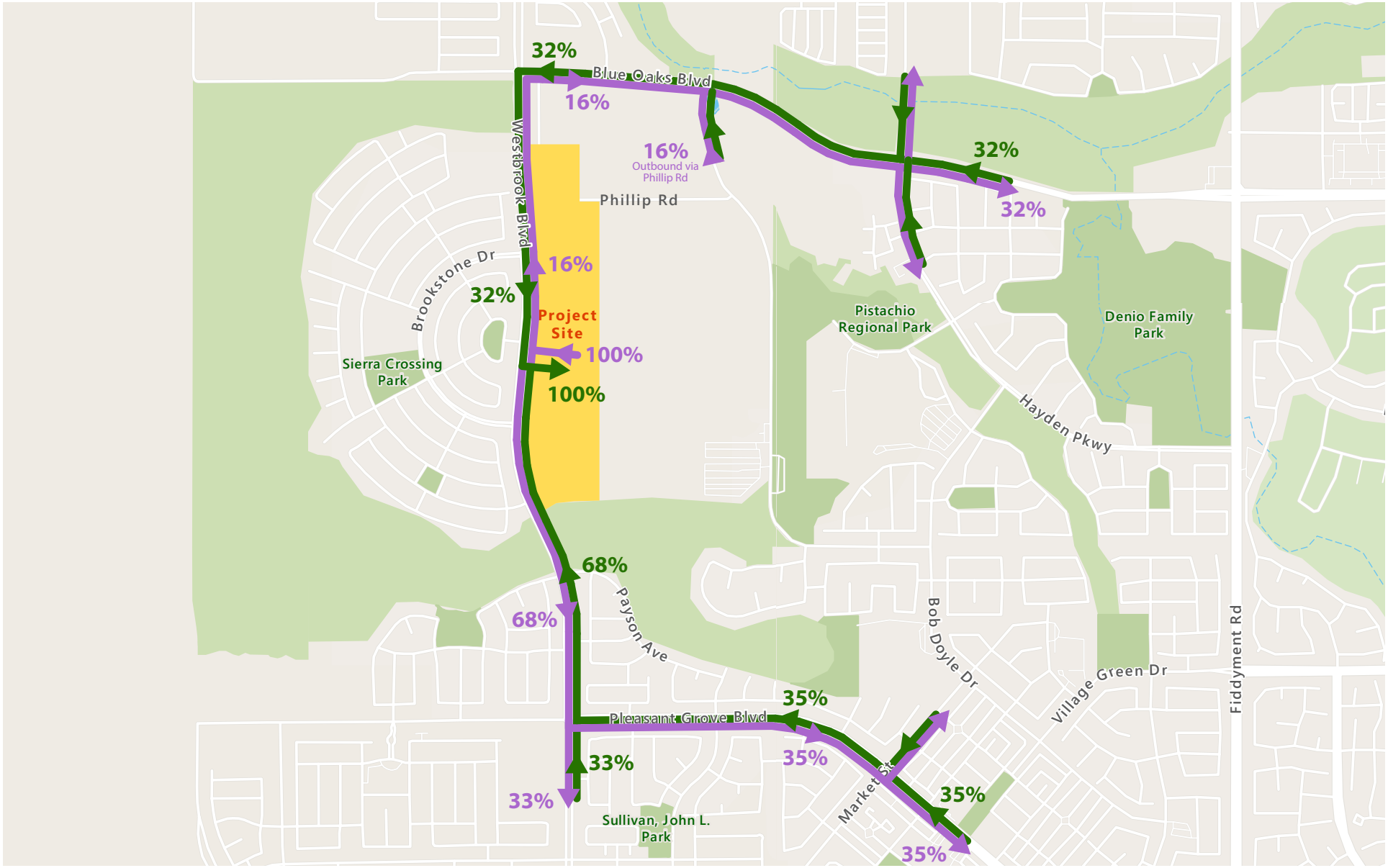



Figure 4

Project Trip Distribution - Local/Semi-Regional Soccer Tournaments

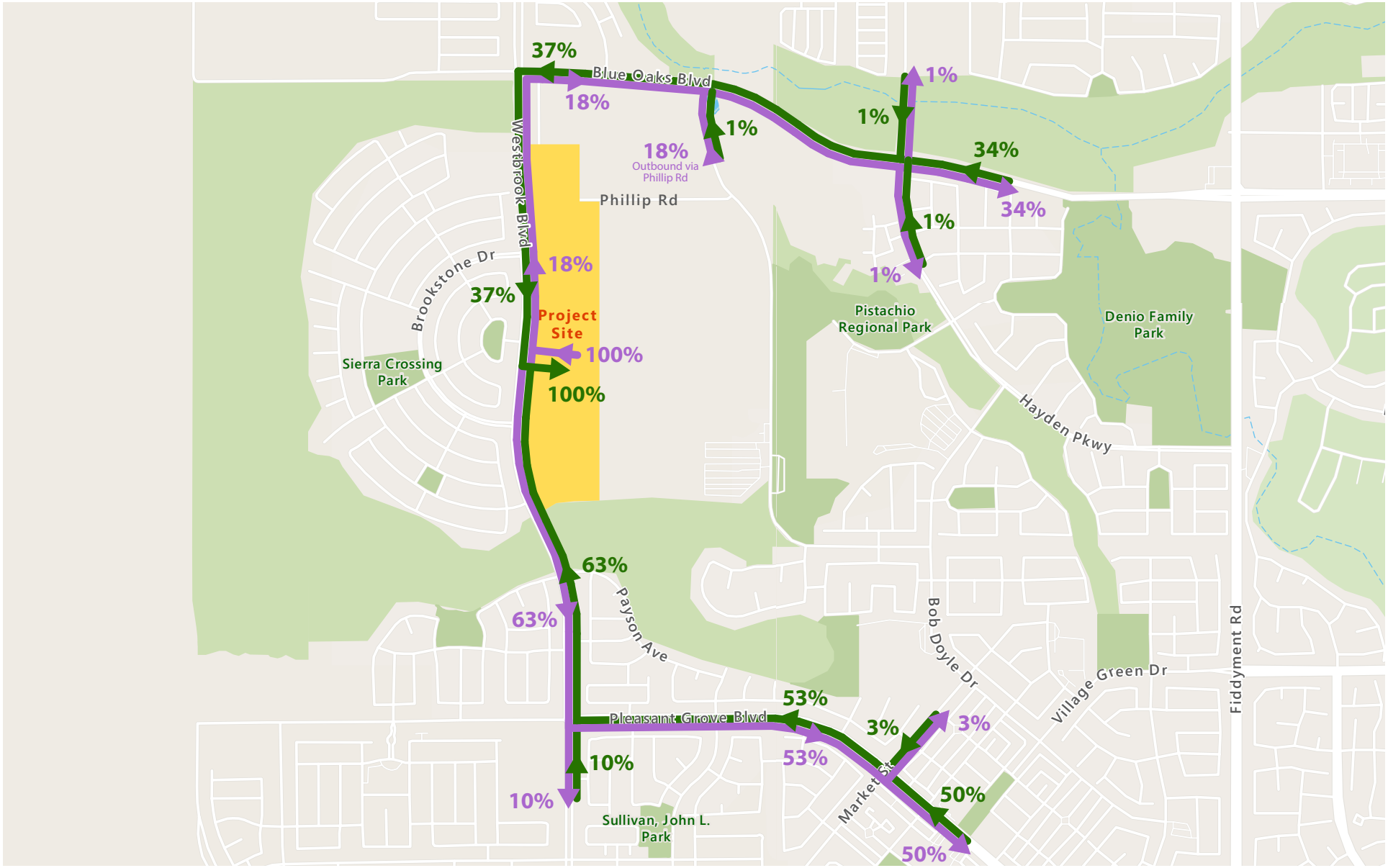



Figure 5

Project Trip Distribution - Weekday Local Soccer Practice

# 5. Significance Criteria

This section describes the significance criteria used to evaluate project impacts to the roadway system (via its VMT contribution) as well as to the bicycle, pedestrian, and transit systems. These thresholds are based on Appendix G of the State CEQA Guidelines and various City of Roseville published plans described in Chapter 3 "Regulatory Setting".

