# 3.11 - Transportation

This section describes the existing transportation setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on the Traffic Assessment prepared by Fehr & Peers and included in this EIR as **Appendix I**.

## 3.11.1 - Existing Conditions

### Roadway System

A network of freeway facilities, local roadways, and private roadways form the roadway system within the study area. The following key roadways within this system would serve trips associated with the proposed project.

#### *Freeway Facilities*

*State Route 99*

State Route 99 (SR-99) is a major state freeway facility that traverses north/south through central and northern California. SR-99 mainline, ramp, and ramp terminal facilities are operated and maintained by Caltrans. SR-99 serves as the primary inter-regional auto and truck travel route that connects the northern valley cities of Chico and Yuba City with Sacramento and central valley cities of Stockton, Modesto, Fresno, and Bakersfield. Within the City of Chico, SR-99 also serves as a major commuter route providing vital north/south circulation, with a four lane divided cross section and a posted speed limit of 55 miles per hour (mph). Within the study area, SR-99 has interchanges with two local roadways, E. 20$^{th}$ Street and Skyway.

In the 2014 Traffic Volumes on California State Highways publication, Caltrans reported an Annual Average Daily Traffic Volume (AADT) of 50,000 and 71,000 vehicles on SR-99 just south and north of the E. 20$^{th}$ Street interchange, respectively. Additionally, the average truck percentage on SR-99 is approximately 6.6 percent for the section south and north of the E. 20$^{th}$ Street interchange.

#### *Local Roadways*

*E. 20$^{th}$ Street*

E. 20$^{th}$ Street is a major east-west arterial that begins in the west at Park Avenue, and continues east through the SR-99 interchange to Bruce Road, where the roadway continues into a residential development. With the exception of the easternmost 0.5 mile of roadway near Bruce Road, E 20$^{th}$ Street is a divided four-lane roadway with channelized left-turn pockets at major streets, a posted Class II bike lane, and a posted speed limit of 35 mph.

*East Park Avenue/Skyway Road*

East Park Avenue and Skyway Road combine to serve as a major east-west arterial. East Park Avenue (Business SR-99) extends westward from the SR-99 interchange approximately 0.75 mile before terminating at Midway/Park Avenue. Skyway Road extends eastward from the SR-99 interchange into the foothills. In the vicinity of the project site, both roadways are divided four-lane facilities with channelized left-turn pockets at major streets, except within the SR-99 interchange where only a single westbound through lane exists between the ramps. The roadways maintain a posted speed

limit of 35 mph west of Notre Dame Boulevard, 45 mph between Notre Dame Boulevard and the City's eastern limits, and 50 to 55 mph east of the City.

*Forest Avenue*

Forest Avenue is a major north-south arterial providing connectivity between the east-west arterial streets of SR-32, E. 20th Street, and Skyway (via Notre Dame Boulevard as described below). Within the vicinity of the project, Forest Avenue maintains a divided four-lane configuration arterial with channelized left-turn pockets at major streets, a posted Class II bike lane, and a posted speed limit of 35 mph.

*Notre Dame Boulevard*

Notre Dame Boulevard is a north-south arterial connecting Forest Avenue and Skyway, serving as the southern continuation for Forest Avenue traffic traveling through to Skyway. Although Notre Dame Boulevard continues north from Forest Avenue and south from Skyway, these facilities are two-lane collector roadways. Between Forest Avenue and Skyway, the roadway is a divided four-lane facility with channelized left-turn pockets and a posted speed limit of 35 mph.

*Wittmeier Drive*

Wittmeier Drive is a short, two-lane east-west roadway along the southern boundary of the proposed project, terminating to the west as a cul-de-sac, and to the east at Forest Avenue. The roadway continues east through Forest Avenue into a residential subdivision as Talbert Drive. Two future driveways along Wittmeier Drive will provide access to the proposed Walmart Expansion project.

### *Private Roadways*

*Baney Lane*

Baney Lane is a private east-west street that has a two-lane undivided cross-section with a left-turn pocket at the easternmost Walmart driveway. At the eastern terminus, Baney Lane forms a signalized intersection with Forest Avenue with two left-turn lanes and one through lane. East of the Forest Avenue intersection, Baney Lane continues into a residential subdivision as Parkway Village Drive. At the western terminus, Baney Lane tees into Business Lane. Three existing Walmart driveways on Baney Lane provide access to the project site.

*Business Lane*

Business Lane is a private street that runs in a north-south direction providing connectivity between E. 20th Street and Baney Lane. Business Lane has a two-lane undivided cross-section. At the northern terminus, Business Lane forms a right-turn-only, stop-sign-controlled intersection with E. 20th Street. Within the cul-de-sac located at the roadway's southern terminus south of Baney Lane, the roadway transitions into the private alley behind the existing Walmart, which will also exist behind the proposed project as an additional access route to and from the project site.

*Chico Mall Access/Toys R Us Parking Lot Drive Aisle*

Chico Mall Access and the Toys R Us Parking Lot Drive Aisle are private internal roadways providing connectivity between E 20th Street and Business Lane. The Toys R Us Parking Lot Drive Aisle runs east-west with two eastbound lanes and one westbound lane. The Chico Mall Access roadway runs

north-south with a four-lane divided cross section. The roadway meets E. 20th Street at a signalized intersection. Outbound traffic traveling westbound on E. 20th Street often utilizes these private roadways due to the left-turn restriction at the E. 20th Street/Business Lane intersection. However, the City's preference is for traffic to utilize Forest Avenue instead of Business Lane, a private street.

## Level of Service

Traffic operations at each study roadway facility were evaluated using Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade from A (best) to F (worst) is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

### *Signalized Intersections*

Traffic operations at all study intersections operated and maintained by the City of Chico and Caltrans are analyzed for weekday AM, weekday PM, and Saturday peak hours using procedures and methodologies described in the Highway Capacity Manual (HCM) (Transportation Research Board, 2010). These methodologies were applied using Synchro® traffic operations analysis software.

Table 3.11-1 specifies the average delay range for each LOS category based on HCM procedures. The reported average delay values are rounded to the nearest second. The associated LOS is based on the second decimal point of the delay values. For instance, a signalized intersection with average delay of 34.85 seconds would have a reported LOS of C, whereas a signalized intersection with average delay of 35.05 seconds would have a reported LOS of D. However, the reported delay for both instances would be "35 seconds."

**Table 3.11-1: Intersection Level of Service Thresholds**

| Level of Service | Signalized Intersections HCM1 (Avg. Delay per Vehicle) | Unsignalized Intersections HCM1 (Avg. Delay per Vehicle) |
|---|---|---|
| A | ≤ 10.0 | ≤ 10.0 |
| B | > 10.0 to 20.0 | > 10.0 to 15.0 |
| C | > 20.0 to 35.0 | > 15.0 to 25.0 |
| D | > 35.0 to 55.0 | > 25.0 to 35.0 |
| E | > 55.0 to 80.0 | > 35.0 to 50.0 |
| F | > 80.0 | > 50.0 |
| Source: Fehr & Peers, 2015. | | |

### *Unsignalized Intersections*

Unsignalized study intersections are analyzed using Synchro, which employs the HCM 2010 procedures. At all-way stop-controlled intersections, the average delay and LOS is reported for the average of all vehicles passing through the intersection. At side-street stop-controlled intersections, the average delay and LOS is reported for both the entire intersection and for the minor-street

movement with the greatest delay. Table 3.11-1 specifies the average delay range for each LOS category based on HCM procedures.

### *Freeway Facilities*

Consistent with Caltrans standards, existing conditions freeway segment operations are evaluated using methodologies from the Transportation Research Board's 2010 Highway Capacity Manual. The LOS for a basic freeway segment is based on the vehicle density (passenger cars/lane/mile) as shown in Table 3.11-2.

**Table 3.11-2: Freeway Level of Service Definitions**

| Level of Service[1] | Mainline (Density)[1] | Ramp Junctions (Density)[1] |
|---|---|---|
| A | < 11 | < 10 |
| B | > 11 to 18 | > 10 to 20 |
| C | > 18 to 26 | > 20 to 28 |
| D | > 26 to 35 | > 28 to 35 |
| E | > 35 to 45 | > 35 |
| F | > 45 or Demand exceeds capacity[2] | Demand exceeds capacity[2] |

Notes:
[1] Density expressed in passenger car equivalents per hour per mile per lane.
[2] Occurs when freeway demand exceeds upstream (diverge) or downstream (merge) freeway segment capacity, or if off-ramp demand exceeds off-ramp capacity.
Source: Fehr & Peers, 2015.

Freeway merge segments are those where two traffic streams combine into one single stream, while freeway diverge segments are those where one traffic stream separates into two separate streams. The performance LOS for merge and diverge sections is computed in one of two ways. If both the ramp and the adjacent freeway mainline segment are under capacity, then LOS is based on the density of the ramp junction. If either the ramp or the adjacent freeway mainline segment have reached (or exceed) capacity, then the merge/diverge segment is considered to operate at LOS F regardless of the computed ramp junction density. The LOS for ramp junctions is based on the vehicle density (passenger cars/lane/mile) as shown in Table 3.11-2.

Consistent with Caltrans standards, the performance of freeway ramp weaving segments under future conditions was analyzed using the Leisch methodology as defined in the 2010 Highway Design Manual (Caltrans). The Leisch method calculates weave section density in passenger cars per mile per lane and assigns an LOS based on appropriate thresholds.

## Existing Traffic Conditions

### *Study Area*

Potential project impacts are analyzed at study facilities operated and maintained by the City of Chico, Caltrans, and private property owners. City of Chico study facilities include intersections in a

study area generally bounded by and including E. 20th Street, Notre Dame Boulevard, Skyway, and Dr. Martin Luther King Jr. Parkway. Caltrans study facilities include SR-99 mainline and ramp facilities adjacent to the project site, including the interchanges at E. 20th Street and Skyway.

*Study Intersections*

The study area includes the 14 study intersections listed below. The location of the project site in relation to the study intersections is presented in Exhibit 3.11-1. All study intersections are operated and maintained by the City of Chico except for intersections 2, 3, 12, and 13, which are operated and maintained by Caltrans.

1. E 20th Street/Dr. Martin Luther King Jr. Parkway (City of Chico)
2. E 20th Street/SR-99 Southbound (SB) Ramps (Caltrans)
3. E 20th Street/SR-99 Northbound (NB) Ramps (Caltrans)
4. E 20th Street/Business Lane (City of Chico)
5. E 20th Street/Chico Mall Access (City of Chico)
6. E 20th Street/Forest Avenue (City of Chico)
7. Forest Avenue/Baney Lane (City of Chico)
8. Forest Avenue/Walmart Driveway (City of Chico)
9. Forest Avenue/Wittmeier Drive-Talbert Drive (City of Chico)
10. Forest Avenue/Notre Dame Boulevard (City of Chico)
11. East Park Avenue/Dr. Martin Luther King Jr. Parkway (City of Chico)
12. SR-99 Southbound (SB) Ramps/Skyway Road (Caltrans)
13. SR-99 Northbound (NB) Ramps/Skyway Road (Caltrans)
14. Skyway Road/Notre Dame Boulevard (City of Chico)

### *Traffic Counts*

Freeway mainline and study intersection traffic counts were collected on Wednesday, October 7, 2015 and Saturday, October 10, 2015 during the weekday AM, weekday PM, and Saturday peak periods. During all counts, weather conditions were generally dry, no unusual traffic patterns were observed, and the Chico Unified School District was in full session.

The AM peak hour is defined as the one hour of peak traffic flow (which is the highest total volume count over four consecutive 15-minute count periods) counted between 7:00 a.m. and 9:00 a.m. on a typical weekday. The PM peak hour is defined as the one-hour of peak traffic flow counted between 4:00 p.m. and 6:00 p.m. on a typical weekday. The Saturday peak hour is defined as the one-hour of peak traffic flow counted between 11:30 a.m. and 1:30 p.m. on a Saturday. In general, the AM peak hour within the study area occurred from 7:45 a.m. to 8:45 a.m., the PM peak hour occurred from 4:30 p.m. to 5:30 p.m., and the Saturday peak hour occurred from 12:15 p.m. to 1:15 p.m.

Intersection turning lane geometrics, traffic control, and existing weekday AM, weekday PM, and Saturday peak-hour traffic volumes for the study intersections are displayed on Exhibit 3.11-2a and Exhibit 3.11-2b. Weekday AM, weekday PM, and Saturday peak-hour traffic volumes for freeway mainlines and ramps are displayed on Exhibit 3.11-3.

### *Intersection Operations*

*Local Intersections*

Existing peak-hour intersection traffic operations were evaluated utilizing existing traffic volumes and existing intersection lane geometrics and control. Table 3.11-3 provides a summary of the existing peak-hour intersection LOS. As shown, all of the study area intersections operate with an average of LOS D or better during the weekday AM, weekday PM, and Saturday peak hours. Overall, the existing roadway system can be characterized as operating efficiently.

**Table 3.11-3: Existing Intersection Operations**

| Intersection | | Control Type | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | E 20th St./Dr. MLK Jr. Pkwy. | Signal | 15 | B | 20 | C | 28 | C |
| 2 | E 20th St./SR-99 SB Ramps | Signal | 10 | A | 15 | B | 18 | B |
| 3 | E 20th St./SR-99 NB Ramps | Signal | 5 | A | 11 | B | 11 | B |
| 4 | E 20th St./Business Ln. | TWSC | 13 | B | 16 | C | 18 | C |
| 5 | E 20th St./Chico Mall Access | Signal | 10 | B | 21 | C | 26 | C |
| 6 | E 20th St./Forest Ave. | Signal | 21 | C | 31 | C | 48 | D |
| 7 | Forest Ave./Baney Ln. | Signal | 20 | B | 25 | C | 24 | C |
| 8 | Forest Ave./Walmart Driveway | TWSC | 11 | B | 11 | B | 11 | B |
| 9 | Forest Ave./Wittmeier Dr.-Talbert Dr. | TWSC | 16 | C | 22 | C | 19 | C |
| 10 | Forest Ave./Notre Dame Blvd. | Signal | 13 | B | 14 | B | 14 | B |
| 11 | E Park Ave./Dr. MLK Jr. Pkwy. | Signal | 10 | A | 13 | B | 13 | B |
| 12 | Skyway/SR-99 SB Ramps | Signal | 11 | B | 14 | B | 8 | A |
| 13 | Skyway/SR-99 NB Ramps | Signal | 9 | A | 12 | B | 5 | A |
| 14 | Skyway/Notre Dame Blvd. | Signal | 30 | C | 31 | C | 28 | C |

Note:
[1] For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For side-street stop controlled intersections, the delay is reported in seconds per vehicle for the worst individual movement. All results are rounded to the nearest second.
Source: Fehr & Peers, 2015.

*Private Intersections*

Several intersections analyzed within the traffic study are private street intersections, including Baney Lane, Business Lane, and all private roadways leading to city streets (such as Chico Mall Access and Walmart driveways).

Source: Fehr and Peers, 2016

Exhibit 3.11-1
Study Area Intersections

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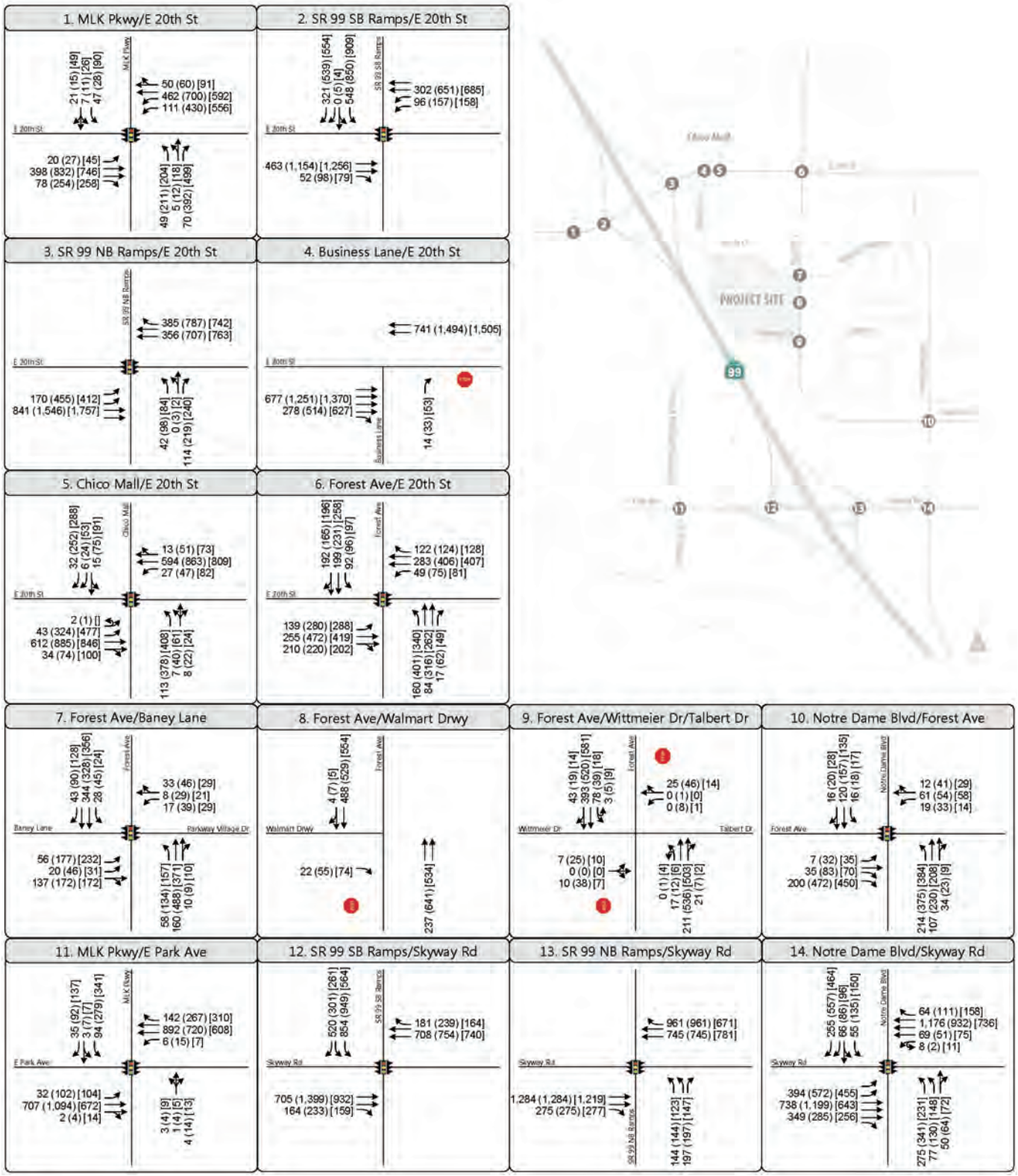