Impacts to the transportation system would be significant if the project would:

- **Roadway System**
  - Exceed the applicable VMT threshold.
- **Bicycle Facilities**
  - Conflict with adopted policies, plans, or programs regarding bicycle facilities.
- **Pedestrian Facilities**
  - Conflict with adopted policies, plans, or programs regarding pedestrian facilities.
- **Transit Service and Facilities**
  - Conflict with adopted policies, plans, or programs regarding transit facilities or service.
- **Hazards**
  - Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses, or inadequate emergency access.

# 6. Impacts and Mitigation Measures

This chapter describes the evaluation of potential transportation impacts associated with the operation of the project and, in instances where the project would cause a significant impact, identifies potential mitigation measures that would lessen the severity of the impact.

## Impact 1: Impacts to vehicle miles traveled (VMT).

Page 4.3-29 of the *City of Roseville General Plan Update Final EIR* (2020) contains the following statements regarding VMT analysis:

> *"Quantitative analysis would not be required if it can be demonstrated that a project is consistent with the General Plan and would generate VMT which is equivalent to or less than what was assumed in this General Plan EIR."*

Following the preparation of the General Plan Update and the accompanying *City of Roseville General Plan Update Final EIR*, the City's travel demand model and VMT metrics were updated as part of the City's Housing Element Update and accompanying *Final Transportation Impact Study for the Roseville Housing Element Update* (Fehr & Peers 2021). This effort was more than just a study of modifications in zoning for the Housing Element Update, which was adopted by the City Council on August 18, 2021 (City of Roseville 2021). Importantly, it accomplished the following:

1. Updated City of Roseville base year model to a February 2020 (pre-COVID) condition. Note that the prior model from the General Plan Update was validated to an approximately 2014-2016 condition.
2. Developed a new Year 2035 model.
3. Updated existing and Year 2035 citywide signalized intersection operating levels.
4. Updated the VMT per service population metrics.

Accordingly, the VMT impact analysis presented in the *Final Transportation Impact Study for the Roseville Housing Element Update* represents the most comprehensive and up-to-date VMT metrics for the City.

Page TI 16-22 of the *January 2021 Amendments to the City of Roseville Design and Constructions Standards* contains the following statements regarding VMT analysis:

*"A project may be screened from additional VMT analysis if it meets one or more of the following criteria. These criteria are based on the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018)."*

1. *Within Scope of Prior CEQA Analysis – The VMT generated by the project is within the scope of a prior CEQA analysis, and is therefore covered by a prior analysis, Prior analysis includes analysis performed for the General Plan.*

The project site would be situated within the West Roseville Specific Plan area on parcels WB-50E, WB-60E, and WB-60B, which have Park, Park (Sports Complex), and Light Industrial land use designations, respectively. VMT associated with these planned uses were included in the VMT impact analysis presented in the *Final Transportation Impact Study for the Roseville Housing Element Update*.

Total daily weekday VMT that would be generated by the project site was estimated for two scenarios. The first scenario assumes that the project site would develop with the planned uses identified in the West Roseville Specific Plan. The second scenario assumes that the project site would develop as proposed by the project. Because this analysis focuses on VMT that would be generated by the project site on a typical weekday, this analysis considers vehicle travel activity associated with evening practices that would occur on a typical weekday at the soccer complex.

Daily vehicle trips were estimated using trip generation rates presented in the *ITE Trip Generation Manual, 11th Edition* (for the planned Light Industrial uses), the City of Roseville Travel Demand model (for the planned Park uses), and based on the anticipated users of the soccer complex (which would be comprised of six fields based on the planned Park Sports Complex uses or ten fields based on the proposed project). Total daily weekday VMT was then estimated by multiplying the total daily vehicle trips by the average trip length for each component.

Average trip lengths for the planned Light Industrial uses were estimated using data presented in the *Roseville Industrial Park Project Administrative Draft EIR*. This document estimated average trip lengths for the planned industrial park uses that would be present at the Roseville Industrial Park project site, which is located approximately one-mile northwest of the Roseville Soccer complex project site. Therefore, these average trip lengths are comparable to those that would be expected of vehicle trips generated by the currently planned Light Industrial uses at the project site.

Average trip lengths for users of the Park and soccer complex uses were estimated based on the geographic distribution of residents aged 5 to 17 years old within the Roseville and north Sacramento County areas according to block group-level data presented in the American Community Survey 2020 5-Year Estimates. This method was selected because this demographic would represent the primary users and vehicle trip generators associated with the Park and soccer complex uses.

Information provided by the City indicates that while the soccer complex would primarily serve local teams, it would also be utilized by the Placer United Soccer Club, which draws from the greater Placer County and northern Sacramento County areas. According to the City, the Placer United Soccer Club would utilize up to three fields for weekday evening practices. Accordingly, for the currently planned six-field soccer complex, it is assumed that three fields would be utilized by the Placer United Soccer Club and three fields would be utilized by local teams. Moreover, for the proposed ten-field soccer complex, it is assumed that three fields would be utilized by the Placer United Soccer Club and seven fields would be utilized by local teams. Average trip lengths for trips associated with the Placer United Soccer Club practices were derived based on the geographic distribution of residents aged 5 to 17 years old in Roseville, Rocklin, Lincoln, Loomis, Granite Bay, Antelope, Foothill Farms, Citrus Heights, Orangevale, Fair Oaks, Carmichael, North Highlands, Rio Linda, and Elverta and their respective travel distances to/from the project site. Average trip lengths for trips associated with local teams were derived based on the geographic distribution of residents aged 5 to 17 years old in Roseville only and their respective travel distances to/from the project site.

As shown in **Table 5**, the proposed project, if implemented, would result in a net decrease of 11,275 total daily weekday VMT when compared to the VMT that would be generated by the site if it were developed with its planned land uses. Accordingly, this impact would be **less than significant**.

## Mitigation Measures

None required.

**Table 5: Roseville Soccer Complex Project – Weekday Vehicle Miles Traveled Comparison**

| Land Use | Quantity | Daily Vehicle Trips | Daily VMT[1] |
|---|---|---|---|
| **Planned Land Uses[2]** | | | |
| Park – Parcel WB-50E | 3.1 acres | 8 | 54 |
| Park (Sports Complex) – Parcel WB-60A | 6 fields[3] | 2,870 | 22,344[4] |
| Industrial – Parcel WB-60B | 30 acres (561.924 ksf)[5] | 2,304[6] | 24,192[7] |
| | **Total** | **5,182** | **46,590** |
| **Proposed Roseville Soccer Complex Project** | | | |
| Roseville Soccer Complex | 10 fields | 4,800 | 35,314[4] |
| | **Total** | **4,800** | **35,314** |
| **Difference (Project Minus Planned)** | | | |
| | **Total** | **-382** | **-11,275** |

Note: [1] Refer to technical appendix for detailed calculations.
[2] Planned land uses represent those identified in the *West Roseville Specific Plan*.
[3] Planned 25.2-acre sports complex would accommodate an estimated 6 fields.
[4] Average trip lengths for trips derived based on the geographic distribution of residents aged 5 to 17 years old in Roseville, Rocklin, Lincoln, Loomis, Granite Bay, Antelope, Foothill Farms, Citrus Heights, Orangevale, Fair Oaks, Carmichael, North Highlands, Rio Linda, and Elverta based on US Census 2020 ACS data and their respective travel distances to/from the project site. In both scenarios, three fields would be utilized by the Placer United Soccer Club, which would draw from all of these communities. The remaining fields would be utilized by local teams and would draw from Roseville only.
[5] Floor area ratio (FAR) of 0.43 derived from the proposed industrial park project analyzed in the Roseville Industrial Park EIR.
[6] Trip generation based on trip rates from *Trip Generation Manual, 11th Edition* (ITE 2021).
[7] Average trip length of 10.5 miles derived from the proposed industrial park project analyzed in the Roseville Industrial Park EIR.
Source: Fehr & Peers, 2022.

## Impact 2: Impacts to bicycle facilities.

As shown on Figure 3, a continuous set of on-street and/or off-street bicycle facilities are present to connect the project site with surrounding neighborhoods. The project would not modify these existing bicycle facilities or implement new bicycle facilities. A bicyclist could ride on Class II bike lanes continuously from the project site along Westbrook Boulevard to Blue Oaks Boulevard, Pleasant Grove Boulevard, and beyond. Similarly, bicyclists could ride on the existing Class I shared-use path along Curry Creek to access the project site from various nearby residential communities such as Westpark. While the project site does not have continuous access to the City's Class I off-street path system, City policies related to biking do not mandate this be present to achieve consistency with policies because continuous Class II bike lanes are provided to accommodate bicycle travel.

The project would not cause a physical disruption to existing bicycle facilities. Moreover, the project would not interfere with the implementation of planned bicycle facilities identified in the City's General Plan, West Roseville Specific Plan, or Bicycle Master Plan.

Altogether, this impact would be **less than significant**.

### Mitigation Measures

None required.

## Impact 3: Impacts to pedestrian facilities.

As shown on Figure 3, continuous pedestrian facilities are currently lacking on Westbrook Boulevard near the project site. In addition to constructing new pedestrian pathways internal to the project site, the project would include the construction of new sidewalks on the easterly side of Westbrook Boulevard along the project site frontage. However, sidewalk gaps would remain on the easterly side of Westbrook Boulevard between Blue Oaks Boulevard and Payson Avenue that would discourage people from walking to and from the project site. This would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5, which call for establishing and maintaining a safe and continuous pedestrian network that encourages walking. It would not be possible to walk to and from the site via the easterly side of Westbrook Boulevard between Blue Oaks Boulevard and Payson Avenue via continuous sidewalks. Instead, pedestrians would either walk in a grassy field, in a landscaped area, or in the Class II bike lane.

The project would not cause a physical disruption to existing pedestrian facilities. Moreover, the project would not interfere with the implementation of planned pedestrian facilities identified in the City's General Plan, West Roseville Specific Plan, or Pedestrian Master Plan.

Altogether, this impact would be **significant**.

### Mitigation Measure 3.1. Construct pedestrian facilities in the project vicinity.

Prior to its first day of operations, the City shall construct the following pedestrian facilities in the project vicinity:

- An approximate 450-foot length of sidewalk along the east side of Westbrook Boulevard from the project site north to connect with the existing sidewalk starting south of Blue Oaks Boulevard.
- An approximate 700-foot length of sidewalk along the east side of Westbrook Boulevard from the project site south to connect with the existing sidewalk starting north of Payson Avenue.

It is conceivable that one or both of the above missing sidewalks may already be constructed by the time that the project would open. If that is the case, then no additional pedestrian improvements would be necessary. However, if they are not yet in place, then the City shall construct the improvements, which could be either permanent or temporary.

Significance after Mitigation

Implementation of Mitigation Measure 2.1 would reduce this impact to a **less-than-significant** level because construction of sidewalks in the areas specified is considered feasible and would lead to consistency with adopted City policies, plans, or programs regarding pedestrian facilities.

## Impact 4: Impacts to transit service and facilities.

As described previously, fixed-route bus service is not currently provided within the project site vicinity. Roseville Transit Dial-a-Ride service provides on-demand transit service to the study area, including the project site.

Farside bus turnouts are currently present on both northbound and southbound Westbrook Boulevard at Brookstone Drive South to accommodate future bus service. Moreover, the project would include the provision of bus parking within the on-site parking lots to accommodate buses and shuttle associated with tournaments and other events.



The project would not cause a physical disruption to existing transit service or facilities. The project would not interfere with the implementation of planned transit service or facilities identified in the City's General Plan, the West Roseville Specific Plan, or the City of Roseville Short Range Transit Plan.

Altogether, this impact would be **less than significant**.

### Mitigation Measures

None required.

## Impact 5: Hazards impacts.

The project would modify the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections. The proposed intersection modifications would adhere to applicable City of Roseville roadway design standards.

Several emergency services are located within the project area. Roseville Fire Station #9 is situated on Hayden Parkway approximately 1.5 miles from the project site and future Fire Station #11 would be located to the north of the project site (in the Amoruso Ranch Specific Plan area). Roseville Police headquarters are located at 1051 Junction Boulevard. Roseville's existing roadway and transportation network provides accessibility for fire, police, and other emergency service providers. Additionally, traffic signals in the City include emergency vehicle pre-emption equipment that would allow emergency responders to turn the signal green, allowing for efficient access to the scene. The project would not create roadway and transportation facilities that impede access for emergency response vehicles. Thus, the project would not result in inadequate emergency access.

Altogether, this impact would be **less than significant**.

### Mitigation Measures

None required.

# 7. Traffic Operations Analysis

This chapter presents an analysis of the potential effects of the project with respect to traffic operations (i.e., vehicle delay and LOS) on roadway facilities within the vicinity of the project site.

## Analysis Scenarios

The following scenarios are analyzed in this study:

- **Near-Term No Project Conditions** – Establishes the baseline setting from which project-specific traffic operations effects are measured. This scenario assumes the completion of numerous near-term land use and transportation system changes (refer to "Travel Demand Forecasting" section below for details).
- **Near-Term Plus Project Conditions** – Adds changes to travel demand, roadway geometrics, etc. that would result from buildout of the proposed project to Near-Term Conditions.
- **Cumulative No Project Conditions** - Represents cumulative travel demand based on reasonably foreseeable local and regional land use and transportation system changes. For the purposes of this study, the cumulative year is 2035. This scenario assumes the project site is developed consistent with the planned land uses identified in the West Roseville Specific Plan.
- **Cumulative Plus Project Conditions** – Adds changes to travel demand, roadway geometrics, etc. that would result from buildout of the proposed project to Cumulative No Conditions.

Traffic operations analyses were performed for each of these scenarios during weekday PM peak hour (4:30 PM to 5:30 PM) and Saturday AM peak hour (10:15 AM to 11:15 AM) conditions. These time periods were selected for analysis purposes because they would experience the greatest levels of project travel activity (i.e., due to weekday evening practices and weekend tournaments). Traffic operations analyses were not performed during weekday AM peak hour conditions because the project would be expected to generate a nominal number of vehicle trips during this time period.

Saturday AM peak hour conditions represent conditions during which a local/semi-regional tournament would be held at the project site. Analysis of a local/semi-regional tournament was selected instead of analysis of a regional/national tournament due to its higher trip generation potential and to avoid understating the potential effects of the project on traffic operations.



# Analysis Methodology

This section describes the methods utilized to analyze roadway traffic operations within the study area.

## Analysis Locations

The following six study intersections were selected for analysis based on the project's expected travel characteristics (i.e., the project location and amount of project trips) as well as their susceptibility to being affected by the project:

1. Blue Oaks Boulevard/Westbrook Boulevard
2. Blue Oaks Boulevard/Westpark Drive
3. Blue Oaks Boulevard/Hayden Parkway
4. Westbrook Boulevard/Brookstone Drive North
5. Westbrook Boulevard/Brookstone Drive South
6. Westbrook Boulevard/Pleasant Grove Boulevard

Study intersections 4 and 5 would serve as the primary vehicular access points for the project site.

## Data Collection

Existing intersection turning movement data was derived at the study intersections as follows:

- Weekday evening (4 PM to 6 PM) peak period
    - Traffic counts were conducted at study intersections 1 through 3 on Tuesday, August 17, 2021 and at study intersections 4 and 5 on Thursday, January 27, 2022.
    - Intersection turning movement data at study intersection 6 on Tuesday, August 17, 2021 was obtained from the City of Roseville Turning Movement Volume/Occupancy Report online database.
- Saturday morning (10 AM to 12 PM) peak period
    - Traffic counts were conducted at study intersections 1 through 5 on Saturday, March 19, 2022.
    - Intersection turning movement data at study intersection 6 on Saturday, March 19, 2022 was obtained from the City of Roseville Turning Movement Volume/Occupancy Report online database.

Additionally, Fehr & Peers conducted a site visit in April 2022 to document of existing intersection geometrics, lane configurations, traffic controls, etc. at the six study intersections. At present, study intersections 1 through 5 are all-way stop-controlled and study intersection 6 is signalized.