Source: Fehr and Peers, 2016

Exhibit 3.11-2
Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

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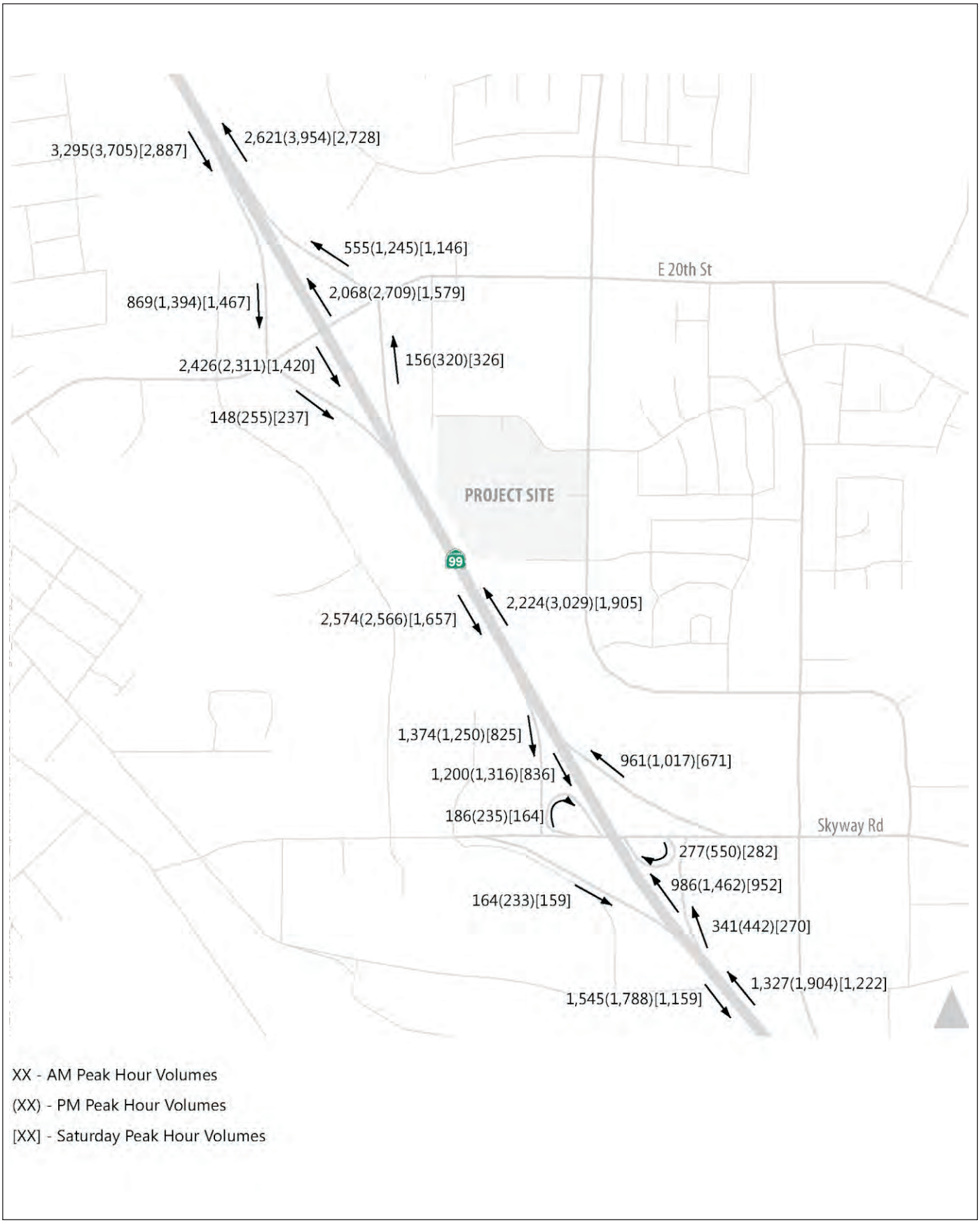


Source: Fehr and Peers, 2016

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Exhibit 3.11-3
Existing Freeway and Mainline Ramp Volumes

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- Business Lane/Toys R Us Access. Located approximately 150 feet south of the intersection with E. 20th Street, this unsignalized intersection is designed with typical minor street standards with stop controls on the westbound approach. Traffic in the area generally moves at slow speeds.
- Baney Lane/Walmart Driveways. Baney Lane is currently narrow and wide enough for one lane in each direction, west of the easternmost driveway. The street currently serves three Walmart driveways on the south, two gas station driveways to the northeast, and a hotel driveway to the northwest.
- Business Lane/Baney Lane. This unsignalized intersection is designed with typical minor street standards with stop control on the westbound Baney Lane approach. There is one approach lane in each direction.

Currently, Business Lane is utilized for access between E. 20th Street and Walmart, particularly for trips to/from SR-99. Inbound trips turn right from E. 20th Street directly onto Business Lane, eventually accessing the Walmart parking lot via Baney Lane. Outbound trips destined for westbound E. 20th Street depart Walmart via Baney Lane and Business Lane, but then utilize the Toys R Us parking lot and E. 20th Street/Chico Mall Access intersection to access E. 20th Street.

*Freeway Facilities*

Existing peak-hour mainline and ramp operations were evaluated utilizing existing peak-hour traffic volumes on SR-99 mainline and ramp facilities. Table 3.11-4 summarizes current SR-99 freeway mainline and ramp operations. As shown, all mainline and ramp segments operate with an average of LOS E or better during the weekday AM, weekday PM, and Saturday peak hours under existing conditions.

**Table 3.11-4: Existing Freeway Level of Service**

| Freeway Facility | Junction Type | Target LOS | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Density | LOS | Density | LOS | Density | LOS |
| **Northbound State Route 99** | | | | | | | | |
| South of Skyway Road | Basic | D | 14.1 | B | 17.0 | B | 10.8 | A |
| Skyway Road Off-Ramp | Diverge | D | 19.1 | B | 22.4 | C | 15.4 | B |
| Skyway Road Loop On-Ramp | Merge | E | 17.3 | B | 21.8 | C | 14.8 | B |
| Skyway Road Slip On-Ramp | Merge | E | 26.7 | C | 30.2 | D | 20.0 | B |
| Skyway Road to E 20th Street | Basic | E | 23.7 | C | 27.8 | D | 16.8 | B |
| E 20th Street Off-Ramp | Diverge | E | 29.3 | D | 31.4 | D | 21.2 | C |
| E 20th Street On-Ramp | Merge | E | 31.1 | D | 36.2 | E | 26.2 | C |
| North of E 20th Street | Basic | E | 28.3 | D | 37.0 | E | 22.8 | C |
| **Southbound State Route 99** | | | | | | | | |
| North of E 20th Street | Basic | E | 34.1 | D | 37.0 | E | 23.7 | C |

### Table 3.11-4 (cont.): Existing Freeway Level of Service

| Freeway Facility | Junction Type | Target LOS | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Density | LOS | Density | LOS | Density | LOS |
| E 20th Street Off-Ramp | Diverge | E | 38.2 | E | 39.9 | E | 29.8 | D |
| E 20th Street On-Ramp | Merge | E | 27.6 | C | 25.8 | C | 16.6 | B |
| E 20th Street to Skyway Road | Basic | E | 24.5 | C | 22.7 | C | 13.6 | B |
| Skyway Road Off-Ramp | Diverge | E | 31.6 | D | 29.3 | D | 20.3 | C |
| Skyway Road Loop On-Ramp | Merge | D | 16.7 | B | 17.1 | B | 12.1 | B |
| Skyway Road On-Ramp | Merge | D | 18.3 | B | 19.2 | B | 13.6 | B |
| South of Skyway Road | Basic | D | 15.2 | B | 16.1 | B | 10.5 | A |
| Source: Fehr & Peers, 2015. | | | | | | | | |

## Public Transit, Bicycles, and Pedestrians

### *Existing Public Transit Service and Facilities*

Butte Regional Transit (B-Line) provides bus service in Chico and throughout Butte County. B-Line is administered and operated by the Butte County Association of Governments.

Two B-Line stops are located immediately adjacent to the existing Walmart store along Forest Avenue south of Baney Lane. Each stop is outfitted with a shelter, benches, lighting, and trash receptacles. Together, these stops serve as the "Forest Xfer" transfer point for B-Line services.

Six B-Line routes serve the two stops near Walmart, including Routes 5, 14, 17, 20, 40, and 41. Route schedule information is summarized in Table 3.11-5. Bus service is generally available during weekdays and Saturdays only, with limited service availability on Sundays. Bus routes serving Walmart connect riders to destinations throughout Chico and the broader Butte County area, including Oroville and Paradise. Exhibit 3.11-4 depicts the bus routes in the project vicinity.

### Table 3.11-5: Existing Transit Service Schedule Summary

| Route | Weekday | | Saturday | | Sunday | |
|---|---|---|---|---|---|---|
| | Frequency (min) | Span | Frequency (min) | Span | Frequency (min) | Span |
| 5 (E. 8th Street) | 30/60 | 7 a.m.–8 p.m. | 60 | 8 a.m.–7 p.m. | — | — |
| 14 (Park/Forest/MLK) | 30/60 | 6 a.m.–10 p.m. | 60 | 8 a.m.–7 p.m. | — | — |
| 17 (Park/MLK/Forest) | 60 | 7 a.m.–6 p.m. | 60 | 8 a.m.–6 p.m. | — | — |
| 20 (Chico–Oroville) | 60 | 6 a.m.–8 p.m. | 120 | 8 a.m.–6 p.m. | 120 | 8 a.m.–6 p.m. |
| 40 (Paradise–Chico) | 60/120 | 7 a.m.–7 p.m. | 120 | 8 a.m.–7 p.m. | 120 | 10 a.m.–6 p.m. |
| 41 (Paradise Pines–Chico) | 60/120 | 6 a.m.–7 p.m. | 180 | 10 a.m.–6 p.m. | — | — |

**Table 3.11-5 (cont.): Existing Transit Service Schedule Summary**

| Route | Weekday | | Saturday | | Sunday | |
|---|---|---|---|---|---|---|
| | Frequency (min) | Span | Frequency (min) | Span | Frequency (min) | Span |

Note:
[1] Where applicable, service frequency is provided for peak/off peak time periods.
Source: Fehr & Peers, 2015.

### *Existing Bicycle Facilities*

The California Department of Transportation recognizes four classifications of bicycle facilities:

- Class I—A Class I facility, commonly referred to as a Bikeway or Bike Path, is a facility separated from automobile traffic for the exclusive use of bicyclists. Class I facilities can be designed to accommodate other modes of transportation, including pedestrians and equestrians, in which case they are referred to as shared use paths.
- Class II—Class II facilities, commonly referred to as Bike Lanes, are dedicated facilities for bicyclists immediately adjacent to automobile traffic. Class II facilities are identified with striping, pavement markings and signage.
- Class III—Class III facilities, commonly referred to as Bike Routes, are on-street routes where bicyclists and automobiles share the road. They are identified with pavement markings and signage, and are typically assigned to low-volume and/or low-speed streets.
- Class IV—Class IV facilities, commonly referred to as protected bicycle lanes or cycle tracks, are a facility that combines elements of Class I and Class II facilities. They offer an exclusive bicycle route immediately adjacent to a roadway similar to a Class II facility, but provide a physical separation from traffic with plastic delineators, raised curb, or parked automobiles.

The project site is currently served by a variety of bicycle facilities, as depicted in Exhibit 3.11-5. A Class I path traverses the southern edge of the existing Walmart, providing a separated bicycle and pedestrian route between Forest Avenue and Business Lane. The north-south portion of the path is part of the SR-99 Bikeway, a crosstown bicycle facility that the City plans to extend south to Skyway Road. Access points are available near the southeast corner of the existing Walmart, at the Business Lane cul-de-sac, and at the Forest Avenue and Baney Lane intersection. Class II bike lanes are present along Business Lane and Forest Avenue immediately abutting the eastern and western edges of the existing Walmart. Nearby Class II facilities along E. 20th Street, Skyway Road, and Notre Dame Boulevard provide connectivity between the project site and destinations throughout Chico.

Currently, there is a bicycle rack located in front of the store for Walmart patrons and employees.

### *Existing Pedestrian Facilities*

Pedestrian facilities are generally present on roadways throughout the study area. Crosswalks are present at local signalized intersections, and continuous sidewalks are available on all but the following local roadways:

- The north side of Forest Avenue, between Flying V Street and Bar Triangle Street.
- The south side of Skyway, from Carmichael Drive to Notre Dame Boulevard.

Sidewalks are present along the Business Lane, Baney Lane, Forest Avenue, and Wittmeier Drive frontages of the project site. Pedestrian connections to Walmart are also available via the Class I path bisecting the project site, with path access available near the southeast corner of the store.

## 3.11.2 - Regulatory Setting

### State Regulations

### *California Department of Transportation*

Caltrans owns, operates, and maintains SR-99 mainline, ramp, and ramp junction terminal facilities within the study area. Caltrans is also responsible for freeway ramp junction terminal intersections at E. 20th Street and Skyway Road. As such, the following Caltrans planning and policy documents provide guidance on expectations for this route related to traffic operations relevant to this analysis and the potential effects of the proposed project.

*District System Management Plan*

The District System Management Plan sets forth the long-term (20-year) policy direction for Caltrans District 3 related to system maintenance, system completion, and congestion relief. The plan identifies two improvement projects within the project study area:

- Construction of auxiliary lanes on SR-99 between Skyway Road and E. 20th Street
- Construction of a Class I bike facility paralleling SR-99 between Business Lane and Cohasset Road

The plan supports complete streets development but only includes performance expectations related to vehicle travel. In general, the plan establishes an LOS E threshold for urban areas but notes that individual Transportation Corridor Concept Reports for each state route set final thresholds. The document notes that once facilities worsen to LOS F, it becomes difficult to measure further degradation to any degree of accuracy. Therefore, other performance measures can be used to define thresholds for system planning and CEQA purposes. These include vehicle travel time, vehicle hours of delay, travel reliability (the degree of variation in travel time due to congestion and non-recurring events), and lost productivity (the ability of a corridor to deliver travelers/goods movement). The document mentions the need to develop thresholds of significance to use these measures for defining significant impacts for facilities not operating at the concept LOS, but it does not identify specific thresholds.

Source: Fehr and Peers, 2016

Exhibit 3.11-4
Existing Transit Routes and Facilities

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Source: Fehr and Peers, 2016

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Exhibit 3.11-5
Existing and Proposed Bicycle Facilities

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*Transportation Corridor Concept Report, State Route 99*

A Transportation Corridor Concept Report is a long-term planning document that the District Transportation Planning Office prepares for each state highway, or portion thereof, in its jurisdiction. The purpose of a Transportation Corridor Concept Report is to plan how a highway will be developed and managed so that it operates at the targeted level of service over a twenty-year period. The Transportation Corridor Concept Report, State Route 99 establishes the following concept LOS standards for SR-99 segments in the project study area:

- Southgate Avenue to Skyway Road/Park Avenue—LOS D
- Skyway Road/Park Avenue to End of Freeway (near Esplanade)—LOS E

*Caltrans District 3 State Highways Bicycle Facility Plan*

The Caltrans District 3 State Highways Bicycle Facility Plan identifies the vision for bicycle use of state highways as well as a detailed inventory of existing facility and needed improvements. The plan does not include any major expansion or modification of bicycle facilities directly on SR-99 in the study area.

## Local

### *City of Chico*

*General Plan*

The Chico 2030 General Plan establishes the following goals and policies relevant to transportation:

- **Goal CIRC-1:** Provide a comprehensive multimodal circulation system that serves the build-out of the Land Use Diagram and provides for the safe and effective movement of people and goods.
- **Policy CIRC-1.1:** (Transportation Improvements) Safely and efficiently accommodate traffic generated by development and redevelopment associated with build-out of the General Plan Land Use Diagram.
- **Policy CIRC-1.2:** (Project-level Circulation Improvements) Require new development to finance and construct internal and adjacent roadway circulation improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities.
- **Policy CIRC-1.3:** (Citywide Circulation Improvements) Collect the fair share cost of circulation improvements necessary to address cumulative transportation impacts, including those to state highways, local roadways, and transit, pedestrian and bicycle facilities, through the City's development impact fee program.
- **Policy CIRC-1.4:** (Level of Service Standards) Until a Multimodal Level of Service (MMLOS) methodology is adopted by the City, maintain LOS D or better for roadways and intersections at the peak PM period, except as specified below:
  - LOS E is acceptable for City streets and intersections under the following circumstances:
    - Downtown streets within the boundaries identified in Figure DT-1 of the Downtown Element.
    - Arterials served by scheduled transit.
    - Arterials not served by scheduled transit, if bicycle and pedestrian facilities are provided within or adjacent to the roadway.
  - Utilize Caltrans LOS standards for Caltrans' facilities.
  - There are no LOS standards for private roads.

Exceptions to the LOS standards above may be considered by the City Council where reducing the level of service would result in a clear public benefit. Such circumstances include, but are not limited to, the following:

- If improvements necessary to achieve the LOS standard results in impacts to a unique historical resource, a highly sensitive environmental area, requires infeasible right-of-way acquisition, or some other unusual physical constraint exists.
- If the intersection is located within a corridor that utilizes coordinated signal timing, in which case, the operation of the corridor as a whole should be considered.

- **Policy CIRC-1.7:** (Goods Movement) Provide clear routes for goods delivery.
- **Goal CIRC-2:** Enhance and maintain mobility with a complete streets network for all modes of travel.
- **Policy CIRC-2.1:** (Complete Streets) Develop an integrated, multimodal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.
- **Policy CIRC-2.2:** (Circulation Connectivity and Efficiency) Provide greater street connectivity and efficiency for all transportation modes.
- **Action CIRC-2.2.2:** (Traffic Management) Perform routine, ongoing evaluation of the street traffic control system, with emphasis on traffic management, such as signal timing and coordination or the use of roundabouts, to optimize traffic flow along arterial corridors and reduce vehicle emissions
- **Goal CIRC-3:** Expand and maintain a comprehensive, safe, and integrated bicycle system throughout the City that encourages bicycling.
- **Policy CIRC-3.1:** (Bikeway Master Plan) Implement and update the Chico Urban Area Bicycle Plan (CUABP) consistent with the goals and policies of the General Plan.
- **Policy CIRC-3.3:** (New Development and Bikeway Connections) Ensure that new residential and non-residential development projects provide connections to the nearest bikeways.
- **Policy CIRC-3.6:** (Bicycle Parking) Provide safe and secure bicycle parking and support facilities.
- **Goal CIRC-4:** Design a safe, convenient, and integrated pedestrian system that promotes walking.
- **Policy CIRC-4.2:** (Continuous Network) Provide a pedestrian network in existing and new neighborhoods that facilitates convenient and continuous pedestrian travel free from major impediments and obstacles.
- **Policy CIRC-4.3:** (Pedestrian-Friendly Streets) Ensure that streets in areas with high levels of pedestrian activity, such as near schools, employment centers, residential areas, and mixed-use areas, support safe pedestrian travel by providing elements such as detached sidewalks, bulb-outs, on-street parking, enhanced pedestrian crossings, and medians.
- **Goal CIRC-5:** Support a comprehensive and integrated transit system as an essential component of a multimodal circulation system.
- **Policy CIRC-5.1:** (Transit Planning) Consult with and encourage the Butte County Association of Governments (BCAG) to implement a comprehensive transit system that serves Chico's current and future needs.
- **Policy CIRC-5.3:** (Transit Connectivity in Projects) Ensure that new development supports public transit.