## Travel Demand Forecasting

Because the analysis scenarios consider future land use and transportation system changes, it was necessary to conduct travel demand forecasting to determine near-term and cumulative peak hour traffic volumes at the six study intersections. This process is described below.

### *Near-Term Conditions*

Near-term conditions reflect the land use growth associated with near-term development activity anticipated for the specific plans presented in **Table 6**. These land use quantities were developed in consultation with City staff as part of the *Blue Oaks Boulevard Phasing Analysis* (Fehr & Peers November 2021). As shown, 6,460 new dwelling units and about 200,000 square feet of retail would be added under near-term conditions.

**Table 6: Near-Term Land Use Absorption**

| Land Use Category | Creekview Specific Plan | West Roseville Specific Plan | Regional University Specific Plan | Sierra Vista West Specific Plan | Sierra Vista East Specific Plan | Amoruso Ranch Specific Plan |
|---|---|---|---|---|---|---|
| SF Res (du's) | 1,000 | 1,732 | 0 | 1,150 | 478 | 481 |
| MF Res (du's) | 210 | 1,057 | 0 | 150 | 200 | 0 |
| Retail (ksf) | 0 | 82 | 0 | 125 | 0 | 0 |
| Office (ksf) | 0 | 0 | 0 | 0 | 0 | 0 |
| Industrial (ksf) | 0 | 0 | 0 | 0 | 0 | 0 |
| School (students) | 0 | 450 | 0 | 0 | 0 | 0 |

Source: *Blue Oaks Boulevard Phasing Analysis* Technical Memorandum (Fehr & Peers, 2021).

Additionally, near-term conditions include the completion of the following major roadway system modifications in the study area:

- Extension of Westbrook Boulevard north to Sunset Boulevard West and south to Baseline Road (two lanes north of Blue Oaks Boulevard and four lanes south of Blue Oaks Boulevard).
- Extension of Santucci Boulevard between Pleasant Grove Boulevard and Baseline Road (four lanes).
- Extension of Market Street between Pleasant Grove Boulevard and Baseline Road (two lanes).
- Extension of Upland Drive between Pleasant Grove Boulevard and Baseline Road (two lane).

The existing lane configurations on Westbrook Boulevard and Blue Oaks Boulevard and existing traffic controls and intersection geometries at the six study intersections were assumed to remain as-is under near-term conditions.

The near-term land uses and transportation system changes were added to the City of Roseville modified 2021 base year model. The model was then run and weekday PM peak hour traffic forecasts were developed for the six study intersections.

Near-term Saturday AM peak hour traffic forecasts were estimated by adjusting the near-term weekday PM peak hour traffic forecasts based on the existing ratio of Saturday AM peak hour to Weekday PM peak hour traffic volumes at the six study intersections as well as at the nearby Pleasant Grove Boulevard/Market Street intersection.

Near-Term Plus Project traffic forecasts were estimated by assigning the project trips to the study intersections in accordance with the project travel characteristics presented in Chapter 4 and adding project trips to the Near-Term No Project traffic forecasts. Additionally, the intersection geometrics and lane configurations at both Westbrook Boulevard/Brookstone Drive intersections were modified in accordance with the modifications proposed on the project site plan.

### *Cumulative Conditions*

Cumulative conditions reflect the reasonably foreseeable local and regional land use and transportation system changes that would be present in 2035. These changes are consistent with the City's "Updated 2035 Model", as documented in the technical memorandum entitled *Updated Roseville 2035 Model VMT and LOS Results* (Fehr & Peers April 2022). These cumulative land use and transportation system changes reflect the "Project Scenario" from the City's Housing Element Update, plus various recently proposed projects both within and outside of the City of Roseville such as the Roseville Industrial Park and the Parcel 55a/60 Rezone.

The cumulative conditions transportation system includes the following key modifications to the study intersections and roadway facilities:

- Widening of Westbrook Boulevard south of Blue Oaks Boulevard to six lanes.
- Widening of Blue Oaks Boulevard between the westerly city limits and Fiddyment Road to six lanes.
- Signalization of the Blue Oaks Boulevard/Westbrook Boulevard, Blue Oaks Boulevard/Westpark Drive, Blue Oaks Boulevard/Hayden Parkway, Westbrook Boulevard/Brookstone Drive North, and Westbrook Boulevard/Brookstone Drive South intersections.

Outputs from the "Updated 2035 Model" were used to derive cumulative weekday PM peak hour traffic forecasts for the six study intersections. Cumulative Saturday AM peak hour traffic forecasts were estimated using similar methods to those described above for near-term conditions.

Cumulative Plus Project traffic forecasts were estimated by assigning the project trips to the study intersections in accordance with the project travel characteristics presented in Chapter 4 and adding project trips to the Cumulative No Project traffic forecasts. Additionally, the intersection geometrics and lane configurations at both Westbrook Boulevard/Brookstone Drive intersections were modified in accordance with the modifications proposed on the project site plan. Because these intersections would be signalized under cumulative conditions, it was assumed that a southbound left-turn pocket would be provided at both intersections to complement the existing northbound left-turn pocket and to enable protected left-turn signal phasing for the northbound and southbound approaches.

## Roadway System Operations

This study analyzes roadway operating conditions using intersection level of service (LOS) as a primary measure of operational performance. Motorized vehicle LOS is a qualitative measure of traffic flow from the perspective of motorists and is an indication of the comfort and convenience associated with driving. Typical factors that affect motorized vehicle LOS include speed, travel time, traffic interruptions, and freedom to maneuver. Empirical LOS criteria and methods of calculation have been documented in the *Highway Capacity Manual, 6th Edition* (HCM) published by the Transportation Research Board of the National Academies of Science (Transportation Research Board, 2016). The HCM defines six levels of service ranging from LOS A (representing free-flow vehicular traffic conditions with little to no congestion) to LOS F (oversaturated conditions where traffic demand exceeds capacity resulting in long queues and delays). The LOS definitions and calculations contained in the HCM are the prevailing measurement standard used throughout the United States and are used in this study. Motorized vehicle LOS definitions for signalized and unsignalized intersection are discussed below.

The LOS at signalized intersections is based on the average control delay (i.e., delay resulting from initial deceleration, queue move-up time, time stopped on an intersection approach, and final acceleration) experienced per vehicle traveling through the intersection. **Table 7** summarizes the relationship between delay and LOS for signalized intersections.

Similar to signalized intersections, the HCM 6th Edition methodology for stop-controlled intersections reports the LOS based on the control delay experienced by motorists traveling through the intersection. As shown in **Table 8**, the delay ranges for stop-controlled intersections are lower than for signalized intersections. The HCM anticipates that motorists expect signalized intersections to carry higher traffic

volume that results in greater delay than a stop-controlled intersection. Stop controls are associated with more uncertainty as delays are less predictable, which can reduce users' delay tolerance.

Traffic operations for study intersections 1 through 3 and 6 were analyzed using Synchro 11 traffic operations analysis software. Traffic operations for study intersections 4 and 5 were analyzed using the SimTraffic micro-simulation module of the Synchro 11 software, which accounts for interactions between intersections, queue spillback, vehicle platooning, etc. SimTraffic also produces more accurate estimates of vehicular queuing (when compared to more deterministic methods).

**Table 7: Signalized Intersection LOS Criteria**

| Level of Service | Description | Average Control Delay[1] |
|---|---|---|
| A | Volume-to-capacity ratio is low and either progression is exceptionally favorable or cycle length is very short. | ≤ 10 |
| B | Volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A. | >10 to 20 |
| C | Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. | >20 to 35 |
| D | Volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable. | >35 to 55 |
| E | Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent. | >55 to 80 |
| F | Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. | >80 |

Note: [1] Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A).
Source: *Highway Capacity Manual, 6th Edition,* Transportation Research Board, 2016.

**Table 8: Stop-Controlled Intersection LOS Criteria**

| Level of Service | Average Control Delay[1] |
|---|---|
| A | ≤ 10 |
| B | >10 to 15 |
| C | >15 to 25 |
| D | >25 to 35 |
| E | >35 to 50 |
| F | >50 |

Note: [1] Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A).
Source: *Highway Capacity Manual, 6th Edition,* Transportation Research Board, 2016.

### Roadway Operations Performance Criteria

*City of Roseville General Plan Circulation Element* Policy CIRC2.1 requires that the City maintain a LOS C standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the AM and PM peak. Exceptions to the LOS C standard may be considered where improvements required to achieve the standard would adversely affect pedestrian, bicycle, or transit access, and where feasible LOS improvements and travel-demand-reducing strategies have been exhausted.

## Near-Term No Project Conditions

**Table 9** presents the weekday PM peak hour and Saturday AM peak hour vehicle delay and LOS for each study intersection under Near-Term No Project Conditions. As shown, all study intersections would operate at acceptable LOS C or better with the exception of the Blue Oaks Boulevard/Hayden Parkway intersection, which would operate at LOS F during both the weekday PM peak hour and Saturday AM peak hour.

**Table 9: Peak Hour Intersection Operations – Near-Term No Project Conditions**

| Intersection | Traffic Control | Peak Hour | Near-Term No Project Conditions | |
|---|---|---|---|---|
| | | | Delay | LOS |
| 1. Blue Oaks Blvd./Westbrook Blvd. | AWSC | Weekday PM | 22 | C |
| | | Saturday AM | 12 | B |
| 2. Blue Oaks Blvd./Westpark Dr. | AWSC | Weekday PM | 20 | C |
| | | Saturday AM | 13 | B |
| 3. Blue Oaks Blvd./Hayden Pkwy. | AWSC | Weekday PM | 193 | F |
| | | Saturday AM | 67 | F |
| 4. Westbrook Blvd./Brookstone Dr. North | AWSC | Weekday PM | 8 | A |
| | | Saturday AM | 8 | A |
| 5. Westbrook Blvd./Brookstone Dr. South | AWSC | Weekday PM | 7 | A |
| | | Saturday AM | 7 | A |
| 6. Westbrook Blvd./Pleasant Grove Blvd. | AWSC | Weekday PM | 21 | C |
| | | Saturday AM | 20 | C |

Note: For signalized and all-way stop-controlled (AWSC) intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections (SSSC), average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.
Source: Fehr & Peers, 2022.

While this study does not include a near-term analysis of weekday AM peak hour conditions, such an analysis was prepared as part of *Blue Oaks Boulevard Widening Analysis*. This analysis revealed that the Blue Oaks Boulevard/Westbrook Boulevard, Blue Oaks Boulevard/Westpark Drive, and Blue Oaks Boulevard/Hayden Parkway intersections would operate at unacceptable LOS E, LOS D, and LOS F, respectively, under near-term weekday AM peak hour conditions. The *Blue Oaks Boulevard Widening Analysis* recommended the following improvements to improve operations to acceptable levels:

- Signalize the Blue Oaks Boulevard/Westbrook Boulevard intersection and maintain the existing lane configurations.
- Convert the Blue Oaks Boulevard/Westpark Drive intersection from all-way to side-street stop control and maintain the existing lane configurations.
- Signalize the Blue Oaks Boulevard/Hayden Parkway intersection and widen the eastbound and westbound approaches to each consist of a dedicated left-turn lane and a shared through-right lane.

These recommendations would similarly apply under Near-Term No Project conditions for this study.

## Near-Term Plus Project Conditions

**Table 10** presents the weekday PM peak hour and Saturday AM peak hour vehicle delay and LOS for each study intersection under Near-Term Plus Project Conditions. As shown, the project would increase delays at all study intersections during both the weekday PM peak hour and Saturday AM peak hour. Moreover, the project would degrade operations at the Blue Oaks Boulevard/Westbrook Boulevard and Blue Oaks Boulevard/Hayden Parkway intersections from acceptable LOS C to unacceptable LOS D during the weekday PM peak hour and would exacerbate unacceptable LOS F conditions at the Blue Oaks Boulevard/Hayden Parkway intersection during both the weekday PM peak hour and Saturday AM peak hour. The Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections serving the project site would both operate at acceptable LOS B or better during both the weekday PM peak hour and Saturday AM peak hour.

The intersection traffic control and lane configuration improvements described previously under Near-Term No Project conditions would improve operations at the Blue Oaks Boulevard/Westbrook Boulevard, Blue Oaks Boulevard/Hayden Parkway, and Blue Oaks Boulevard/Hayden Parkway intersections to acceptable LOS C or better (see **Table 11**).

While the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections would comply with the City's LOS policy, both intersections would meet the peak hour signal warrant (CAMUTCD Warrant 3B) during the Saturday AM peak hour under Near Term Plus Project conditions. Accordingly, it is recommended that the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections be signalized prior to the commencement of operations at the project site. Signalization of these intersections is planned by the City and included in the City's CIP. Additional benefits associated with signalization of these intersections include improved pedestrian crossings across Westbrook Boulevard to/from the project site and improved access for motorists turning onto Westbrook Boulevard from Brookstone Drive.

Given the existing eastbound approach lane configurations and the project's proposed westbound approach lane configurations at both the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections, with the signalization of these intersections, it is anticipated that the eastbound and westbound approaches would operate with split phasing at both intersections. In light of the eastbound and westbound split phase operations, the following modifications are recommended to maximize operational efficiency at these two intersections:

- Eliminate the marked crosswalk on the south leg of the Westbrook Boulevard/Brookstone Drive North intersection. Note that a sidewalk is not present along the southerly side of Brookstone Drive North west of Westbrook Boulevard. Thus, the south leg crossing would provide limited benefit to pedestrian connectivity when the intersection is signalized.
- Eliminate the marked crosswalk on the north leg of the Westbrook Boulevard/Brookstone Drive South intersection. Note that a sidewalk is not present along the northerly side of Brookstone Drive South west of Westbrook Boulevard. Thus, the north leg crossing would provide limited benefit to pedestrian connectivity when the intersection is signalized.

### Table 10: Peak Hour Intersection Operations – Near-Term Plus Project Conditions

| Intersection | Traffic Control | Peak Hour | Near-Term No Project Conditions | | Near-Term Plus Project Conditions | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. Blue Oaks Blvd./Westbrook Blvd. | AWSC | Weekday PM | 22 | C | 39 | E |
| | | Saturday AM | 12 | B | 20 | C |
| 2. Blue Oaks Blvd./Westpark Dr. | AWSC | Weekday PM | 20 | C | 56 | F |
| | | Saturday AM | 13 | B | 23 | C |
| 3. Blue Oaks Blvd./Hayden Pkwy. | AWSC | Weekday PM | 193 | F | 321 | F |
| | | Saturday AM | 67 | F | 177 | F |
| 4. Westbrook Blvd./Brookstone Dr. North | AWSC | Weekday PM | 8 | A | 13 | B |
| | | Saturday AM | 8 | A | 11 | B |
| 5. Westbrook Blvd./Brookstone Dr. South | AWSC | Weekday PM | 7 | A | 10 | B |
| | | Saturday AM | 7 | A | 10 | A |
| 6. Westbrook Blvd./Pleasant Grove Blvd. | AWSC | Weekday PM | 21 | C | 33 | C |
| | | Saturday AM | 20 | C | 25 | C |

Note: For signalized and all-way stop-controlled (AWSC) intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections (SSSC), average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.
Source: Fehr & Peers, 2022.

### Table 11: Peak Hour Intersection Operations – Near-Term Plus Project Conditions With Improvements

| Intersection | Traffic Control | Peak Hour | Near-Term Plus Project Conditions | | Near-Term Plus Project Conditions With Improvements | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. Blue Oaks Blvd./Westbrook Blvd. | AWSC/ Signal | Weekday PM | 28 | D | 29 | C |
| | | Saturday AM | 20 | C | 19 | C |
| 2. Blue Oaks Blvd./Westpark Dr. | AWSC/ SSSC | Weekday PM | 29 | D | 2 (30) | A (D) |
| | | Saturday AM | 23 | C | 1 (22) | A (C) |
| 3. Blue Oaks Blvd./Hayden Pkwy. | AWSC/ Signal | Weekday PM | 255 | F | 35 | C |
| | | Saturday AM | 177 | F | 24 | C |

Note: For signalized and all-way stop-controlled (AWSC) intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections (SSSC), average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.
Source: Fehr & Peers, 2022.