- **Goal CIRC-9:** Reduce the use of single-occupant motor vehicles.
- **Policy CIRC-9.1:** (Reduce Peak-Hour Trips) Strive to reduce single occupant vehicle trips through the use of travel demand management strategies.
- **Policy CIRC-9.2:** (Off-Peak Deliveries) Encourage business owners to schedule deliveries during off-peak traffic periods.
- **Policy CIRC-9.3:** (Emphasize Trip Reduction) Emphasize automotive trip reduction in the design, review, and approval of public and private development.

*Chico Urban Area Bicycle Plan*

The Chico Urban Area Bicycle Plan establishes goals and objectives for recreational and transportation-related bicycle use in Chico. The plan identifies several future on- and off-street bicycle facility improvements adjacent to the project site, including new routes along Wittmeier Drive and paralleling SR-99.

## 3.11.3 - Methodology

Fehr & Peers prepared a Traffic Assessment that evaluated transportation-related impacts of the proposed project. The complete assessment is provided in **Appendix I**. The following provides a summary of the Traffic Assessment methodology.

### Analysis Scenarios

The following scenarios are analyzed in this report:

- Existing Conditions—represents the existing setting upon which project-specific impacts are evaluated.
- Existing Plus Project Conditions—represents Existing Conditions plus the full buildout of the Walmart Expansion Project.
- Short Term No Project Conditions—assumes the development of approved projects in Chico expected to be developed within the next 5 years, but no development associated with the Walmart Expansion Project.
- Short Term Plus Project Conditions—represents Short Term No Project Conditions plus the full buildout of the Walmart Expansion Project.
- 2035 Cumulative No Project Conditions—assumes the development of numerous reasonably foreseeable land uses expected in 2035, but no development associated with the Walmart Expansion Project.
- 2035 Cumulative Plus Project Conditions—represents 2035 Cumulative No Project Conditions plus the full buildout of the Walmart Expansion Project.

### Project Roadway Modifications

The Existing Plus Project scenario assumes the completion of the following roadway modifications that are included in the proposed project. These roadway modifications are also incorporated into

analyses related to the Short Term Plus Project and Cumulative Plus Project scenarios presented in later sections.

### *Baney Lane Modifications*

Proposed modifications to Baney Lane address potential project-related traffic impacts at the E. 20th Street/Chico Mall intersection and on private roadways surrounding the project site. Proposed Baney Lane modifications also anticipate the need for improved traffic control in order to minimize potential vehicle conflicts as development occurs on the north side of the street. These modifications are consistent with the City's preference to channelize traffic towards Forest Avenue instead of Business Lane, a private street:

- Relocated Walmart East Driveway. The proposed project includes a relocation of the Walmart East Driveway approximately 180 feet west of its current location based on the site plan. This modification would provide additional space for eastbound vehicle queuing at the Forest Avenue/Baney Lane intersection, extending the storage for the Number 2 left-turn lane from 250 feet to 400 feet. A queuing analysis conducted for the eastbound left-turn movement in the Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project scenarios indicates that vehicle queues may reach up to 75 feet, 225 feet, and 275 feet during the AM, PM, and Saturday peak hours, respectively. The extended eastbound left-turn storage distance should sufficiently accommodate any eastbound left-turn vehicle queuing and provide clear westbound left-turning vehicle access from Baney Lane into the Walmart East Driveway.
- Restricted left turns from the three Walmart driveways to Baney Lane. Similar to the current configuration of the Baney Lane/Walmart West Driveway, the proposed project site plan calls for the construction of a raised channelization island at the Baney Lane/Walmart Central Driveway and the relocated Baney Lane/Walmart East Driveway to physically prohibit outbound left turns at these driveways. These modifications are proposed to address both restricted sight distance to the east and to encourage traffic to utilize the Forest Avenue access rather than the Business Lane to Toys R Us private street route. These restrictions are assumed in the traffic analysis, and existing outbound left-turns from Walmart at these driveways have been appropriately reassigned onto the network.
- Modifications to the existing traffic segment on Baney Lane between Forest Avenue and Business Lane. The following modifications would accommodate project-related traffic and redirected traffic resulting from the Walmart Baney Lane driveways reconfiguration:
  - Baney Lane from Forest Avenue to Walmart East Driveway—Lane channelization would accommodate queues at the Forest Avenue/Baney Lane intersection and provide westbound left-turn access into Wal-Mart.
  - Eastbound Baney Lane at Forest Avenue—The proposed extension of the dual left-turn lanes to 175 feet would facilitate turns onto Forest Avenue.
  - Westbound Baney Lane at Walmart East Driveway—The proposed left-turn lane would facilitate turns into the Walmart parking lot.
- Modifications to the Forest Avenue/Baney Lane traffic signal. The eastbound Baney Lane approach would include dual, 175-foot, eastbound left-turn lanes approaching Forest Avenue,

with approximately 50 feet of taper length and a combined through-right lane. The northbound Forest Avenue approach would include a through lane, combined through-right lane and a lengthened exclusive left-turn lane from 200 feet to 325 feet. A queuing analysis conducted for the northbound left-turn movement in the Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project scenarios indicates that vehicle queues may reach up to 125 feet, 250 feet, and 325 feet during the AM, PM, and Saturday peak hours, respectively. The extended northbound left-turn storage distance should sufficiently accommodate any northbound left-turn vehicle queuing. Signal timing at the intersection would be modified to accommodate project-related traffic.

### *Wittmeier Drive Modifications*

The following modifications to Wittmeier Drive are included to accommodate project-related traffic accessing the southern edge of the project site:

- Two new driveways on Wittmeier Drive. Additional driveways on Wittmeier Drive would provide access via the southern edge of the project site.
- Conversion of the Forest Avenue/Wittmeier Drive-Talbert Drive intersection from a stop controlled intersection to a signalized intersection. A signalized intersection is included to accommodate project-related traffic accessing the project site via the new Wittmeier Drive driveways. According to a traffic signal warrants analysis conducted for Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project conditions, the roadway configuration and traffic volumes at this intersection meet the criteria of Signal Warrant 4 as defined by the California Manual on Uniform Traffic Control Devices (Caltrans 2012). The detailed warrants analysis is included in the Technical Appendix. The redesigned intersection at Forest Avenue/Wittmeier Drive-Talbert Drive will contain the following lane geometrics:
  - The northbound Forest Avenue approach would provide a through lane, combined through-right lane, and an exclusive left-turn lane.
  - The southbound Forest Avenue approach would provide a through lane, combined through-right lane, and a lengthened left-turn lane from 100 feet to 175 feet. A queuing analysis conducted for the southbound left-turn movement in the Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project scenarios indicates that vehicle queues may reach up to 100 feet, 75 feet, and 50 feet during the AM, PM, and Saturday peak hours, respectively. The extended southbound left-turn storage distance should sufficiently accommodate any southbound left-turn vehicle queuing.
  - The eastbound Wittmeier Drive approach would provide dual 250-foot left-turn lanes, and a combined through-right lane. A queuing analysis conducted for the eastbound left-turn movement in the Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project scenarios indicates that vehicle queues may reach up to 50 feet, 75 feet, and 75 feet during the AM, PM, and Saturday peak hours, respectively. The eastbound left-turn storage distance should sufficiently accommodate any eastbound left-turn vehicle queuing. A queuing analysis conducted for the eastbound right-turn movement in the Existing Plus Project, Short Term Plus Project, and Cumulative Plus Project scenarios indicates that vehicle queues may reach up to 25 feet, 50 feet, and 50 feet during the AM, PM, and Saturday peak

hours, respectively. The eastbound left-turn and right-turn queues should not impede access to existing and proposed driveways along Wittmeier Drive, particularly westbound left-turns into the eastern-most driveway of the adjacent automotive dealership on the south side of Wittmeier Drive. This driveway is located approximately 150 west of the Forest Avenue/Wittmeier Drive-Talbert Drive intersection.
- The westbound Talbert Drive approach would provide a left-turn lane and a combined through-right lane.

- Widen Wittmeier Drive. The road cross-section would be widened from 40 feet to 64 feet to accommodate four 12-foot lanes (three eastbound and one westbound lane) and two 8-foot parking shoulders.

### *Bicycle Network Modifications*

The proposed project includes new construction that would conflict with the existing Class I bicycle path traversing the southern edge of the existing Walmart store. The proposed project site plan includes the relocation of the existing path to near the edge of the project site immediately parallel to Forest Avenue, Wittmeier Drive, and SR-99. This modification will continue to accommodate bicycle travel to and from the project site and maintain the continuity of the surrounding bicycle network. This modification is largely consistent with the future bicycle network identified in the Chico Urban Area Bicycle Plan, including a portion of the planned SR-99 Bikeway that the City plans to extend south to Skyway Road. The proposed project does not include approximately 75 feet of the City's planned SR-99 Bikeway located between the southwest corner of the proposed bicycle path and the southern edge of the project site. The proposed project also includes a total of 40 bicycle parking locations (20 covered and 20 uncovered) near entrances to the Walmart store. Exhibit 3.11-6 depicts planned bicycle facilities in the project vicinity.

### *Pedestrian Network Modifications*

The proposed project includes a new on-site pedestrian walkway through the central portion of the parking lot to provide pedestrian access between Forest Avenue and the southeast store entrance. Pedestrians would also be able to continue to utilize the relocated bike path. The project does not include any modifications to the surrounding public sidewalk network. New crosswalks are proposed for each leg of the modified Forest Avenue/Wittmeier Intersection.

## Project Site Access

Project site access would be available via driveways on Baney Lane, Business Lane, Forest Avenue, and Wittmeier Drive:

- Baney Lane/Walmart Driveway West—side street stop-controlled, restricted outbound left-turn
- Baney Lane/Walmart Driveway Central—side street stop-controlled, restricted outbound left-turn
- Baney Lane/Walmart Driveway East—side street stop-controlled, restricted outbound left-turn
- Business Lane/Walmart Rear Alley—side street stop-controlled
- Forest Avenue/Walmart Driveway—side street stop-controlled, right-in/right-out
- Wittmeier Drive/Walmart Driveway West—side street stop-controlled
- Wittmeier Drive/Walmart Driveway East—side street stop-controlled

Source: Fehr and Peers, 2016

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Exhibit 3.11-6
Planned Future Bicycle Facilities

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The primary local access points include the existing signalized intersection at Forest Avenue/Baney Lane and the new signalized intersection at Forest Avenue/Wittmeier Drive. Inbound-only local access is also available via E. 20th Street at Business Lane and Chico Mall. Bicycle access would be available via the relocated on-site Class I bike path and Class II bike lane on Forest Avenue. Pedestrian access would be available via sidewalks on Baney Lane and Forest Avenue.

### Project On-site Circulation

On-site traffic circulation is provided via two-way internal roadways connecting to the Baney Lane, Forest Avenue, and Wittmeier Drive driveways and one-way drive aisles striped for diagonal parking. The truck route from the Business Lane driveway would provide access to the truck docking facilities located at the rear of the store. Bicyclists would be able to traverse the project site via the bike path located along the eastern, southern, and western edge of the project site. A pedestrian system of sidewalks and crosswalks, including the new pedestrian path through the center of the project site, would provide pedestrian access to the store from Forest Avenue and the on-site parking lot. Traffic accessing the fuel station would circulate through a two-way internal roadway connecting the Forest Avenue/Walmart Driveway and Wittmeier Drive/Walmart Driveway East.

### Project Truck Traffic

It is anticipated that the proposed project will have an average of ten truck deliveries per day. Of these, it is anticipated that six will be large semi-trucks. The proposed project land uses are expected to generate the following additional daily truck trips:

- Walmart Expansion
  - Five large semi-trucks per day
  - Two small trucks per day
- Fuel Station
  - One large semi-truck per day
- Commercial Parcels
  - Two small trucks per day

According to the project site plan, the existing truck route/fire lane behind the store would be extended south towards a new truck turnaround. Located at the southwest corner of the store near the loading dock, the truck turnaround would be 130 feet in diameter.

The primary truck route for deliveries to the store is from Business Lane. Trucks exiting SR-99 at the E. 20th Street off-ramp would turn south on Business Lane, proceed to the Walmart access at the end of Business Lane, and unload merchandise at the truck well bays behind the Walmart. Trucks would exit the site via Business Lane, Baney Lane, or Wittmeier Drive to return to SR-99 or travel to other stops in the area.

For the delivery of smaller merchandise, an at grade service door would be provided adjacent to the truck bay loading area. Smaller trucks would access the site from Business Lane and park adjacent to these loading areas.

For access to the proposed fuel station, it is anticipated that trucks will utilize Forest Avenue/Walmart Driveway and Wittmeier Drive/Walmart Driveway East.

## Project Trip Generation

This section documents the expected trip generation of the proposed Chico Walmart Expansion Project. For analysis purposes, the term "project" refers to the development of the proposed expansion of the existing Walmart store, the fuel station with convenience market, and two outlot parcels for commercial use, as well as proposed modifications to the roadway system.

### *Existing Walmart Trip Generation*

Traffic counts of driveways to/from the existing Walmart store were collected in October 2015 and used to develop a trip generation rate to apply to the Walmart expansion project. The counts were taken from 7 a.m. to 9 a.m. and from 4 p.m. to 6 p.m. on Wednesday, October 7, 2015, and from 11 a.m. to 2 p.m. on Saturday, October 10, 2015.

Table 3.11-6 shows the existing Walmart trip generation and actual trip rates based on the driveway counts.

**Table 3.11-6: Existing Walmart Trip Generation**

| Description | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | In | Out | Total | In | Out | Total | In | Out |
| Trips Counted | **275** | 155 | 120 | **713** | 340 | 373 | **987** | 505 | 482 |
| Trip Rate per 1,000 sf | **2.09** | 56% | 44% | **5.43** | 48% | 52% | **7.52** | 51% | 49% |

Notes:
Existing Walmart store has 131,302 square feet of retail use.
sf = square feet
Source: Fehr & Peers, 2015.

### *Proposed Project Trip Generation*

The trip generation of the project will consist of various trip types: primary trips, internal trips, pass-by trips, and diverted trips. Each trip type is described below. The project's impact will be analyzed based on the net changes to the number of trips on the surrounding roadway network.

*Gross Trips*

Gross trips constitute all of the trip types: primary, internal, pass-by, and diverted. The gross project trips were first calculated to determine all of the project trips that would be generated before any adjustments were made to account for internalization, pass-by, and diverted link trips. Trip generation was determined using the rates calculated from the existing Walmart driveway counts and from the Institute of Transportation Engineers (ITE) Trip Generation Manual (9$^{th}$ Edition).

To determine the appropriate trip rates for the proposed Walmart expansion, trip rates contained in the ITE Trip Generation Manual were compared with the actual rates of the existing Walmart. The

ITE Manual reports trip rates for a freestanding discount superstore containing a full service grocery department (ITE land use 813), and a freestanding discount store without a grocery component (ITE land use 815). Table 3.11-7 shows that the trip rates derived from actual counts at the existing Walmart store are higher than those from the ITE land uses 813 and 815 for all peak hours being analyzed in this study. Therefore, the actual trip rates from the existing Walmart store were used to estimate the trip generation of the Walmart expansion.

### Table 3.11-7: Trip Generation Rates Comparison for Walmart Expansion

| Land Use Description (ITE Code) | Trip Rates per 1,000 square feet | | |
|---|---|---|---|
| | Weekday AM Peak Hour | Weekday PM Peak Hour | Saturday Peak Hour |
| Free Standing Discount Superstore (813) | 1.85 | 4.35 | 5.64 |
| Free Standing Discount Store (815) | 1.06 | 4.98 | 7.39 |
| Existing Walmart (Counts) | 2.09 | 5.43 | 7.52 |
| Source: Fehr & Peers, 2015. | | | |

ITE trip generation rates for "Gasoline/Service Station with Convenience Market" (ITE land use 945) were used to estimate the trip generation of the proposed fuel station. ITE trip generation rates for "Shopping Center" (ITE land use 820) were used to estimate the trip generation of the proposed retail/restaurant uses on Parcels 2 and 3.

Table 3.11-8 shows the trip rates used and gross trips calculated for the proposed project land uses. As shown, the proposed project is estimated to generate 352 gross AM peak-hour trips, 770 gross PM peak-hour trips, and 967 Saturday peak-hour trips.

### Table 3.11-8: Gross Project Trips

| Land Use Description (ITE Code) | Units | Trip Rates | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
| | | Trip Rate | In % | Out % | Trip Rate | In % | Out % | Trip Rate | In % | Out % |
| Walmart Expansion[1] | ksf | **2.09** | 56% | 44% | **5.43** | 48% | 52% | **7.52** | 51% | 49% |
| Fuel Station (945) | fueling positions | **10.16** | 50% | 50% | **13.51** | 50% | 50% | **13.51** | 50% | 50% |
| Parcels 2 & 3 Commercial (820) | ksf | **0.96** | 62% | 38% | **3.71** | 48% | 52% | **4.82** | 52% | 48% |
| | | Trips | | | | | | | | |
| | | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
| Land Use Description | Quantity | Total | In | Out | Total | In | Out | Total | In | Out |
| Walmart Expansion | 66.5 ksf | **139** | 78 | 61 | **361** | 173 | 188 | **500** | 255 | 245 |

## Table 3.11-8 (cont.): Gross Project Trips

| Land Use Description | Quantity | Trips | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
| | | Total | In | Out | Total | In | Out | Total | In | Out |
| Fuel Station | 16 fueling positions | **163** | 82 | 81 | **216** | 108 | 108 | **216** | 108 | 108 |
| Parcels 2 & 3 Commercial | 52.0 ksf | **50** | 31 | 19 | **193** | 93 | 100 | **251** | 131 | 120 |
| **Total Gross Trips** | | **352** | 191 | 161 | **770** | 374 | 396 | **967** | 494 | 473 |

Notes:
[1] Trip rates for the Walmart Expansion are based on the actual trip rates calculated from the existing Walmart driveway counts.
ksf = thousand square feet
Source: Fehr & Peers, 2015.

*Internal Trip Reduction*

As noted previously, the proposed project consists of the Walmart expansion, fuel station, and Parcels 2 and 3 commercial land uses. Because the proposed project is a mixed-use development with complementary land uses, it is expected that some vehicles visiting one of the three future land uses on the project site may also visit one (or both) of the other land uses.

For example, a vehicle leaving Walmart may stop at the gas station, or Parcels 2 and 3 before leaving the project site. Additionally, some vehicles drawn to the site to stop at the gas station may also stop at Parcels 2, 3, or Walmart (or vice versa).