**Table 12** displays the estimated 95th percentile queues for critical movements at the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections serving the project site. These include the northbound right-turn and southbound left-turn ingress movements as well as the westbound shared through-left and right-turn egress movements. The 95th percentile queues would be accommodated within the available storage. However, because the southbound left-turn movements would occur from the southbound shared through-left lane, queues associated with these movements would disrupt southbound through traffic on Westbrook Boulevard.

**Table 12: Peak Hour 95th Percentile Queue Estimates – Near-Term Plus Project Conditions**

| Intersection | Movement | Storage (ft.) | Peak Hour | 95th Percentile Queue (ft.) |
|---|---|---|---|---|
| 4. Westbrook Blvd./Brookstone Dr. North | NB RT | 220 | Weekday PM | 75 |
| | | | Saturday AM | 100 |
| | SB TH/LT | >1,000 | Weekday PM | 125 |
| | | | Saturday AM | 100 |
| | WB TH/LT | >350 | Weekday PM | 125 |
| | | | Saturday AM | 125 |
| | WB RT | 240 | Weekday PM | 50 |
| | | | Saturday AM | 50 |
| 5. Westbrook Blvd./Brookstone Dr. South | NB RT | 220 | Weekday PM | 75 |
| | | | Saturday AM | 75 |
| | SB TH/LT | 820 | Weekday PM | 100 |
| | | | Saturday AM | 75 |
| | WB TH/LT | >500 | Weekday PM | 75 |
| | | | Saturday AM | 75 |
| | WB RT | 115 | Weekday PM | 50 |
| | | | Saturday AM | 50 |

Note: Results shown estimated from SimTraffic micro-simulation analysis of 10 simulation runs. Queue lengths are rounded up to nearest 25 feet.
Source: Fehr & Peers, 2022.

The following improvements are recommended to reduce the adverse effects associated with the southbound left-turn queues at the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections:

- At both the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections, construct a southbound left-turn pocket with a storage length of 250 feet. These modifications would be consistent with Detail ST-10 (Four-Lane Arterial Single Left-Turns) of the *City of Roseville Design and Construction Standards*. Moreover, these modifications would be consistent with Section 5-6 of the *City of Roseville Design and Construction Standards*, which states that "on arterials and expressways and where left turns in will be permitted, a left turn deceleration lane shall be provided." Finally, these modifications would be consistent with those anticipated to be required under Cumulative Plus Project conditions. Because these intersections would be signalized under cumulative conditions, it is assumed that a southbound left-turn pocket would be needed at both intersections to complement the existing northbound left-turn pocket and to enable protected left-turn signal phasing for the northbound and southbound approaches.

## Cumulative No Project Conditions

**Table 13** presents the weekday PM peak hour and Saturday AM peak hour vehicle delay and LOS for each study intersection under Cumulative No Project Conditions. As shown, all study intersections would operate at acceptable LOS C or better with the exception of the Blue Oaks Boulevard/Westbrook Boulevard intersection, which would operate at LOS D during the weekday PM peak hour.

These results are consistent with those presented for the cumulative conditions analysis in the *Updated Roseville 2035 Model VMT and LOS Results* technical memorandum. This analysis determined that the total number of intersections throughout the City operating at LOS C or better during the PM peak hour would be consistent with the City's associated LOS policy. The same conclusion applies to Cumulative No Project conditions for this study.

**Table 13: Peak Hour Intersection Operations – Cumulative No Project Conditions**

| Intersection | Traffic Control | Peak Hour | Cumulative No Project Conditions | |
|---|---|---|---|---|
| | | | Delay | LOS |
| 1. Blue Oaks Blvd./Westbrook Blvd. | Signal | Weekday PM | 50 | D |
| | | Saturday AM | 23 | C |
| 2. Blue Oaks Blvd./Westpark Dr. | Signal | Weekday PM | 5 | A |
| | | Saturday AM | 5 | A |
| 3. Blue Oaks Blvd./Hayden Pkwy. | Signal | Weekday PM | 25 | C |
| | | Saturday AM | 17 | B |
| 4. Westbrook Blvd./Brookstone Dr. North | Signal | Weekday PM | 9 | A |
| | | Saturday AM | 4 | A |
| 5. Westbrook Blvd./Brookstone Dr. South | Signal | Weekday PM | 6 | A |
| | | Saturday AM | 6 | A |
| 6. Westbrook Blvd./Pleasant Grove Blvd. | Signal | Weekday PM | 32 | C |
| | | Saturday AM | 21 | C |

Note: For signalized and all-way stop-controlled (AWSC) intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections (SSSC), average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.
Source: Fehr & Peers, 2022.

## Cumulative Plus Project Conditions

**Table 14** presents the weekday PM peak hour and Saturday AM peak hour vehicle delay and LOS for each study intersection under Cumulative Plus Project Conditions. As shown, the project would increase delays at all study intersections during both the weekday PM peak hour and Saturday AM peak hour. Moreover, the project would degrade operations at the Westbrook Boulevard/Pleasant Grove Boulevard intersection from acceptable LOS C to unacceptable LOS D during the weekday PM peak hour and would exacerbate unacceptable LOS D to LOS E at the Blue Oaks Boulevard/Westbrook Boulevard intersection during the weekday PM peak hour. The Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections serving the project site would both operate at acceptable LOS B or better during both the weekday PM peak hour and Saturday AM peak hour.

**Table 14: Peak Hour Intersection Operations – Cumulative Plus Project Conditions**

| Intersection | Traffic Control | Peak Hour | Cumulative No Project Conditions | | Cumulative Plus Project Conditions | |
|---|---|---|---|---|---|---|
| | | | Delay | LOS | Delay | LOS |
| 1. Blue Oaks Blvd./Westbrook Blvd. | Signal | Weekday PM | 50 | D | 73 | E |
| | | Saturday AM | 23 | C | 27 | C |
| 2. Blue Oaks Blvd./Westpark Dr. | Signal | Weekday PM | 5 | A | 5 | A |
| | | Saturday AM | 5 | A | 5 | A |
| 3. Blue Oaks Blvd./Hayden Pkwy. | Signal | Weekday PM | 25 | C | 26 | C |
| | | Saturday AM | 17 | B | 17 | B |
| 4. Westbrook Blvd./Brookstone Dr. North | Signal | Weekday PM | 9 | A | 29 | C |
| | | Saturday AM | 4 | A | 18 | B |
| 5. Westbrook Blvd./Brookstone Dr. South | Signal | Weekday PM | 6 | A | 18 | B |
| | | Saturday AM | 6 | A | 16 | B |
| 6. Westbrook Blvd./Pleasant Grove Blvd. | Signal | Weekday PM | 32 | C | 70 | E |
| | | Saturday AM | 21 | C | 33 | C |

Note: For signalized and all-way stop-controlled (AWSC) intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections (SSSC), average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.
Source: Fehr & Peers, 2022.

While the project would degrade operations at the Blue Oaks Boulevard/Westbrook Boulevard intersection, this degradation would not constitute an inconsistency with the City's LOS policy, as this intersection already would not operate at LOS C or better under Cumulative No Project conditions. However, the project-related degradation of operations at the Westbrook Boulevard/Pleasant Grove Boulevard intersection would increase the number of intersections throughout the City that would not operate at LOS C or better conditions relative to Cumulative No Project conditions. The following improvements would improve operations at the Westbrook Boulevard/Pleasant Grove Boulevard intersection to acceptable LOS C or better conditions:

- Modify the Westbrook Boulevard/Pleasant Grove Boulevard intersection signal equipment and signal timing plan to operate with an overlap phase for the westbound right-turn phase (i.e., would operate concurrently with southbound left-turn).

Note that this would require prohibiting southbound u-turns. While there are a pair of right-turn only intersections to the north (i.e., at Symphony Avenue and Youngtown Avenue), they are not likely generating much u-turn demand at this location due to the neighborhoods connecting to the signalized Westbrook Boulevard/Octave Avenue/Payson Avenue intersection 700 feet to the north).