When a vehicle visits a project site, it is typically calculated as two trips to account for the inbound and outbound component of the round trip. However, if this same vehicle also visited one (or both) of the other two land uses, it would result in four (or six) trips when taking into account the inbound and outbound component to and from each land use. Given the proximity of the proposed land uses to each other, some of these trips might not occur using a vehicle but rather could be accomplished on foot after parking.

The primary objective of the traffic analysis is to analyze impacts to the adjacent roadway system. Therefore, it is reasonable to reduce the gross trip generation volumes to account for only the inbound vehicular trip entering the project site, and the outbound vehicular trip exiting the project site.

A conservative estimate of 5 percent internal trip reduction of the total gross project trips plus existing Walmart trips was assumed. Table 3.11-9 shows the internal trip reduction for the project and total external project trips.

## Table 3.11-9: Internal Project Trip Reduction

| Description | Trip Reduction Percentage | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Weekday AM Peak Hour Reduction % | | | Weekday PM Peak Hour Reduction % | | | Saturday Peak Hour Reduction % | | |
| Internal Trip Reduction | 5% | | | 5% | | | 5% | | |
| Description | Trips | | | | | | | | |
| | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
| | Total | In | Out | Total | In | Out | Total | In | Out |
| Existing Walmart Trips | **275** | 155 | 120 | **713** | 340 | 373 | **987** | 505 | 482 |
| Total Gross Project Trips | **352** | 191 | 161 | **770** | 374 | 396 | **967** | 494 | 473 |
| *Existing Walmart and Total Gross Project Trips* | *627* | *346* | *281* | *1,483* | *714* | *769* | *1,954* | *999* | *955* |
| **Total Internal Trip Reduction** | **-31** | -17 | -14 | **-74** | -36 | -38 | **-98** | -50 | -48 |
| **Total External Existing Walmart and Project Trips** | **596** | 329 | 267 | **1,409** | 678 | 731 | **1,856** | 949 | 907 |
| **Total External Project Trips** | **321** | 174 | 147 | **696** | 338 | 358 | **869** | 444 | 425 |
| Source: Fehr & Peers, 2015. | | | | | | | | | |

*Pass-By Trip Reduction*

Pass-by trips are defined as trips that would occur on the roadway immediately adjacent to the project with or without the project. These trips are simply an intermediate stop of a primary trip and do not involve any route diversion; therefore, pass-by trips do not add any through traffic to an existing roadway.

The location of the project site, although close to many higher traffic roadways such as E. 20th Street, is only immediately adjacent to Forest Avenue and Baney Lane. The traffic on these streets is lower than the average adjacent roadway volumes reported in the studies within the ITE Trip Generation Handbook for similar land uses. The average pass-by trip reduction percentage in the PM peak period for Free Standing Discount Superstore is 27 percent, 34 percent for Shopping Center, and 56 percent for Gas Station with Convenience Market. Because of lower traffic on the adjacent roadways, a conservative estimate of a 17 percent pass-by trip reduction was assumed for the Walmart Expansion, a 10 percent pass-by reduction for the fuel station, and a 15 percent pass-by reduction for the Parcels 2 and 3 commercial uses, as shown in Table 3.11-10.

**Table 3.11-10: Pass-By Project Trip Reduction**

| Land Use Description | Pass-By Trip Reduction | | |
|---|---|---|---|
| | Weekday AM Peak Hour Reduction % | Weekday PM Peak Hour Reduction % | Saturday Peak Hour Reduction % |
| Walmart Expansion | 17% | 17% | 17% |
| Fuel Station | 10% | 10% | 10% |
| Parcels 2 & 3 Commercial | 15% | 15% | 15% |
| Source: Fehr & Peers, 2015. | | | |

*Diverted Trip Reduction*

Diverted trips are similar in nature to pass-by trips. Whereas a pass-by trip is captured from existing traffic traveling along the roadway adjacent to the project, a diverted trip is captured from existing traffic along a nearby roadway that "diverts" to a another roadway to access the project site. These trips are an intermediate stop of a primary trip, but involve a route diversion, adding traffic only to the roadways and intersections that correspond to the diverted portion of the travel route to/from the project site.

Within this analysis, it is assumed that trips would be diverted to the project site from the following nearby roadways: SR-99, E. 20th Street, and Skyway Road.

The ITE Trip Generation Handbook reports average diverted trip reduction percentages for the proposed project land uses. The average diverted trip reduction percentage in the PM peak hour for Free Standing Discount Store is 35 percent, 26 percent for Shopping Center, and 32 percent for Gas Station with Convenience Market. The diverted trip reduction percentages in the ITE Trip Generation Handbook were assumed for the fuel station, while a conservative estimate of a 23 percent diverted trip reduction was assumed for the Walmart expansion, and a 25 percent diverted trip reduction for the Parcels 2 and 3 commercial uses. Table 3.11-11 shows the diverted trip reduction percentages for the project.

**Table 3.11-11: Diverted Project Trip Reduction**

| Land Use Description | Diverted Trip Reduction | | |
|---|---|---|---|
| | Weekday AM Peak Hour Reduction % | Weekday PM Peak Hour Reduction % | Saturday Peak Hour Reduction % |
| Walmart Expansion | 23% | 23% | 23% |
| Fuel Station | 21% | 32% | 32% |
| Parcels 2 & 3 Commercial | 25% | 25% | 25% |
| Source: Fehr & Peers, 2015. | | | |

### *Total New Primary Trips*

Table 3.11-12 shows the total new primary trips after deducting the pass-by trips and diverted trips. The proposed project is projected to generate 194 new weekday AM peak-hour trips, 384 new weekday PM peak-hour trips, and 477 new Saturday peak-hour trips.

**Table 3.11-12: Total New Primary Project Trips**

| Trip Type | Land Use Description | Trips | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | | Saturday Peak Hour | | |
| | | Total | In | Out | Total | In | Out | Total | In | Out |
| **Total External Project Trips** | | **321** | 174 | 147 | **696** | 338 | 358 | **869** | 444 | 425 |
| Pass-By Trip Reduction | Walmart Expansion | **-24** | -13 | -11 | **-61** | -29 | -32 | **-85** | -43 | -42 |
| | Fuel Station | **-16** | -8 | -8 | **-22** | -11 | -11 | **-22** | -11 | -11 |
| | Parcels 2 & 3 Commercial | **-8** | -5 | -3 | **-29** | -14 | -15 | **-38** | -20 | -18 |
| **Total Pass-By Trip Reduction** | | **-48** | -26 | -22 | **-112** | -54 | -58 | **-145** | -74 | -71 |
| Diverted Trip Reduction | Walmart Expansion | **-32** | -18 | -14 | **-83** | -40 | -43 | **-115** | -59 | -56 |
| | Fuel Station | **-34** | -17 | -17 | **-69** | -35 | -34 | **-69** | -35 | -34 |
| | Parcels 2 & 3 Commercial | **-13** | -8 | -5 | **-48** | -23 | -25 | **-63** | -33 | -30 |
| **Total Diverted Trip Reduction** | | **-79** | -43 | -36 | **-200** | -98 | -102 | **-247** | -127 | -120 |
| New Primary Trips | Walmart Expansion | **71** | 40 | 31 | **182** | 87 | 95 | **249** | 127 | 122 |
| | Fuel Station | **98** | 50 | 48 | **105** | 52 | 53 | **103** | 51 | 52 |
| | Parcels 2 & 3 Commercial | **25** | 15 | 10 | **97** | 47 | 50 | **125** | 65 | 60 |
| **Total New Primary Trips** | | **194** | 105 | 89 | **384** | 186 | 198 | **477** | 243 | 234 |
| Source: Fehr & Peers, 2015. | | | | | | | | | | |

## Project Trip Distribution and Assignment

Trip distribution for the Walmart store was analyzed separately from the trip distribution for the fuel station and commercial parcels because of the different nature of the land uses.

The directional trip distribution and assignment for the proposed project reflects existing and projected future traffic flows and travel patterns within the vicinity of the project site. Consideration was also given for the location of other similar facilities, as well as the location of local and regional housing and employment/commercial centers in relation to the proposed project site when deriving the trip distribution and trip assignment patterns for the proposed project.

Exhibit 3.11-7a and Exhibit 3.11-7b shows the trip distribution for the Walmart expansion and commercial parcels and Exhibit 3.11-8a and Exhibit 3.11-8b depicts the trip distribution for the fuel station.

## 3.11.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether transportation and traffic impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Refer to Section 7, Effects Found not to be Significant)

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

## 3.11.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### Existing Plus Project Traffic Conditions

| | |
|---|---|
| **Impact TRANS-1:** | **The proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Existing Plus Project Conditions.** |

#### *Impact Analysis*

*Intersection Operations*

Existing Plus Project intersection traffic operations were analyzed utilizing projected Existing Plus Project traffic volumes, as shown in Exhibit 3.11-9a and Exhibit 3.11-9b. Table 3.11-13 displays Existing Plus Project weekday AM, weekday PM, and Saturday peak-hour operations at study intersections.

## Table 3.11-13: Existing Plus Project Intersection Operations

| Intersection | | Control Type | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | E 20th St./Dr. MLK Jr. Pkwy. | Signal | 15 | B | 20 | C | 29 | C |
| 2 | E 20th St./SR-99 SB Ramps | Signal | 10 | A | 17 | B | 20 | C |
| 3 | E 20th St./SR-99 NB Ramps | Signal | 6 | A | 12 | B | 13 | B |
| 4 | E 20th St./Business Ln. | TWSC | 13 | B | 17 | C | 19 | C |
| 5 | E 20th St./Chico Mall Access | Signal | 10 | A | 20 | C | 29 | C |
| 6 | E 20th St./Forest Ave. | Signal | 23 | C | 49 | D | **93** | **F** |
| 7 | Forest Ave./Baney Ln. | Signal | 20 | C | 27 | C | 28 | C |
| 8 | Forest Ave./Walmart Driveway | TWSC | 11 | B | 12 | B | 12 | B |
| 9 | Forest Ave./Wittmeier Dr.-Talbert Dr. | Signal | 12 | B | 15 | B | 14 | B |
| 10 | Forest Ave./Notre Dame Blvd. | Signal | 13 | B | 15 | B | 16 | B |
| 11 | E Park Ave./Dr. MLK Jr. Pkwy. | Signal | 10 | B | 13 | B | 13 | B |
| 12 | Skyway/SR-99 SB Ramps | Signal | 11 | B | 14 | B | 8 | A |
| 13 | Skyway/SR-99 NB Ramps | Signal | 10 | A | 13 | B | 6 | A |
| 14 | Skyway/Notre Dame Blvd. | Signal | 30 | C | 32 | C | 29 | C |

Note:
[1] For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For side-street stop controlled intersections, the delay is reported in seconds per vehicle for the worst individual movement. All results are rounded to the nearest second.
Source: Fehr & Peers, 2015.

As shown in Table 3.11-13, all but one of the study area intersections are projected to operate at acceptable LOS thresholds during the weekday AM, weekday PM, and Saturday peak hours under Existing Plus Project conditions:

- E. 20th Street/Forest Avenue—Operations at this intersection are projected to degrade from an acceptable LOS D under Existing Conditions to an unacceptable LOS F under Existing Plus Project conditions during the Saturday peak hour. According to the City of Chico General Plan, intersection operations are considered acceptable at LOS E or better under the roadway conditions of E. 20th Street and Forest Avenue. This is considered a significant impact.

The increase in intersection volume and corresponding degradation of intersection operations can be attributed to a combination of (a) additional trips generated by the proposed project and (b) additional trips rerouted to Forest Avenue as a result of the proposed turn restrictions at the Baney

Lane Walmart driveways. Northbound left-turn volumes are particularly high during the Saturday peak-hour time period under Existing Plus Project conditions. The current signal timing plan provides insufficient northbound left-turn green time to accommodate this projected volume without adversely impacting intersection operations.

*Impacts and Mitigation Measures*

**E. 20th Street/Forest Avenue**

Pursuant to City of Chico General Plan Action CIRC 2.2.2, City Public Works staff will continue to monitor operations and adjust signal timing as needed to optimize traffic flows and maintain an acceptable level of service at the E 20th Street/Forest Avenue intersection. According to a Synchro® analysis of the E. 20th Street/Forest Avenue intersection, with signal optimization it is estimated that signal timing modifications could improve operations to an average delay of 55 seconds and an acceptable LOS D can be maintained during the Saturday peak time period. Since operation of the intersection will be maintained at an acceptable level of service by Public Works staff pursuant to existing General Plan policy, no mitigation is necessary to reduce project impacts.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

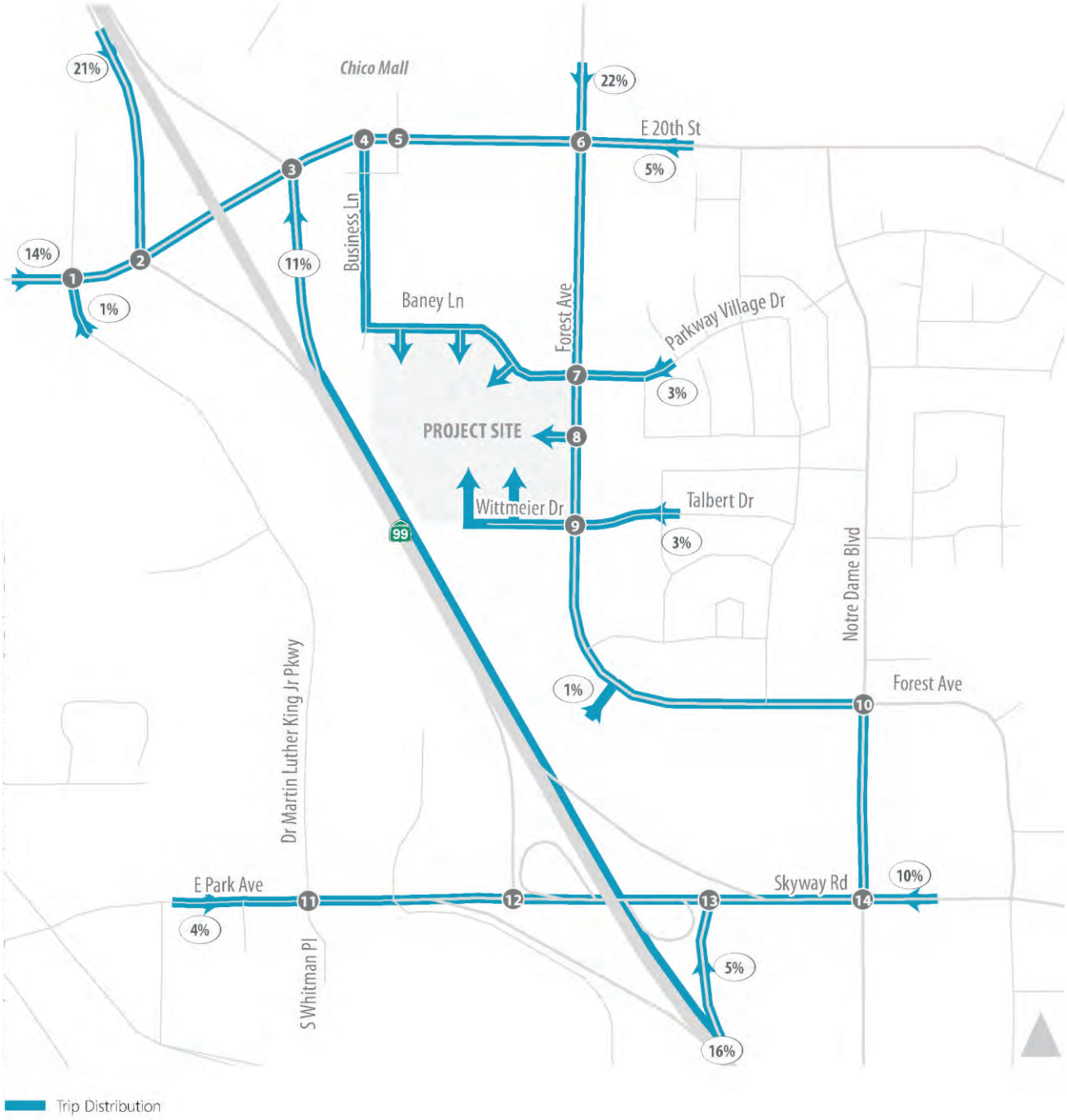
Less than significant impact.

## Short-Term Plus Project Traffic Conditions

**Impact TRANS-2: The proposed project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system under Short-Term Plus Project Conditions.**

### *Impact Analysis*

The Short Term scenario is the analysis scenario in which traffic impacts are analyzed assuming the development of several approved projects in the vicinity of the project and addition of study intersections that may be developed over the next 5 years. City of Chico staff provided a list of development projects to be assumed to be developed under Short Term conditions. Projected Short Term traffic conditions are derived from applying land use assumptions associated with the planned development projects to 2010 base year land use information from the 2009 Butte County Association of Governments (BCAG) travel demand model. While a City of Chico travel demand model is available, the BCAG travel demand model was utilized for this study because it includes more recent existing and future land use and roadway network inputs that reflect the recessionary impacts within the City of Chico and throughout the BCAG region. To ensure that the BCAG model was sensitive and accurate for this application, it was tested and validated against benchmarks specified by the modeling guidelines contained in the 2010 California Regional Transportation Plan Guidelines (CTC 2010) and the Travel Model Validation and Reasonableness Checking Manual, Second Edition (FHWA 2010).




Source: Fehr and Peers, 2016

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Exhibit 3.11-7a
Walmart Expansion and Parcels 2 & 3
Trip Distribution - Inbound

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Source: Fehr and Peers, 2016

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Exhibit 3.11-7b
Walmart Expansion and Parcels 2 & 3
Trip Distribution - Outbound

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Source: Fehr and Peers, 2016

Exhibit 3.11-8a
Fuel Station Trip Distribution
Inbound

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Source: Fehr and Peers, 2016

Exhibit 3.11-8b
Fuel Station Trip Distribution
Outbound

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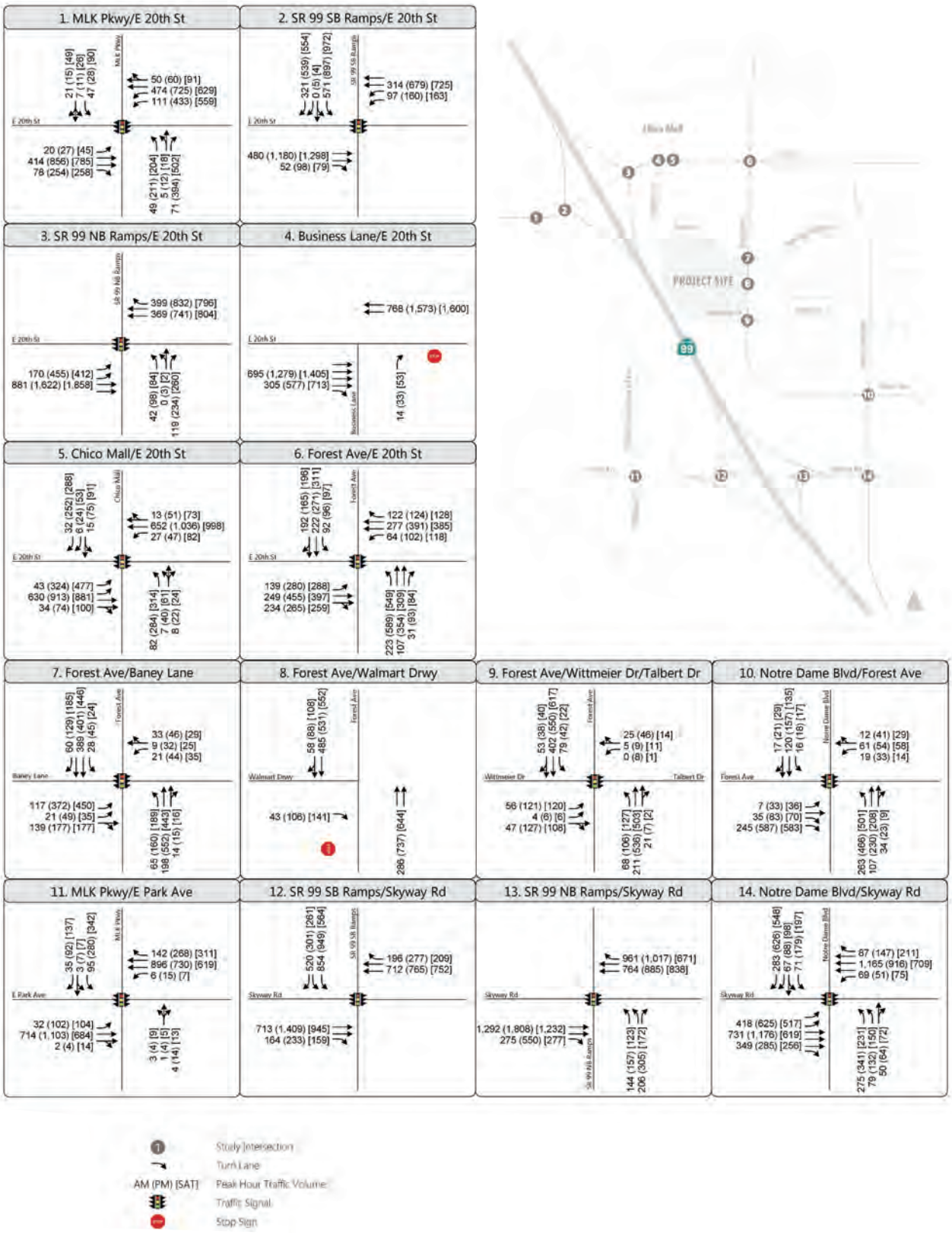


Source: Fehr and Peers, 2016

Exhibit 3.11-9
Peak Hour Traffic Volumes and
Lane Configurations - Existing Plus Project

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Short Term No Project conditions assume no development or transportation modifications associated with the Walmart Expansion Project. The Short Term Plus Project scenario is the analysis scenario in which traffic impacts associated with the proposed project are compared with those of the Short Term No Project scenario. Project-related impacts expected to occur under the Short Term Plus Project scenario are presented at the end of this section.

*Short-Term Development Project*

Development projects assumed to be completed within the next 5 years under Short Term No Project conditions are presented in Table 3.11-14.

**Table 3.11-14: Short-Term Development Projects**

| Project Name | Commercial Square Footage | Residential Units |
|---|---|---|
| **Residential Subdivisions** | | |
| Sierra Gardens Townhouses | — | 79 |
| Belvedere Heights 2 | — | 92 |
| Meriam Park | — | 105 |
| Oak Valley | — | 265 |
| **Multi-Family Projects** | | |
| Oakdale Apartments | — | 36 |
| Chico Senior Living Complex | — | 77 |
| Carriage Park Apartments | — | 141 |
| Oakdale Apartments | — | 26 |
| Oak Valley Apartments | — | 98 |
| **Retail Projects** | | |
| Ulta Beauty | 10,000 | — |
| **Other Projects** | | |
| Southeast Chico Primary Care Clinic | 44,000 | — |
| Mechoopda Tribal (Office) | 14,000 | — |
| Source: Fehr & Peers, 2015. | | |

*Intersection Operations*

Short Term No Project peak-hour intersection traffic operations were analyzed utilizing projected traffic volumes and existing intersection lane geometrics and control (shown on Exhibit 3.11-10). Table 3.11-15 provides a summary of the projected peak-hour intersection LOS under Short Term No Project conditions. As shown, all of the study area intersections are projected to operate with an average of LOS D or better during the weekday AM, weekday PM, and Saturday peak hours.

The Short Term Plus Project scenario is the analysis scenario in which traffic impacts associated with the proposed project are analyzed in comparison to the Short Term No Project scenario. Trips associated with the proposed project were layered on top of the Short Term No Project scenario volumes to establish Short Term Plus Project volumes. The Short Term Plus Project scenario assumes the completion of the planned roadway modifications included in the proposed project, as well as the completion of approved development projects expected to be constructed within the next 5 years.

Short Term Plus Project intersection traffic operations were analyzed utilizing projected Short Term Plus Project traffic volumes, as shown in Exhibit 3.11-11. Table 3.11-15 displays Short Term Plus Project weekday AM, weekday PM, and Saturday peak-hour operations at study intersections.

## Table 3.11-15: Short-Term Plus Project Intersection Operations

| | Intersection | Control Type | No Project Conditions | | | | | | Plus Project Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
| | | | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | E 20th St./Dr. MLK Jr. Pkwy. | Signal | 15 | B | 21 | C | 30 | C | 15 | B | 21 | C | 30 | C |
| 2 | E 20th St./SR-99 SB Ramps | Signal | 10 | A | 17 | B | 19 | B | 10 | B | 18 | B | 23 | C |
| 3 | E 20th St./SR-99 NB Ramps | Signal | 5 | A | 11 | B | 12 | B | 6 | A | 12 | B | 13 | B |
| 4 | E 20th St./Business Ln. | TWSC | 13 | B | 17 | C | 19 | C | 13 | B | 18 | C | 20 | C |
| 5 | E 20th St./Chico Mall Access | Signal | 10 | B | 22 | C | 28 | C | 10 | A | 22 | C | 34 | C |
| 6 | E 20th St./Forest Ave. | Signal | 21 | C | 34 | D | 52 | D | 23 | C | 54 | E | **100** | **F** |
| 7 | Forest Ave./Baney Ln. | Signal | 20 | B | 25 | C | 24 | C | 20 | C | 27 | C | 28 | C |
| 8 | Forest Ave./Walmart Driveway | TWSC | 11 | B | 11 | B | 11 | B | 11 | B | 12 | B | 12 | B |
| 9 | Forest Ave./Wittmeier Dr.-Talbert Dr. | TWSC | 16 | C | 22 | C | 19 | C | 12 | B | 15 | B | 14 | B |
| 10 | Forest Ave./Notre Dame Blvd. | Signal | 13 | B | 15 | B | 15 | B | 13 | B | 16 | B | 18 | B |
| 11 | E Park Ave./Dr. MLK Jr. Pkwy. | Signal | 10 | B | 13 | B | 13 | B | 10 | B | 13 | B | 13 | B |
| 12 | Skyway/SR-99 SB Ramps | Signal | 11 | B | 14 | B | 8 | A | 11 | B | 14 | B | 8 | A |
| 13 | Skyway/SR-99 NB Ramps | Signal | 9 | A | 12 | B | 5 | A | 10 | A | 13 | B | 7 | A |
| 14 | Skyway/Notre Dame Blvd. | Signal | 31 | C | 31 | C | 28 | C | 31 | C | 32 | C | 29 | C |

Note:
[1] For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For side-street stop controlled intersections, the delay is reported in seconds per vehicle for the worst individual movement. All results are rounded to the nearest second.
Source: Fehr & Peers, 2015.

*Impacts and Mitigation Measures*

**E. 20th Street/Forest Avenue**

Operations at this intersection are projected to degrade from an acceptable LOS D under Short Term Conditions to an unacceptable LOS F under Short Term Plus Project conditions during the Saturday peak hour. According to the City of Chico General Plan, intersection operations are considered acceptable at LOS E or better under the roadway conditions of E. 20th Street and Forest Avenue.

The increase in intersection volume and corresponding degradation of intersection operations can be attributed to a combination of (a) additional trips generated by the proposed project, and (b) additional trips rerouted to Forest Avenue as a result of the proposed turn restrictions at the Baney Lane Walmart driveways. Northbound left-turn volumes are particularly high during the Saturday peak-hour time period under Short Term Plus Project conditions. The current signal timing plan provides insufficient northbound left-turn green time to accommodate this projected volume without adversely impacting intersection operations.

Pursuant to City of Chico General Plan Action CIRC 2.2.2, City Public Works staff will continue to monitor operations and adjust signal timing as needed to optimize traffic flows and maintain an acceptable level of service at the E. 20th Street/Forest Avenue intersection. According to a Synchro analysis of the E. 20th Street/Forest Avenue intersection with signal optimization, it is estimated that signal timing modifications could improve operations to an average delay of 55 seconds and an acceptable LOS D can be maintained during the Saturday peak time period.

Since operation of the intersection will be maintained at an acceptable level of service by Public Works staff pursuant to existing General Plan policy, no mitigation is necessary to reduce project impacts. Thus, impacts would be less than significant.

### *Conclusion*

All intersections would operate at acceptable LOS and no mitigation is necessary. Thus, impacts would be less than significant.

### *Level of Significance Before Mitigation*

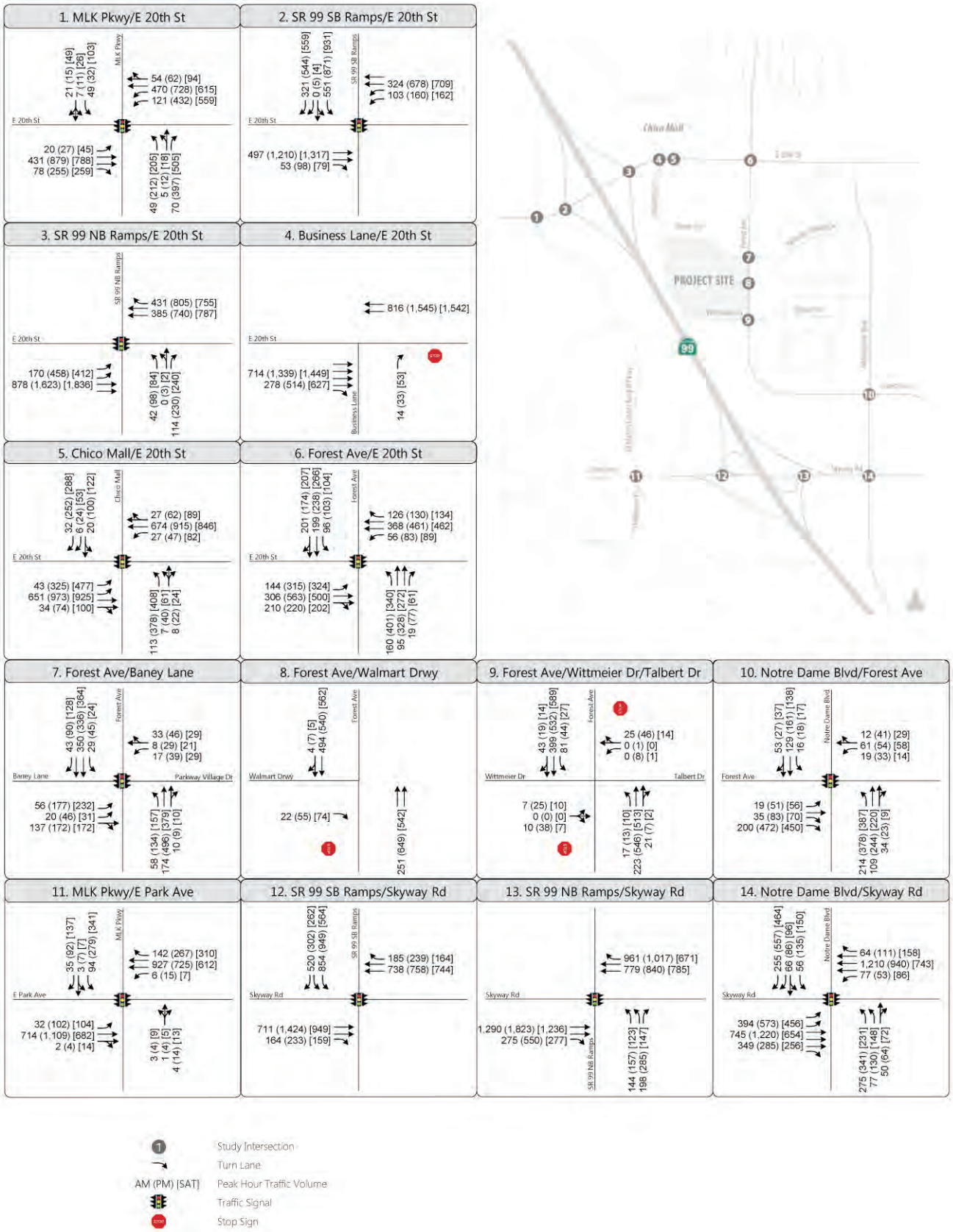
Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.




Source: Fehr and Peers, 2016

# Exhibit 3.11-10
## Peak Hour Traffic Volumes and Lane Configurations - Short-Term No Project

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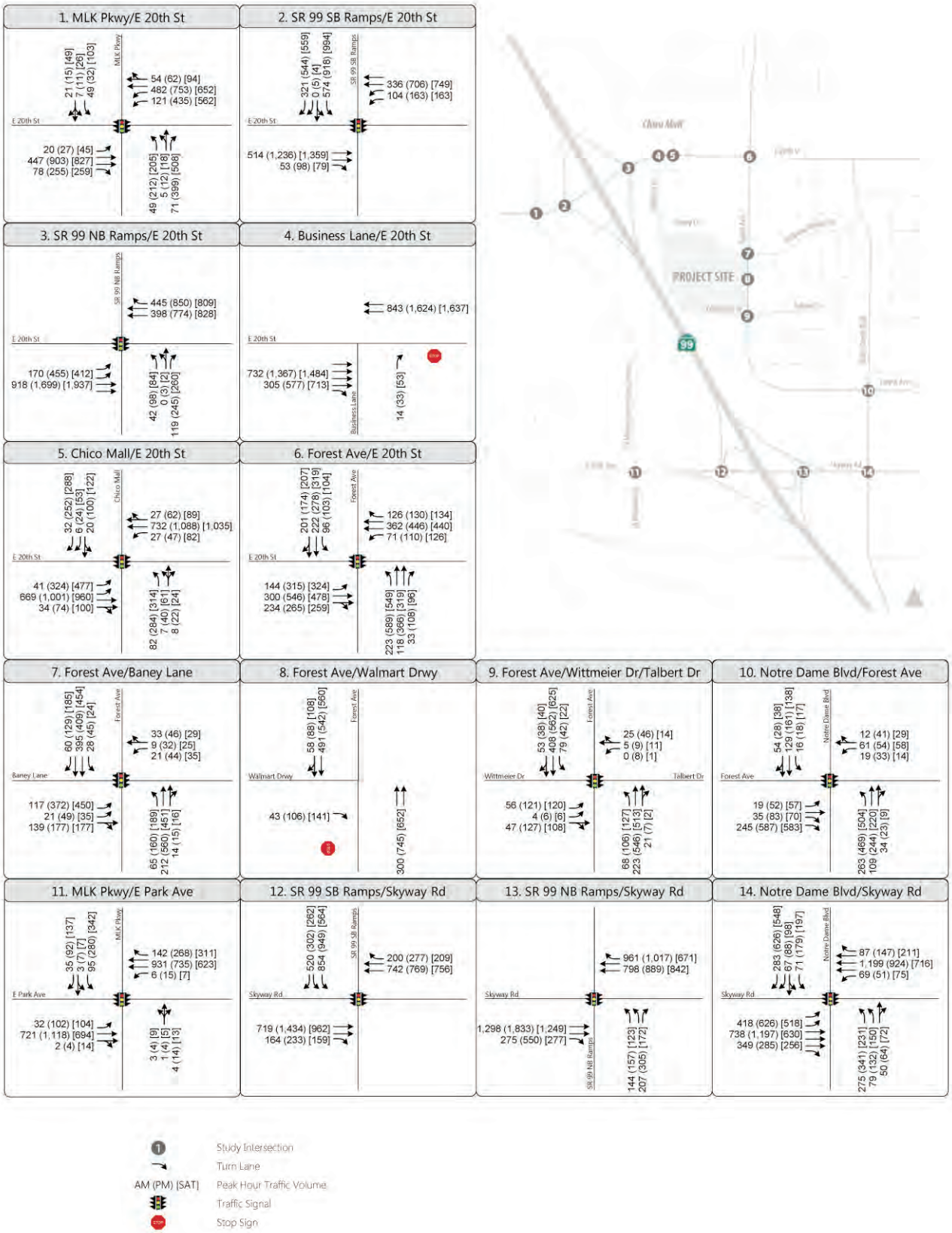


Source: Fehr and Peers, 2016

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# Exhibit 3.11-11
# Peak Hour Traffic Volumes and Lane Configurations - Short-Term Plus Project

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## Cumulative Plus Project Traffic Conditions

**Impact TRANS-3: The project may conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.**

### *Impact Analysis*

The Cumulative scenario is the analysis scenario in which traffic impacts are analyzed assuming the development of numerous reasonable and foreseeable land uses expected in 2035. This analysis utilizes the 2009 BCAG travel demand model, developed as part of the 2012 BCAG MTP/SCS, to establish future land use and traffic assumptions for 2035. While a City of Chico travel demand model is available, the BCAG travel demand model was utilized for this study because it includes more recent existing and future land use and roadway network inputs that reflect the recessionary impacts within the City of Chico and throughout the BCAG region. To ensure that the BCAG model was sensitive and accurate for this application, it was tested and validated against benchmarks specified by the modeling guidelines contained in the 2010 California Regional Transportation Plan Guidelines (CTC, 2010) and the Travel Model Validation and Reasonableness Checking Manual, Second Edition (FHWA, 2010). For Cumulative conditions, 2035 land use inputs were updated to incorporate new development projects that may have been omitted from the original version of the BCAG travel demand model.

Cumulative No Project conditions assume no development or transportation modifications associated with the Walmart Expansion Project. The Cumulative Plus Project scenario is the analysis scenario in which traffic impacts associated with the proposed project are analyzed in comparison to the Cumulative No Project scenario. Project-related impacts expected to occur under the Cumulative Plus Project scenario are presented at the end of this section.