As described previously, it is anticipated that under Cumulative Plus Project conditions, both the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections would need to be modified to include a southbound left-turn pocket. These modifications would be needed at both intersections (which are planned for signalization under cumulative conditions) to complement the existing northbound left-turn pocket and to enable protected left-turn signal phasing for the northbound and southbound approaches.

Given the existing eastbound approach lane configurations and the project's proposed westbound approach lane configurations at both the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections, it is anticipated that the eastbound and westbound approaches would operate with split phasing at both intersections. In light of the eastbound and westbound split phase operations, the following modifications are recommended to maximize operational efficiency at these two intersections:

- Eliminate the marked crosswalk on the south leg of the Westbrook Boulevard/Brookstone Drive North intersection. Note that a sidewalk is not present along the southerly side of Brookstone Drive North west of Westbrook Boulevard. Thus, the south leg crossing would provide limited benefit to pedestrian connectivity when the intersection is signalized under cumulative conditions.
- Eliminate the marked crosswalk on the north leg of the Westbrook Boulevard/Brookstone Drive South intersection. Note that a sidewalk is not present along the northerly side of Brookstone Drive South west of Westbrook Boulevard. Thus, the north leg crossing would provide limited benefit to pedestrian connectivity when the intersection is signalized under cumulative conditions.

**Table 15** displays the estimated 95$^{th}$ percentile queues for critical movements at the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections serving the project site. These include the northbound right-turn and southbound left-turn ingress movements as well as the westbound shared through-left and right-turn egress movements. The 95$^{th}$ percentile queues would be accommodated within the available storage, with the exception of the 95$^{th}$ percentile queue for the southbound left-turn movement at the Westbrook Boulevard/Brookstone Drive North intersection, which would reach a distance of 275 feet during the weekday PM peak hour. As described previously, it is recommended that the marked crosswalk on the north leg of the Westbrook Boulevard/Brookstone Drive North intersection be eliminated to maximize the operational efficiency of the intersection. Implementation of this recommendation would reduce the length of the southbound left-turn movement 95$^{th}$ percentile queue to a length less than the available storage of 240 feet.



**Table 15: Peak Hour 95th Percentile Queue Estimates – Cumulative Plus Project Conditions**

| Intersection | Movement | Storage (ft.) | Peak Hour | 95th Percentile Queue (ft.) |
|---|---|---|---|---|
| 4. Westbrook Blvd./Brookstone Dr. North | NB RT | 220 | Weekday PM | 125 |
| | | | Saturday AM | 125 |
| | SB LT | 240 | Weekday PM | 275 |
| | | | Saturday AM | 150 |
| | WB TH/LT | >350 | Weekday PM | 175 |
| | | | Saturday AM | 200 |
| | WB RT | 240 | Weekday PM | 75 |
| | | | Saturday AM | 50 |
| 5. Westbrook Blvd./Brookstone Dr. South | NB RT | 220 | Weekday PM | 75 |
| | | | Saturday AM | 75 |
| | SB LT | 240 | Weekday PM | 100 |
| | | | Saturday AM | 100 |
| | WB TH/LT | >500 | Weekday PM | 100 |
| | | | Saturday AM | 150 |
| | WB RT | 115 | Weekday PM | 50 |
| | | | Saturday AM | 50 |

Note: Results shown estimated from SimTraffic micro-simulation analysis of 10 simulation runs. Queue lengths are rounded up to nearest 25 feet.
Source: Fehr & Peers, 2022.

# 8. Project Site Parking, Access, and Circulation

This section site provides a review of project site parking, access, and circulation.

## Parking Demand and Supply

The project's expected Saturday peak parking demand is expected to be similar to what was observed at the Rick Hitch Tournament and Placer United Girls Cup. The data collection at the Rick Hitch Tournament included on-site parking occupancy measurements. Through review of 15-minute arrival and departure traffic flows at the Placer United Girls Cup, peak parking demand was calculated. **Table 16** indicates that the peak parking demand at each tournament was about 80 spaces per field.

The two tournaments had nearly identical parking demand rates despite having different tournament profiles. Although the Placer Girls Cup consisted of a greater proportion of teams traveling from more remote destinations (i.e., likely traveling in fewer vehicles), this may have been offset by greater percentages of attendees at the Rick Hitch Tournament departing and then arriving again between games.

This data suggests that the proposed project would have a peak parking demand of about 800 parking spaces. Since over 950 on-site parking spaces would be provided, the supply of parking appears adequate to meet the projected demand during weekend soccer tournaments.

**Table 16: Saturday Parking Rates at Soccer Tournaments**

| Soccer Tournament | Occupied Fields | Peak Parking Demand | |
|---|---|---|---|
| | | Occupied Parking Spaces | Parking Demand Rate |
| Rick Hitch Tournament at Maidu Regional Park[1] | 5 | 397 | 80 spaces/field |
| Placer United Girls Cup at Cherry Island Soccer Complex[2] | 10 | 822 | 81 spaces/field |

Note: [1] Observations on Saturday, August 15, 2015. Peak parking demand occurred at 2 PM.
[2] Observations on Saturday, October 24, 2015. Peak parking demand occurred at 10:15 AM.
Source: Fehr & Peers, 2015.

## Driveway Throat Depths

As described previously, the 95th percentile queues for critical movements at the two Westbrook Boulevard/Brookstone Drive intersections were analyzed to determine the extent to which available storage would adequately accommodate peak hour queues. These movements included the westbound movements, which represent vehicles utilizing the outbound driveways from the project's two on-site parking lots. As shown in Tables 12 and 15, the available storage proposed for these westbound movements would adequately accommodate the weekday PM and Saturday AM peak hour 95th percentile queues under both Near-Term Plus Project and Cumulative Plus Project conditions.

As described previously, the City anticipates that parking fees would not be collected on-site during tournaments. This would eliminate the need for vehicles to stop upon entering the project parking lots to complete a parking transaction via cash, credit card, etc. This would also eliminate queueing associated with inbound vehicles that could otherwise spill back towards or onto Westbrook Boulevard.

Altogether, the proposed driveway (i.e., westbound approach) throat depths at the two Westbrook Boulevard/Brookstone Drive intersections would adequately accommodate queuing associated with inbound and outbound vehicles.

## Phillip Road Access

The project proposes to provide outbound-only access from the northerly parking lot via Phillip Road. However, it is conceivable that some visitors traveling to the soccer complex attempt to enter the project site via Phillip Road. This could be due to a variety of reasons, including a lack of awareness of the proposed access restriction or a visitor following route recommendations provided by a mobile device navigation app (see screenshot below of Google Maps route recommendation to utilize Phillip Road for a trip beginning in Lincoln and ending at the project site).

Vehicles attempting to enter the project site via Phillip Road would not be aware of the access restriction until they approach the Phillip Road project driveway and see that they are unable to enter the site at this location. Vehicles would then be required to complete a multi-point turn to travel eastbound on Phillip Road to locate an alternate access option. Given that the width of Phillip Road measures approximately 20 feet at this location, such a maneuver would cause temporary blockages of Phillip Road.

Additionally, Phillip Road would be an attractive parking option for visitors approaching the project site from the east who would prefer to avoid traveling to and utilizing one of the two proposed on-site parking lots (i.e., due to the reduced travel time associated with traveling to Phillip Road versus traveling to the on-site parking lots). The existing Roseville Energy Park gravel parking lot located on the north side of Phillip Road would also be an attractive parking option for project visitors for similar reasons. Use of

these facilities for project parking activity is not recommended due to the narrow roadway width, the lack of on-street parking facilities, and the lack of sidewalks on Phillip Road. The lack of sidewalks is particularly important to note as this would result in the mixing of pedestrians and vehicles in the Phillip Road travel lanes, which would increase the potential for conflicts involving pedestrians.