*Cumulative Roadway Improvements*

Roadway improvement projects assumed to be completed under Cumulative conditions are presented below. These include the future local roadway conditions as identified in the City of Chico General Plan as well as future freeway improvements identified in the Transportation Corridor Concept Report, State Route 99. Under Cumulative conditions, these improvements are added to the roadway improvements assumed under Short Term conditions.

Current long-term plans for the E 20$^{th}$ Street corridor include roadway widening to three lanes in each direction and extended and/or additional turn lanes at intersections to accommodate future traffic growth. The City is currently contemplating modifying these plans to include roundabouts instead of roadway widening along E 20$^{th}$ Street, however, the roundabout alternative has not been formally incorporated into the City's Capital Improvement Program.

- Auxiliary lanes will be provided in both directions on SR-99 between the Skyway and E. 20$^{th}$ Street interchanges.

- Auxiliary lanes will be provided in both directions on SR-99 between the E. 20th Street and SR-32 interchanges.
- Given the distant time horizon for the Cumulative scenarios, it is assumed that the City and Caltrans will update signalized intersections with optimized signal timing plans to reflect changes in local roadway volumes, where necessary.

*Intersection Operations*

Cumulative No Project peak-hour intersection traffic operations were analyzed utilizing projected traffic volumes and intersection lane geometrics and control (shown on Exhibit 3.11-12). Table 3.11-16 provides a summary of the projected peak-hour intersection LOS under Cumulative No Project conditions. As shown, all of the study area intersections are projected to operate with an average of LOS E or better during the weekday AM, weekday PM, and Saturday peak hours under Cumulative No Project conditions.

The Cumulative Plus Project scenario is the analysis scenario in which traffic impacts associated with the proposed project are compared with those of the Cumulative No Project scenario. Trips associated with the proposed project were layered on top of the Cumulative No Project scenario volumes to establish Cumulative Plus Project volumes. The Cumulative Plus Project scenario assumes the completion of the planned roadway modifications included in the proposed project, as well as the completion of numerous reasonable and foreseeable land uses expected in 2035. This analysis utilizes the 2009 BCAG travel demand model to establish future land use and traffic assumptions for 2035.

Cumulative Plus Project intersection traffic operations were analyzed utilizing projected Cumulative Plus Project traffic volumes, as shown in Exhibit 3.11-13. Table 3.11-16 displays Cumulative Plus Project weekday AM, weekday PM, and Saturday peak-hour operations at study intersections.

## Table 3.11-16: Cumulative Plus Project Intersection Operations

| Intersection | | Control Type | No Project Conditions | | | | | | Plus Project Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
| | | | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS | Avg. Delay | LOS |
| 1 | E 20th St./Dr. MLK Jr. Pkwy. | Signal | 17 | B | 27 | C | 38 | D | 17 | B | 27 | C | 39 | D |
| 2 | E 20th St./SR-99 SB Ramps | Signal | 13 | B | 27 | C | 35 | D | 14 | B | 31 | C | 41 | D |
| 3 | E 20th St./SR-99 NB Ramps | Signal | 11 | B | 18 | B | 21 | C | 11 | B | 20 | C | 27 | C |
| 4 | E 20th St./Business Ln. | TWSC | 18 | C | 20 | C | 24 | C | 18 | C | 21 | C | 25 | C |
| 5 | E 20th St./Chico Mall Access | Signal | 12 | B | 32 | C | 45 | D | 12 | B | 34 | C | 61 | E |
| 6 | E 20th St./Forest Ave. | Signal | 40 | D | 66 | E | 58 | E | 56 | E | **94** | **F** | **89** | **F** |
| 7 | Forest Ave./Baney Ln. | Signal | 19 | B | 24 | C | 23 | C | 20 | C | 27 | C | 27 | C |
| 8 | Forest Ave./Walmart Driveway | TWSC | 11 | B | 11 | B | 11 | B | 12 | B | 12 | B | 13 | B |
| 9 | Forest Ave./Wittmeier Dr.-Talbert Dr. | TWSC | 19 | C | 24 | C | 20 | C | 12 | B | 15 | B | 14 | B |
| 10 | Forest Ave./Notre Dame Blvd. | Signal | 15 | B | 15 | B | 15 | B | 15 | B | 17 | B | 19 | B |
| 11 | E Park Ave./Dr. MLK Jr. Pkwy. | Signal | 10 | B | 14 | B | 15 | B | 10 | B | 14 | B | 15 | B |
| 12 | Skyway/SR-99 SB Ramps | Signal | 12 | B | 14 | B | 8 | A | 12 | B | 14 | B | 8 | A |
| 13 | Skyway/SR-99 NB Ramps | Signal | 14 | B | 17 | B | 11 | B | 14 | B | 17 | B | 11 | B |
| 14 | Skyway/Notre Dame Blvd. | Signal | 27 | C | 31 | C | 26 | C | 27 | C | 33 | C | 29 | C |

Note:
[1] For signalized and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for the overall intersection. For side-street stop controlled intersections, the delay is reported in seconds per vehicle for the worst individual movement. All results are rounded to the nearest second.
Source: Fehr & Peers, 2015.

As shown in Table 3.11-16, all but one of the study area intersections are projected to operate at acceptable LOS thresholds during the weekday AM, weekday PM, and Saturday peak hours under Cumulative Plus Project conditions:

- E. 20th Street/Forest Avenue—During the weekday PM and Saturday peak hours, this intersection is projected to degrade from an acceptable LOS E under Cumulative No Project conditions to an unacceptable LOS F under Cumulative Plus Project conditions. According to the City of Chico General Plan, intersection operations are considered acceptable at LOS E or better under the roadway conditions of E. 20th Street and Forest Avenue. Based on the analysis below, the impact would be offset with mitigation measures reducing the impact to less than significant.

The increase in intersection volume and corresponding degradation of intersection operations can be attributed to a combination of (a) additional trips generated by the proposed project and (b) additional trips rerouted to Forest Avenue as a result of the proposed turn restrictions at the Baney Lane Walmart driveways. Northbound left-turn volumes are particularly high during the weekday PM and Saturday peak-hour time periods under Cumulative Plus Project conditions.

*Impacts and Mitigation Measures*

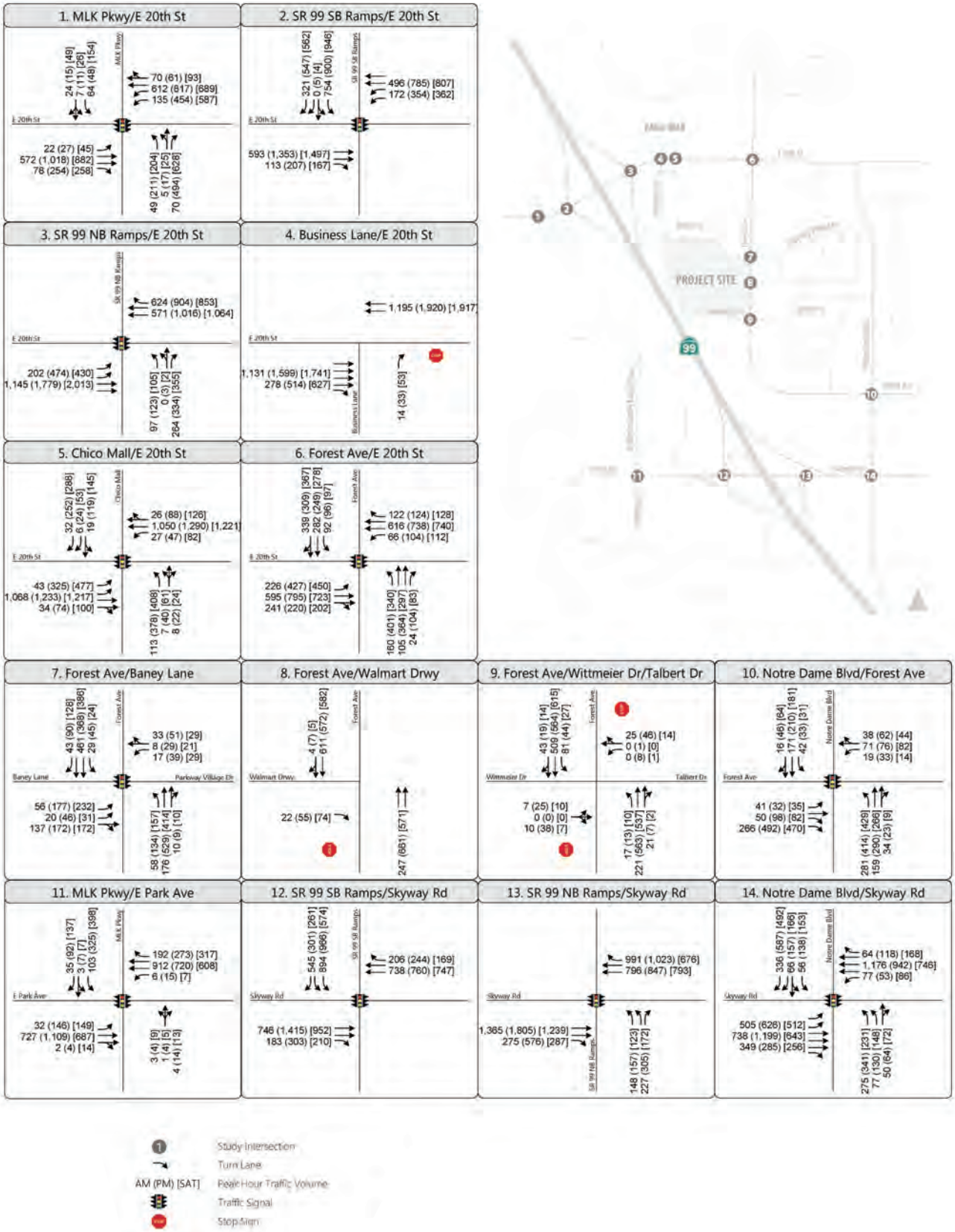
**E. 20th Street/Forest Avenue**

To mitigate the impact, the applicant shall provide the City of Chico with the requisite funds for improving the intersection of E 20th Street/Forest Avenue. The improvements shall consist of a) restriping the northbound approach (Forest Avenue) to provide a left-turn lane, a shared left-turn/through lane, a through lane, and a right-turn lane, and b) modifying the signal operation to provide split phasing on the northbound and southbound approaches. The City of Chico shall implement the improvements when monitoring determines that the intersection operation is approaching unacceptable levels. This improvement is reflected in Mitigation Measure TRANS-3a.

According to a Synchro analysis of the E. 20th Street/Forest Avenue intersection with the restriping and split-phase signal timing, operations would improve to an average delay of 68 seconds during the weekday PM peak time period and 65 seconds during the Saturday peak time period, both of which would operate at an acceptable LOS E. This would mitigate the associated intersection impact to less than significant under the Cumulative Plus Project scenario.

Pursuant to General Plan Policy CIRC-1.3 (Citywide Circulation Improvements), the applicant shall pay the fair share cost of circulation improvements necessary to address cumulative transportation impacts through the City's development impact fee program.

Current long-term plans for the E. 20th Street corridor include roadway widening to three lanes in each direction and extended and/or additional turn lanes at intersections to accommodate future traffic growth. Consistent with these plans, a modification of the lane configuration on the northbound approach of the E. 20th Street/Forest Avenue intersection to include dual left-turn lanes could sufficiently accommodate Cumulative Plus Project traffic volumes. This improvement would require the construction of an additional left-turn lane with 225 feet of storage on the northbound approach of the intersection. This would be the same distance as the existing single left-turn lane. This improvement may require roadway widening in order to accommodate the additional turn lane.




Source: Fehr and Peers, 2016

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# Exhibit 3.11-12
# Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project

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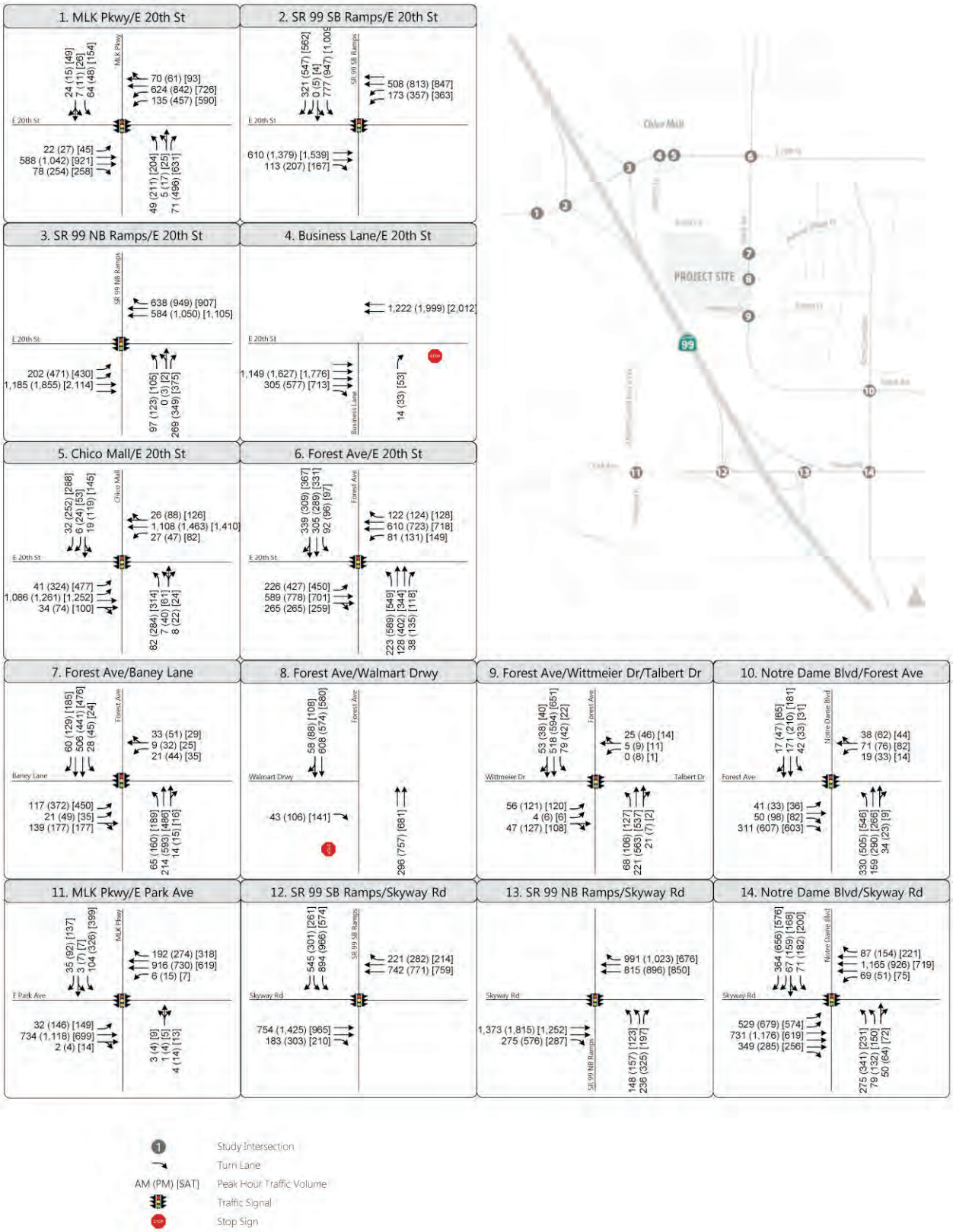


Source: Fehr and Peers, 2016

# Exhibit 3.11-13
## Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project

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Whereas signal timing modifications adequately address unacceptable traffic operations under Existing Plus Project and Short Term Plus Project conditions, increased automobile volumes under Cumulative Plus Project conditions cannot be sufficiently mitigated with signal timing modifications alone. With an estimated peak-hour volume on E. 20th Street of more than 700 vehicles traveling each direction, and a left-turn volume on the Forest Avenue approach of more than 550 vehicles, a second left-turn lane is warranted. According to a Synchro analysis of the E. 20th Street/Forest Avenue intersection with northbound dual left-turn lanes, it is estimated that this modification would improve operations to an average delay of 55 seconds and an acceptable LOS E during the weekday PM peak time period and an average delay of 54 seconds and an acceptable LOS D during the Saturday peak time period.

Alternatively, the City is currently contemplating modifying existing long-term plans to include roundabouts in place of roadway widening along E. 20th Street. A potential roundabout at E 20th Street/Forest Avenue is one of four along the E. 20th Street corridor identified as improvement alternatives in the East 20th Street Circulation Study (City of Chico 2011). However, the roundabout alternative has not been formally incorporated into the City's Capital Improvement Program.

For either alternative, the applicant will pay its fair-share cost of circulation improvements necessary to partially mitigate cumulative roadway impacts.

This recommendation is reflected in Mitigation Measure TRANS-3b. Paying fair-share fees would partially mitigate the impact, but the impact would remain potentially significant and unavoidable because the timing of physical intersection improvements cannot be guaranteed to occur prior to the future traffic volumes that would cause the intersection to operate at an unacceptable level of service. As such, the residual significance of this impact would be significant and unavoidable.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM TRANS-3a** Prior to issuance of the first building permit for the proposed project, the applicant shall provide the City of Chico with the requisite funds for improving the intersection of E. 20th Street/Forest Avenue. The improvements shall consists of: (1) restriping the northbound approach (Forest Avenue) to provide a left-turn lane, a shared left-turn/through lane, a through lane, and a right-turn lane; and (2) modifying the signal operation to provide split phasing on the northbound and southbound approaches. The City of Chico shall implement the improvements when monitoring determines that the intersection operation is approaching unacceptable levels.

**MM TRANS-3b** Prior to issuance of building permits for the proposed project, the applicant shall pay the fair-share cost of off-site circulation improvements, as calculated through the City's adopted development impact fee program.

### *Level of Significance After Mitigation*

Less than significant impact.

## Regional Facilities

**Impact TRANS-4: The project may conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.**

### *Impact Analysis*

This impact assesses whether the project would conflict with an applicable Congestion Management Program. Regional facilities such as freeways are commonly classified as Congestion Management Program facility is regional plans such as the Regional Transportation Plan. Thus, freeway operations on SR-99 were evaluated under Existing Plus Project, Short-Term, and Cumulative Conditions.

### *Freeway Operations*

*Existing Plus Project Conditions*

Existing Plus Project peak-hour freeway mainline and ramp operations were evaluated utilizing the peak-hour traffic volumes shown on Exhibit 3.11-14. Table 3.11-17 summarizes projected SR-99 freeway mainline and ramp operations within the study area under Existing Plus Project conditions.