The following strategies and modifications are recommended:

- In informational materials related to the soccer complex, tournaments, etc., provide clear information regarding project site access and parking options. In particular, this information should state that ingress via Phillip Road and on-street parking on Phillip Road are not permitted.
- Install the following signage:
    - "No Parking" signage on both sides of Phillip Road between the project site and Westpark Drive,
    - "No Soccer Complex Parking" at the driveway serving the Roseville Energy Park gravel parking lot located on the north side of Phillip Road.
    - "Do Not Enter" signage on westbound Phillip Road approaching the project driveway.
    - "Soccer Complex Entrance - Proceed Straight" on westbound Blue Oaks Boulevard approaching Westpark Drive and on northbound Westpark Drive approaching Phillip Road.

    - "Soccer Complex - No Access Via Phillip Road" on northbound and southbound Westpark Drive approaching Phillip Road.
- Modify the intersection of Phillip Road and the Pleasant Grove Wastewater Treatment Plant north-south access road to include a paved turnout on the northerly side of the intersection. This intersection should be designed such that sufficient radius is available for westbound vehicles to complete a u-turn to travel eastbound on Phillip Road (i.e., to accommodate vehicle turnarounds for those attempting to enter the project site via Phillip Road).

## Westbrook Boulevard/Durango Way Intersection

The Westbrook Boulevard/Durango Way intersection is a right-in/right-out only intersection located between the two Westbrook Boulevard/Brookstone Drive intersections. The west leg of the intersection provides access into the adjacent Brookstone neighborhood to the west. Westbrook Boulevard has a raised median through the intersection and pedestrian crosswalks are not currently provided across Westbrook Boulevard at the intersection. The project would not modify this intersection or provide project site access via this intersection.

As described in the "Parking Demand and Supply" section, the proposed on-site parking supply would be expected to adequately accommodate project-generated parking demand associated with soccer tournaments at the complex. However, it is conceivable that project-related parking activity could occur in the Brookstone neighborhood in unanticipated instances where project parking demand exceeds the available on-site parking supply. In these instances, people desiring to travel between their parked vehicles on the west side of Westbrook Boulevard and the project site may choose to cross Westbrook Boulevard at Durango Way. This behavior would be undesirable given the lack of established pedestrian crossings and the high-speed, multi-lane characteristics of Westbrook Boulevard.

It is recommended that the City monitor the Westbrook Boulevard/Durango Way intersection during tournaments at the soccer complex and evaluate the extent to which pedestrian crossing activity occurs. If sufficient pedestrian activity occurs, it is recommended that the City implement measures to deter this behavior. Potential options include the installation of fencing along the Westbrook Boulevard median through the intersection and the installation of wayfinding signage directing pedestrians from the Brookstone neighborhood to utilize the marked crosswalks at one of the two Westbrook Boulevard/Brookstone Drive intersections.

## Passenger Loading Activity

The project would generate demand for passenger loading activity. During weekday practices and weekend games/tournaments, this would primarily take the form of parents, friends, etc. picking

up/dropping off players in a private vehicle. During weekend games/tournaments, this would also entail buses/shuttles picking up/dropping off players, coaches, and other team personnel.

Experience from comparable event centers and athletic facilities indicates that without designated passenger loading zones, private vehicle passenger loading activity typically occurs along curbspace at locations closest to the facility. The project proposes the provision of several on-site bus parking spaces that would accommodate buses/shuttles. The project site plan does not provide details regarding proposed passenger loading zones for general use.

It is recommended that designated passenger loading zones be provided along the easterly curbspace within both the northerly and southerly on-site parking lots. It is also recommended that "No Stopping Anytime" signage be installed on the east legs of both Westbrook Boulevard/Brookstone Drive intersections (i.e., the project driveways) to prevent passenger loading activity from interfering with inbound traffic flows.

Finally, it is recommended that the City evaluate bus/large vehicle turning maneuvers and swept paths to ensure that the design of internal roadways/drive aisles can adequately accommodate bus maneuvers to and from the designated on-site bus parking spaces.

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# 9. Conclusions

The following conclusions and recommendations were identified in this study:

- Transportation Impact Analysis
    - The project would cause less-than-significant impacts to VMT, bicycle facilities, transit service and facilities, and roadway hazards.
    - The project would cause a less-than-significant impact to pedestrian facilities with the implementation of Mitigation Measure 3.1.
- Traffic Operations Analysis
    - Near-Term Plus Project Conditions
        - Several study intersections would conflict with City LOS policies. The following modifications would improve operations at these intersections to acceptable levels:
            - Signalize the Blue Oaks Boulevard/Westbrook Boulevard intersection and maintain the existing lane configurations.
            - Convert the Blue Oaks Boulevard/Westpark Drive intersection from all-way to side-street stop control and maintain the existing lane configurations.
            - Signalize the Blue Oaks Boulevard/Hayden Parkway intersection and widen the eastbound and westbound approaches to each consist of a dedicated left-turn lane and a shared through-right lane.
        - The Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections would both meet the peak hour signal warrant during the Saturday AM peak hour. The following modifications are recommended:
            - Signalize the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections.
            - Eliminate the marked crosswalks on the south leg of the Westbrook Boulevard/Brookstone Drive North intersection and the north leg of the Westbrook Boulevard/Brookstone Drive South intersection (due to split phase operations in the eastbound and westbound directions).
        - The project would cause vehicle queues that would block southbound through traffic on Westbrook Boulevard. The following modifications would address this issue:

- At both the Westbrook Boulevard/Brookstone Drive North and Westbrook Boulevard/Brookstone Drive South intersections, construct a southbound left-turn pocket with a storage length of 250 feet.

- Cumulative Plus Project
  - The project would cause the Westbrook Boulevard/Pleasant Grove Boulevard to conflict with City LOS policies. The following modification would improve operations at this intersection to acceptable levels:
    - Modify the Westbrook Boulevard/Pleasant Grove Boulevard intersection signal equipment and signal timing plan to operate with an overlap phase for the westbound right-turn phase (i.e., would operate concurrently with southbound left-turn).
  - The project would require that the future planned traffic signals at the two Westbrook Boulevard/Brookstone Drive intersections operate with split phasing in the eastbound and westbound directions. The following modifications would improve the efficiency of split phase operations at these intersections:
    - Eliminate the marked crosswalks on the south leg of the Westbrook Boulevard/Brookstone Drive North intersection and the north leg of the Westbrook Boulevard/Brookstone Drive South intersection.

- Parking, Access, and Circulation
  - The proposed on-site parking supply would adequately accommodate project-generated parking demand during tournaments.
  - The proposed project driveway throat depths would adequately accommodate queuing associated with inbound and outbound vehicles
  - The following strategies and modifications are recommended to address adverse access and parking effects on Phillip Road:
    - In informational materials related to the soccer complex, tournaments, etc., provide clear information regarding project site access and parking options.
    - Install the following signage:
      - "No Parking" signage on both sides of Phillip Road between the project site and Westpark Drive,
      - "No Soccer Complex Parking" at the driveway serving the Roseville Energy Park gravel parking lot located on the north side of Phillip Road.
      - "Do Not Enter" signage on westbound Phillip Road approaching the project driveway.

        - "Soccer Complex Entrance - Proceed Straight" on westbound Blue Oaks Boulevard approaching Westpark Drive and on northbound Westpark Drive approaching Phillip Road.
        - "Soccer Complex - No Access Via Phillip Road" on northbound and southbound Westpark Drive approaching Phillip Road.
    - Modify the intersection of Phillip Road and the Pleasant Grove Wastewater Treatment Plant north-south access road to include a paved turnout on the northerly side of the intersection.
- It is recommended that the City monitor the Westbrook Boulevard/Durango Way intersection during tournaments at the soccer complex and evaluate the extent to which pedestrian crossing activity occurs. If sufficient pedestrian activity occurs, it is recommended that the City implement measures to deter this behavior.
- The following actions are recommended to accommodate passenger loading activities:
    - Provide designated passenger loading zones along the easterly curbspace within both the northerly and southerly on-site parking lots.
    - Install "No Stopping Anytime" signage on the east legs of both Westbrook Boulevard/Brookstone Drive intersections (i.e., the project driveways).
    - Evaluate bus/large vehicle turning maneuvers and swept paths to ensure that the design of internal roadways/drive aisles can adequately accommodate bus maneuvers to and from the designated on-site bus parking spaces