**Table 3.11-17: Existing Plus Project Freeway Operations**

| Freeway Facility | Junction Type | Target LOS | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Density | LOS | Density | LOS | Density | LOS |
| **Northbound State Route 99** | | | | | | | | |
| South of Skyway Road | Basic | D | 14.2 | B | 17.3 | B | 11.2 | B |
| Skyway Road Off-Ramp | Diverge | D | 19.2 | B | 22.7 | C | 15.9 | B |
| Skyway Road Loop On-Ramp | Merge | E | 17.4 | B | 22.0 | C | 14.9 | B |
| Skyway Road Slip On-Ramp | Merge | E | 26.7 | C | 30.3 | D | 20.1 | C |
| Skyway Road to E 20th Street | Basic | E | 23.7 | C | 28.0 | D | 17.0 | B |
| E 20th Street Off-Ramp | Diverge | E | 29.4 | D | 31.5 | D | 21.3 | C |
| E 20th Street On-Ramp | Merge | E | 31.3 | D | 36.5 | E | 26.6 | C |
| North of E 20th Street | Basic | E | 28.5 | D | 37.8 | E | 23.3 | C |
| **Southbound State Route 99** | | | | | | | | |
| North of E 20th Street | Basic | E | 34.5 | D | 37.8 | E | 24.3 | C |
| E 20th Street Off-Ramp | Diverge | E | 38.4 | E | 40.4 | E | 30.4 | D |
| E 20th Street On-Ramp | Merge | E | 27.6 | C | 25.8 | C | 16.7 | B |
| E 20th Street to Skyway Road | Basic | E | 24.5 | C | 22.7 | C | 13.6 | B |
| Skyway Road Off-Ramp | Diverge | E | 31.6 | D | 29.3 | D | 20.3 | C |
| Skyway Road Loop On-Ramp | Merge | D | 16.8 | B | 17.4 | B | 12.6 | B |
| Skyway Road On-Ramp | Merge | D | 18.4 | B | 19.6 | B | 14.0 | B |

## Table 3.11-17 (cont.): Existing Plus Project Freeway Operations

| Freeway Facility | Junction Type | Target LOS | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
|---|---|---|---|---|---|---|---|---|
| | | | Density | LOS | Density | LOS | Density | LOS |
| South of Skyway Road | Basic | D | 15.3 | B | 16.5 | B | 11.0 | B |
| Source: Fehr & Peers, 2015. | | | | | | | | |

As shown in Table 3.11-17, all study freeway mainline and ramp facilities are projected to continue to operate at acceptable LOS (LOS E or better north of Skyway and LOS D or better south of Skyway, according to Caltrans significance criteria for freeways) during weekday AM, weekday PM, and Saturday peak hours under Existing Plus Project conditions. Therefore, all project impacts to freeway facilities are considered less than significant.

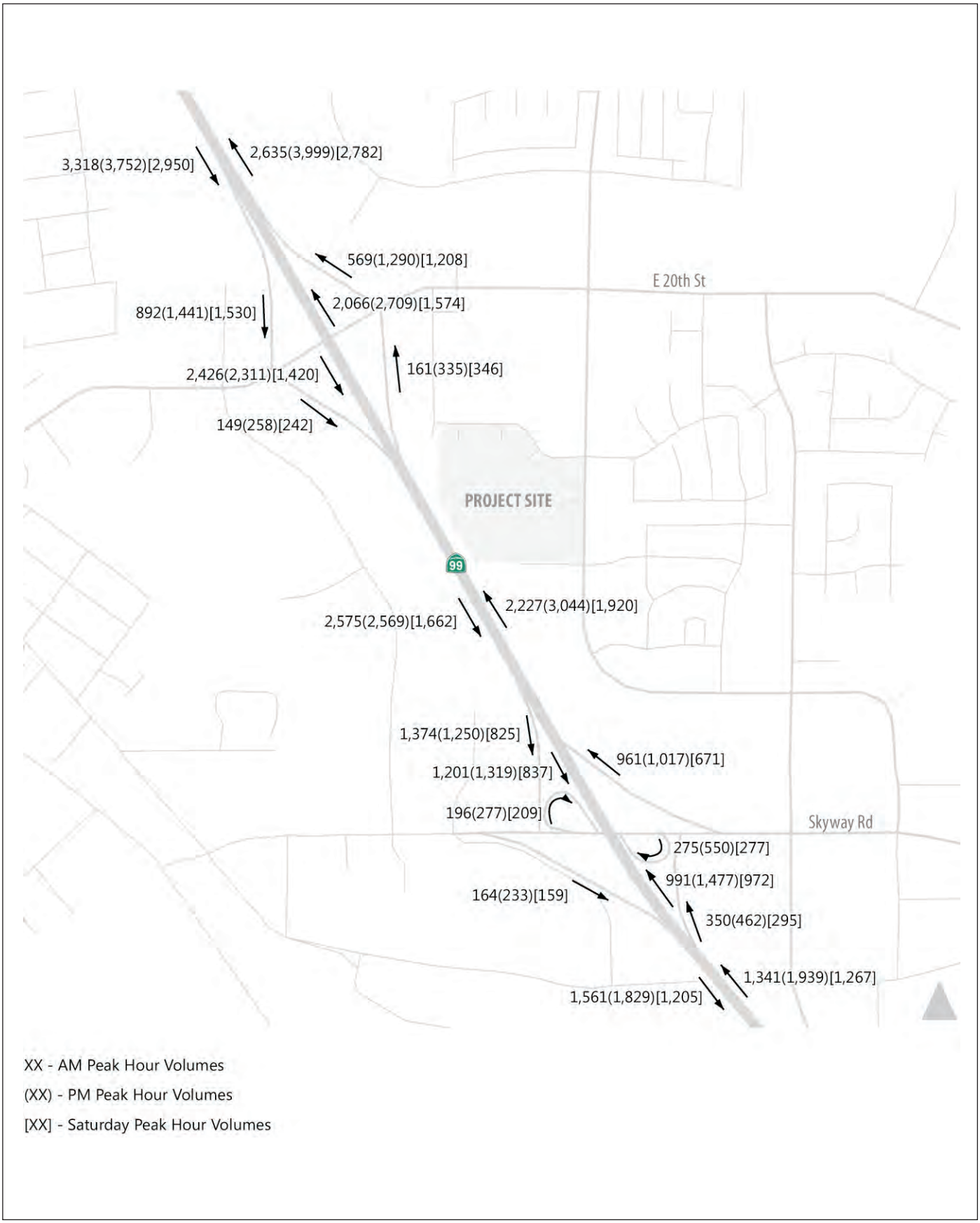
*Short-Term Conditions*

Short Term No Project peak-hour mainline and ramp operations were evaluated utilizing the projected peak-hour traffic volumes shown on Exhibit 3.11-15. Table 3.11-18 summarizes projected SR-99 freeway mainline and ramp operations under Short Term No Project conditions. As shown, all mainline and ramp segments are projected to operate with an average of LOS E or better during the weekday AM, weekday PM, and Saturday peak hours under Short Term No Project conditions.

Short Term Plus Project peak-hour freeway mainline and ramp operations were evaluated utilizing the peak-hour traffic volumes shown on Exhibit 3.11-16. Table 3.11-18 summarizes projected SR-99 freeway mainline and ramp operations within the study area under Short Term Plus Project conditions.

## Table 3.11-18: Short-Term Plus Project Freeway Operations

| Freeway Facility | Junction Type | Target LOS | No Project Conditions | | | | | | Plus Project Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
| | | | Density | LOS | Density | LOS | Density | LOS | Density | LOS | Density | LOS | Density | LOS |
| **Northbound State Route 99** | | | | | | | | | | | | | | |
| South of Skyway Road | Basic | D | 14.1 | B | 17.2 | B | 10.9 | A | 14.2 | B | 17.5 | B | 11.3 | B |
| Skyway Road Off-Ramp | Diverge | D | 19.1 | B | 22.5 | C | 15.5 | B | 19.2 | B | 22.9 | C | 16.0 | B |
| Skyway Road Loop On-Ramp | Merge | E | 17.3 | B | 22.0 | C | 14.9 | B | 17.4 | B | 22.1 | C | 15.0 | B |
| Skyway Road Slip On-Ramp | Merge | E | 26.7 | C | 30.3 | D | 20.0 | C | 26.7 | C | 30.5 | D | 20.2 | C |
| Skyway Road to E 20th Street | Basic | E | 23.6 | C | 28.0 | D | 16.9 | B | 23.7 | C | 28.2 | D | 17.0 | B |
| E 20th Street Off-Ramp | Diverge | E | 29.3 | D | 31.5 | D | 21.2 | C | 29.4 | D | 31.7 | D | 21.4 | C |
| E 20th Street On-Ramp | Merge | E | 31.6 | D | 36.4 | E | 26.4 | C | 31.7 | D | 36.7 | E | 26.8 | C |
| North of E 20th Street | Basic | E | 28.9 | D | 37.4 | E | 23.1 | C | 29.1 | D | 38.2 | E | 23.6 | C |
| **Southbound State Route 99** | | | | | | | | | | | | | | |
| North of E 20th Street | Basic | E | 34.5 | D | 36.9 | E | 23.7 | C | 34.9 | D | 37.8 | E | 24.3 | C |
| E 20th Street Off-Ramp | Diverge | E | 38.5 | E | 39.9 | E | 29.8 | D | 38.7 | E | 40.4 | E | 30.4 | D |
| E 20th Street On-Ramp | Merge | E | 27.9 | C | 25.6 | C | 16.4 | B | 27.9 | C | 25.7 | C | 16.5 | B |
| E 20th Street to Skyway Road | Basic | E | 24.9 | C | 22.5 | C | 13.4 | B | 24.9 | C | 22.5 | C | 13.4 | B |
| Skyway Road Off-Ramp | Diverge | E | 31.9 | D | 29.0 | D | 20.0 | C | 31.9 | D | 29.1 | D | 20.1 | C |
| Skyway Road Loop On-Ramp | Merge | D | 17.0 | B | 16.9 | B | 11.9 | B | 17.1 | B | 17.3 | B | 12.3 | B |
| Skyway Road On-Ramp | Merge | D | 18.6 | B | 19.0 | B | 13.4 | B | 18.8 | B | 19.4 | B | 13.8 | B |
| South of Skyway Road | Basic | D | 15.5 | B | 15.9 | B | 10.3 | A | 15.7 | B | 16.3 | B | 10.8 | A |
| Source: Fehr & Peers, 2015. | | | | | | | | | | | | | | |




Source: Fehr and Peers, 2016

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Exhibit 3.11-14
Existing Plus Project Freeway and Mainline Ramp Volumes

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Source: Fehr and Peers, 2016

Exhibit 3.11-15
Short Term No Project Freeway and Mainline Ramp Volumes

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Source: Fehr and Peers, 2016

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Exhibit 3.11-16
Short Term Plus Project Freeway and Mainline Ramp Volumes

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*Cumulative Conditions*

Cumulative No Project peak-hour mainline, ramp, and weave segment operations were evaluated utilizing the projected peak-hour traffic volumes shown on Exhibit 3.11-17. Table 3.11-19 summarizes projected SR-99 freeway mainline and ramp operations under Cumulative No Project conditions. As shown, all mainline, ramp, and weave segments are projected to operate with an average of LOS E or better during the weekday AM, weekday PM, and Saturday peak hours under Cumulative No Project conditions.

Cumulative Plus Project peak-hour freeway mainline, ramp, and weave segment operations were evaluated utilizing the peak-hour traffic volumes shown on Exhibit 3.11-18. Table 3.11-19 summarizes projected SR-99 freeway mainline, ramp, and weave segment operations within the study area under Cumulative Plus Project conditions.

## Table 3.11-19: Cumulative Plus Project Freeway Operations

| Freeway Facility | Junction Type | Target LOS | No Project Conditions | | | | | | Plus Project Conditions | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | | AM Peak Hour | | PM Peak Hour | | Saturday Peak Hour | |
| | | | Density | LOS | Density | LOS | Density | LOS | Density | LOS | Density | LOS | Density | LOS |
| **Northbound State Route 99** | | | | | | | | | | | | | | |
| South of Skyway Road | Basic | D | 29.0 | D | 17.2 | B | 10.9 | A | 14.2 | B | 17.5 | B | 11.3 | B |
| Skyway Road Off-Ramp | Diverge | D | 34.5 | D | 22.5 | C | 15.5 | B | 19.2 | B | 22.9 | C | 16.0 | B |
| Skyway Road Loop On-Ramp | Merge | E | 31.0 | D | 22.0 | C | 14.9 | B | 17.4 | B | 22.1 | C | 15.0 | B |
| Skyway Road On-Ramp to E 20th Street Off-Ramp | Weave | E | — | C | — | D | — | B | — | C | — | D | — | B |
| E 20th Street On-Ramp to SR-32 Off-Ramp | Weave | E | — | D | — | E | — | C | — | D | — | D | — | C |
| **Southbound State Route 99** | | | | | | | | | | | | | | |
| SR-32 On-Ramp to E 20th Street Off-Ramp | Weave | E | — | D | — | E | — | D | — | D | — | **F** | — | D |
| E 20th Street On-Ramp to Skyway Road Off-Ramp | Weave | E | — | D | — | D | — | B | — | D | — | D | — | B |
| Skyway Road Loop On-Ramp | Merge | D | 17.0 | B | 16.9 | B | 11.9 | B | 17.1 | B | 17.3 | B | 12.3 | B |
| Skyway Road On-Ramp | Merge | D | 18.6 | B | 19.0 | B | 13.4 | B | 18.8 | B | 19.4 | B | 13.8 | B |
| South of Skyway Road | Basic | D | 15.5 | B | 15.9 | B | 10.3 | A | 15.7 | B | 16.3 | B | 10.8 | A |
| Source: Fehr & Peers, 2015. | | | | | | | | | | | | | | |

XX - AM Peak Hour Volumes

(XX) - PM Peak Hour Volumes

[XX] - Saturday Peak Hour Volumes

Source: Fehr and Peers, 2016

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Exhibit 3.11-17
Cumulative No Project Freeway and Mainline Ramp Volumes

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Source: Fehr and Peers, 2016

Exhibit 3.11-18
Cumulative Plus Project Freeway and Mainline Ramp Volumes

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As shown in Table 3.11-19, all but one study freeway mainline, ramp, and weave segment facilities are projected to continue to operate at acceptable LOS (LOS E or better north of Skyway and LOS D or better south of Skyway, according to Caltrans significance criteria for freeways) during weekday AM, weekday PM and Saturday peak hours under Cumulative Plus Project conditions:

- Southbound SR-99-SR-32 On-Ramp to E. 20th Street Off-Ramp

Operations on southbound SR-99 north of E. 20th Street are projected to degrade from an acceptable LOS E under Cumulative No Project conditions to an unacceptable LOS F under Cumulative Plus Project conditions during the PM peak hour. According to Caltrans, freeway operations are considered acceptable at LOS E or better on SR-99 north of Skyway.

General Plan Policy CIRC-1.3 requires the City to collect the fair share cost of circulation improvements necessary to address cumulative transportation impacts, including those to state highways, local roadways, and transit, and pedestrian and bicycle facilities, through the City's development impact fee program. In this case, the project's impacts to SR-99 is cumulatively significant impact, and, therefore, the appropriate mitigation is for the project to pay adopted transportation fees at the time building permits are sought. This is reflected in Mitigation Measure TRANS-3.

### *Conclusion*

SR-99 would operate at acceptable LOS under Existing Plus Project and Short-Term Plus Project Conditions; however, it would operate at unacceptable levels under Cumulative Plus Project Conditions. Under the latter scenario, SR-99 would operate unacceptably in the southbound direction between the SR-32 on-ramp and the E. 20th Street off-ramp (a weave segment) during the PM peak hour. The proposed project would pay all adopted transportation fees (as required by Mitigation Measure TRANS-3b), but the impact would remain potentially significant and unavoidable because the timing of physical intersection improvements cannot be guaranteed to occur prior to the future traffic volumes that would cause the segment of SR-99 to operate at an unacceptable level of service. As such, the residual significance of this impact would be significant and unavoidable.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

Implement Mitigation Measure TRANS-3b.

### *Level of Significance After Mitigation*

Significant unavoidable impact.

## Roadway Hazards

**Impact TRANS-5: The project may substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

### *Impact Analysis*

Wittmeier Drive provides vehicular access to the Wittmeier Auto Center via three driveways. A legal representative of the Wittmeier Auto Center submitted a letter in response to the Notice of Preparation for this EIR on November 5, 2015 noting that auto carriers serving the dealership use Wittmeier Drive for loading and unloading activities, and that the roadway also serves as the exclusive access to the Service Center and Parts Department. The representative indicated that the development of the proposed project had the potential to conflict with auto carrier unloading activities and ingress and egress to the Service Center and Parts Department. Accordingly, Fehr & Peers evaluated this issue and presented its findings, described below.

According to the current site plan, the proposed roadway modifications on Wittmeier Drive could potentially affect access to the project site and Wittmeier Auto Center while increasing hazards along the roadway. First, the current lane configuration may impede vehicular access and truck loading from Wittmeier Drive into the Wittmeier Auto Center south of the roadway, particularly at its easternmost driveway. Second, vehicular conflicts may occur as drivers attempt to navigate the cul-de-sac in tandem with vehicles arriving and departing from the westernmost Walmart driveway. Finally, with the westernmost driveway directly aligned with the Wittmeier Drive travel lanes may cause vehicular conflicts for vehicles turning in and out of the Wittmeier Auto Center driveways.

To reduce the potential for hazards and access issues on Wittmeier Drive, one of the following options for modifications could be made to reduce the opportunities for conflict between through and turning vehicles.

- **Option 1:** The eastbound dual left-turn lanes on Wittmeier Drive could be modified to a single left-turn lane, providing an extra lane to facilitate westbound turning movements and truck loading and unloading. Based on estimated Plus Project peak-hour left-turn movements from Wittmeier Drive to Forest Avenue, it is not anticipated that dual left-turn lanes are necessary to accommodate turning vehicle queues.
- **Option 2:** A roundabout could be installed at the Wittmeier Drive cul-de-sac to address potential vehicular conflicts between vehicles turning in the cul-de-sac and vehicles entering and exiting the westernmost Walmart driveway on Wittmeier Drive.

In addition to these modifications, additional roadway configuration options could be explored to further facilitate vehicle movement on Wittmeier Drive, including:

- **Option A:** One left-turn lane and one through-right lane in the eastbound direction, and one through-left lane and one right-turn pocket in the westbound direction. Truck loading and unloading activity could occur on the curbside between the two driveways on the south side of Wittmeier Drive.

- **Option B:** One left-turn lane and one through-right lane in the eastbound direction, one through-right lane in the westbound direction, and one two-way center left-turn lane with a median extending 50 feet west of the Forest Avenue/Wittmeier Drive intersection. Truck loading and unloading activity could occur in the two-way center left-turn lane.

These four options are presented in Mitigation Measure TRANS-5. Since these modifications would reduce potential hazards on Wittmeier Drive due to design features, it would mitigate the associated intersection impact to less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM TRANS-5** Prior to the approval of any improvement plans for Wittmeier Drive, the project applicant shall retain a qualified traffic engineer to evaluate the following options for addressing (1) conflicts between through and turning vehicles and (2) vehicle movement enhancements on Wittmeier Drive. The engineer shall identify a recommended option or options for each issue, and the applicant shall prepare and submit plans to the City of Chico for review and approval that reflect the recommended options. The approved plans shall be incorporated into the proposed project.

To address conflicts between through and turning vehicles, one or both of the following options shall be implemented:

- **Option 1:** Modify the eastbound dual left-turn lanes on Wittmeier Drive to provide a single left-turn lane, thereby providing an extra lane to facilitate westbound turning movements and truck loading and unloading. Based on estimated Plus Project peak-hour left-turn movements from Wittmeier Drive to Forest Avenue, it is not anticipated that dual left-turn lanes are necessary to accommodate turning vehicle queues.
- **Option 2:** Install a roundabout at the Wittmeier Drive cul-de-sac to address potential vehicular conflicts between vehicles turning in the cul-de-sac and vehicles entering and exiting the westernmost Walmart driveway on Wittmeier Drive. The roundabout would also address potential safety issues arising from vehicles entering and exiting the westernmost Walmart driveway at higher rates of speed.

To address vehicle movement enhancements, one of the following options shall be implemented:

- **Option A**: One left-turn lane and one through-right lane in the eastbound direction, and one through-left lane and one right-turn pocket in the westbound direction. Truck loading and unloading activity could occur on the curbside between the two driveways on the south side of Wittmeier Drive.

- **Option B:** One left-turn lane and one through-right lane in the eastbound direction, one through-right lane in the westbound direction, and one two-way center left-turn lane with a median extending 50 feet west of the Forest Avenue/Wittmeier Drive intersection. Truck loading and unloading activity could occur in the two-way center left-turn lane.

### *Level of Significance After Mitigation*

Less than significant impact.

## Emergency Access

**Impact TRANS-6: The project would not result in inadequate emergency access.**

### *Impact Analysis*

The proposed project would be served with seven access points, described as follows:

- Forest Avenue: This existing right-in, right-out point would remain as is.
- Baney Lane (East): This existing full access point nearest Forest Avenue would be relocated approximately 200 feet west of the current location and would be modified to prohibit left-out movements.
- Baney Lane (Middle): This existing full access point would be modified to prohibit left-out movements.
- Baney Lane (West): This existing access point, which allows left-in, right-in, and right-out movements, would remain as is.
- Business Lane (Service): This existing full access point that primarily serves delivery vehicles would remain as is.
- Wittmeier Drive (East): This new point would provide a mid-block full access point.
- Wittmeier Drive (West): This new point at the end of the Wittmeier Drive cul-de-sac would provide full access.

The proposed left-out restrictions on the Baney Lane access points are intended to direct outbound traffic to Forest Avenue in order to minimize traffic on Business Lane. These restrictions would not impair inbound emergency response for fire or police vehicles, as left-in and right-in movements would still be permitted at these locations.

Overall, the proposed project would result in a total of seven vehicular access points to the project site from four surrounding roadways. The provision of these points would satisfy the California Fire Code's emergency access requirements.

Finally, the proposed project does not propose any off-site modifications to roadways in a manner that would impair or interfere with emergency response or evacuation (permanent road closures, lane narrowing, one-way street conversions, etc.). Impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

## Public Transit, Bicycles, and Pedestrians

**Impact TRANS-7: The project may conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.**

### *Impact Analysis*

*Public Transit*

The City addresses local public transit priorities with City of Chico General Plan Policy CIRC-5.3 (Transit Connectivity in Projects), which requires new development to support public transit. The proposed project does not include any modifications to existing transit service.

To reduce vehicular pollutant emissions by promoting alternatives to single-occupant vehicle travel, Mitigation Measure AIR-2h requires the project applicant to enhance the existing bus stop on Forest Avenue with a minimum of a shelter, seating, lighting, transit information, and a pedestrian connection to the Walmart store entrance.

Although the proposed project is expected to generate additional transit trips, any increases in transit ridership are expected to be small and capable of being served by existing B-Line services and facilities. Therefore, all project impacts to public transit service and facilities are considered to be less than significant.

*Bicycles*

The existing Class I path would be relocated to near the edge of the project site, paralleling Forest Avenue, Wittmeier Drive, and SR-99. This facility is largely consistent with both the City of Chico General Plan and the Chico Urban Area Bicycle Plan, the documents that guide the development and maintenance of bicycle facilities throughout the City.

The City of Chico General Plan includes Policy CIRC-1.2 (Project-Level Circulation Improvements), which requires new development to finance and construct internal and adjacent roadway circulation improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities. The proposed project adheres to this policy by including a relocated Class I path as part of the project site plan. Bicycle travel is further supported by the provision of forty bicycle parking spaces as part of the proposed project.

The City of Chico General Plan also includes Policy CIRC-3.3 (New Development and Bikeway Connections), which requires new residential and non-residential development projects to provide

connections to the nearest bikeways. The proposed bicycle facility adheres to this policy by providing direct connections to the surrounding bicycle network and accommodating bicycle travel to and from the project site. Although the Class I path would be moved to a new location, it would continue to serve the same role in the citywide bicycle network by connecting the SR-99 Corridor Bikeway Facility with the Forest Avenue bike lanes.

The Chico Urban Area Bicycle Plan identifies future bicycle facilities in Chico, including the SR-99 Bikeway that the City plans to extend through the project site south to Skyway Road. While the proposed project includes a portion of the planned SR-99 Bikeway, approximately 75 feet of the bikeway located between the southwest corner of the proposed bicycle path and the southern edge of the project site are not included in the proposed project. Without an accommodation of a potential future extension of the City's planned SR-99 Bikeway to the southern edge of the project site, this is considered a potentially significant impact.

To mitigate this impact, the proposed project shall be modified to include an easement for a potential future Class I bikeway connection that would extend south from the southwesterly corner of the project site. With the ability reserved by the City to establish a future connection to this planned bikeway facility, this potential impact would be reduced to a level of less than significant. This recommendation is reflected in Mitigation Measure TRANS-7.

Additionally, the project includes 20 covered bike lockers and 19 uncovered bike parking spaces as part of the store expansion. Therefore, all project impacts to bicycle facilities are considered less than significant.

*Pedestrians*

In the City of Chico General Plan, Policy CIRC-1.2 (Project-Level Circulation Improvements) requires new development to finance and construct internal and adjacent roadway circulation improvements as necessary to mitigate project impacts, including roadway, transit, pedestrian, and bicycle facilities, and Policy CIRC-4.2 (Continuous Network) requires the provision of a pedestrian network in existing and new neighborhoods that facilitates convenient and continuous pedestrian travel free from major impediments and obstacles.

The proposed project includes a new on-site pedestrian walkway through the central portion of the parking lot to provide pedestrian access between Forest Avenue and the southeast store entrance. Pedestrians would also be able to utilize the relocated Class I bike path to traverse the project site. The project does not include any modifications to the surrounding public sidewalk network. New crosswalks are proposed for each leg of the modified Forest Avenue/Wittmeier Intersection.

Altogether, the pedestrian facility modifications included in the proposed project facilitate pedestrian access to and within the project site and do not require the removal of existing pedestrian facilities on public roadways. Therefore, all project impacts to pedestrian facilities adhere to City of Chico General Plan policies and are considered to be less than significant.

### *Level of Significance Before Mitigation*

Potentially significant impact.

### *Mitigation Measures*

**MM TRANS-7** Prior to recordation of the final parcel map, the project applicant shall provide an easement for a potential future Class I bikeway connection that would extend south from the southwesterly corner of the project site to the planned SR-99 Bikeway.

### *Level of Significance After Mitigation*

Less than significant impact.

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# 3.12 - Urban Decay

This section describes the existing urban decay setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on the Urban Decay Study prepared by ALH Economics and included in this EIR as **Appendix J**.

## 3.12.1 - Existing Conditions

### Overview of Urban Decay

Since this study is being completed as part of the Environmental Impact Report (EIR) process for the proposed project, it focuses strictly on the types of physical changes to the environment that are defined as significant by the California Environmental Quality Act (CEQA). A project's economic effects on market area competitors are not an environmental impact under CEQA unless they can be traced to direct physical changes in the market area (i.e., physical deterioration of existing retail centers/facilities).

As Section 15131(b) of the CEQA Guidelines explains:

a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

For the purpose of this analysis, urban decay is defined as, among other characteristics, visible symptoms of physical deterioration that invite vandalism, loitering, and graffiti that is caused by a downward spiral of business closures and long-term vacancies. This physical deterioration to properties or structures is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community.

### Market Area Definition

This report chapter discusses the approach to estimating the project's market area, which is the area from which the majority of shoppers are anticipated to originate. This chapter describes the market area and characterizes the area's existing retail inventory.

#### *Approach to Defining Market Area*

The project's market area definition is based on the principle that most consumers will travel to the shopping destination most convenient to their homes given the type of goods available. A market area is the geographic area from which the majority of a retail shopping center's demand is anticipated to originate. Several tasks were completed to identify the project's market area, foremost of which included mapping the location of the project relative to other Walmart stores, especially existing or planned stores with a major food sales component, and taking into

consideration comparative travel time and the size and composition of the retail base in Chico and other areas within the general environs of Chico.

### *Market Area Conceptual Description*

In developing a market area, ALH Economics strives to identify the area from which the majority of demand for a shopping center will originate, typically at least 70 percent, based upon the following industry resources.

Materials published by major industry organizations indicate that a retail store's trade area generally supplies 70 percent to 90 percent of the store's sales, while the remaining 10 percent to 30 percent of sales are attributed to consumers residing outside of the store's market area. In its Shopping Center Development Handbook, Third Edition, the Urban Land Institute (ULI) states the following:

> A site generally has a primary and a secondary trade area, and it might have a tertiary area. The primary trade area should generally supply 70 to 80 percent of the sales generated by the site. These boundaries are set by geographical and psychological obstacles[1].

ULI is a nonprofit research and education organization representing the entire spectrum of land use and real estate development disciplines. Among real estate, retail, and economic development professionals, this organization is considered a preeminent educational forum.

Information published by the International Council of Shopping Centers (ICSC), a trade association for the shopping center industry, also provides instructional information about market area definitions. In the recent publication Developing Successful Retail in Secondary & Rural Markets, the ICSC says:

> A trade area is the geographic market that you will be offering to potential retailers as a consumer market . . . . Defining a retail trade area is an art and a science. In general, a trade area should reflect the geography from which 75-90 percent of retail sales are generated. Different stores can have different trade areas based on their individual drawing power and the competitive market context[2].

In summary, these industry resources suggest that a retail project's trade area, or market area, typically is defined as the geographic area from which at least 70 percent of demand is anticipated to originate.

### *Project Market Area Definition*

ALH Economics conducted research to develop an estimate of the market area for the project, i.e., the area from which the majority of shoppers will originate. This market area took into consideration the location of other retail nodes where consumers can shop, including nodes with other Walmart stores, including stores with expanded food sales similar to what is planned for the

[1] Shopping Center Development Handbook, Third Edition, Urban Land Institute, 1999, page 44
[2] Developing Successful Retail in Secondary & Rural Markets, International Council of Shopping Centers in cooperation with National Association of Counties, 2007, page 7.

Chico store expansion. Such Walmart stores are located in Red Bluff, Willows, and Oroville, with the Oroville store relocating in 2017 to include expanded food sales. The locations of these stores are plotted on Exhibit 3.12-1, and are generally located at three corners bordering Chico and its environs. For market area definition purposes, ALH Economics assumes that households that live closer to any one of these three existing/planned Walmart stores will shop there, and not shop in Chico. However, locations closer to Chico, and especially the Walmart store site, are assumed to comprise areas included in the Chico Walmart store's market area.

To identify these closer areas, ALH Economics selected several geographic locations and calculated their travel time and distance between the Chico Walmart site and the next nearest Walmart site. This mapping was achieved using the Google Maps functionality. Thus, the general boundary of the project's market area was determined based upon this mapping analysis. This especially included analysis of the Town of Paradise, and a determination that Paradise households are more likely to shop in Chico than in Oroville, especially given the larger size of the Chico retail base compared with Oroville[3]. ALH Economics then superimposed census tract boundaries over the general boundary to identify the census tracts that would best comprise the market area for the project. An advantage of using census tracts is that the market area definition is easily defined, easily replicable, and key demographic estimates and projections are readily available in this format.

The resulting market area is presented in Exhibit 3.12-1. This area extends to Hamilton City on the west, through the unincorporated county area of Durham to the south, to Paradise on the east, and Forest Ranch to the north. Because of the configuration of Butte County census tracts, an additional area north of Forest Ranch is included in the market area. It is possible that consumers living in this area might not shop in Chico. However, there is very little population in this additional geographical area. For example, this area includes the Butte Meadows Census Designated Place, which in 2010 had a population of 40. Thus, the inclusion of this limited population base is not anticipated to have any material impact on the findings.

### *Market Area Retail Orientation*

The market area is dominated by the City of Chico and the Town of Paradise. These two locations comprise the major commercial portions of the market area. Chico, however, is the main locus, with taxable retail sales for retail and food services in 2013 totaling $1.4 billion, compared with $139.2 million in Paradise. In its entirety, Butte County, in which both Chico and Paradise are located, had 2013 taxable retail sales totaling $2.1 billion[4]. Thus, the incorporated portions of the market area comprise almost three-fourths of all retail commercial activity in Butte County.

There are numerous commercial corridors in Chico and a wide range of regional-serving retailers. The project site is located in the southernmost portion of Chico, which includes a significant portion of Chico's retail base. This area includes Chico Mall, anchored by JCPenney, Sears, Forever 21, and Dick's Sporting Goods. There are numerous other specialty apparel and other retailers located at the Mall, including Motherhood Maternity, Men's Wearhouse, and Bath & Body Works. This traditional

[3] Specifically, according to the State of California Board of Equalization, Oroville taxable retail sales in 2013 (the most recent year for which annual data are available) totaled $336.7 million, compared to $1.7 billion in Chico (see http://www.boe.ca.gov/news/2013/ts_a13_rpt.pdf).

[4] See Taxable Sales in California (Sales & Use Tax) During 2013, Fifty-Third Annual Report, pages 3, 17, and 33.

mall is operating at high occupancy and serves to help anchor this southern portion of Chico as a major retail destination. Other major retailers in this general area include Walmart, Costco, discount food stores WinCo and FoodMaxx, Target, Kohl's, Michael's, Office Depot, Bed Bath & Beyond, Staples, Old Navy, and Best Buy. These uses are distributed among several shopping centers, but all are located in a node generally centered around Forest Avenue and East 20th Street, as well as nearby frontage along State Route 99. Given the presence of all these retailers, this area is the commercial retail core of Chico. This commercial area accounts for the definition of the market area, with this area comprising the closest major retail core for many households in Butte County and even portions of nearby Glenn County.

There are yet many other retail locations in Chico as well, with another smaller core of regional retailers located in the northern part of the City, centered near East Avenue and Cohasset Road. This area includes major retailers such as Kmart, Sportsman's Warehouse, Trader Joe's, many eating establishments, and a major cinema, Cinemark 14. In addition, there are a number of major thoroughfares in Chico lined with commercial establishments. These include Main Street, Mangrove Avenue, and East Avenue, among others. Chico also features a robust downtown, adjacent to the Chico campus of the California State University. This downtown area features many small specialty retailers, including restaurants, taverns, bicycle shops, sporting goods, clothing, and jewelry stores. Downtown also features the Senator Theatre, which is a major entertainment venue that generates retail and restaurant sales, as well as brings in business to other downtown establishments.

Compared to Chico, the retail base in Paradise is minimal. The major retailers in Paradise include grocery stores, Kmart (BigK), pharmacies such as Rite Aid, and small general merchandise stores such as Dollar General and Dollar Tree. There are many specialized services available in Paradise, such as feed and pet supply, tires, knitting, a number of eating establishments, and small boutiques, but little opportunity to purchase large-scale items such as electronics, furniture, or a range of apparel options.

Beyond the incorporated areas of Chico and Paradise there are very limited shopping opportunities in the market area. Some of the fringe areas include small food stores and a very limited number of personal services, such as Forest Ranch, Magalia, Durham, and Hamilton City; thus, households from these areas need to leave their communities to purchase even the most basic of consumer goods.

## Market Area Demographics and Retail Spending Potential

This report chapter identifies the market area's demographic characteristics, including comparisons between the City of Chico and Town of Paradise. The chapter additionally estimates retail demand generated by the market area's residents.

### *Demographic Characteristics*

ALH Economics developed population and household estimates and projections for the market area to provide a basis for estimating market area retail demand. These estimates and projections were prepared using a combination of two data sources. The primary data source includes the Butte County Association of Governments, which prepared long-term growth forecasts for Butte County in November 2014. These projections include several growth scenarios, including low, medium, and

high. The projections are presented at 5-year intervals beginning with 2020, and benchmarked to 2014. Direction from the City of Chico Community Development Department Planning resulted in the selection of the medium growth scenario for projection purposes, which the City indicates represents the most accurate forecast for growth in Chico. These projections are presented for population and housing unit counts, which ALH Economics interpolated for the interim year of 2018, corresponding with the project's anticipated first full year of operations.

ALH Economics converted the housing unit counts to household estimates, based upon an estimated vacancy rate for housing units pursuant to data reported by the State of California Department of Finance. In addition, a portion of the market area is not located in Butte County and therefore is not reflected in the Butte County projections. This portion is the Hamilton City census designated place, which is located in Glenn County. A separate estimation procedure was used based upon data prepared by Nielson Reports to estimate the demographics associated with the Hamilton City portion of the market area.

The resulting demographic estimates and projections for the project's market area indicate that the market area has an estimated 2015 household count of 64,487 (see Exhibit 9 in **Appendix J**). The population equivalent is 161,518. This is for the 34 census tracts that collectively comprise the market area. By 2018, the first estimated year of full operations for the project, the household count is forecasted to increase to 66,975, for an increase of 2,488 households. By 2020, two years after full operations, the household count is forecast to rise to 68,687, or by an additional 1,712 households.

As shown in Exhibit 9 in **Appendix J**, the City of Chico comprises the largest portion of the market area, with Chico's households comprising approximately 54 percent of the market area's household count. The Town of Paradise comprises a smaller portion, averaging approximately 18 percent of the market area total. The remaining 28 percent of the market area households live in unincorporated portions of Butte County with a very small portion in the Hamilton City Census Designated Place (which is located in Glenn County).

Household incomes in the market area vary by geography, with the average household income in Chico in 2015 comprising $60,892 and ranging up to $97,570 in Paradise. For the market area as a whole, however, the average is $61,757 as presented in Table 3.12-1.

### Table 3.12-1: Market Area Average Household Income

| Geographic Area | 2015 Income |
|---|---|
| City of Chico | $60,892 |
| City of Paradise | $97,570 |
| Market Area | $61,757 |
| Source: ALH Economics, 2016. | |

These average household incomes are estimated by Nielsen Reports, as there are no governmental resources with current household income estimates for the jurisdictions comprising the market area, or for the customized market area itself.

## Market Area Retail Demand Potential

### *Approach to Estimating Retail Demand*

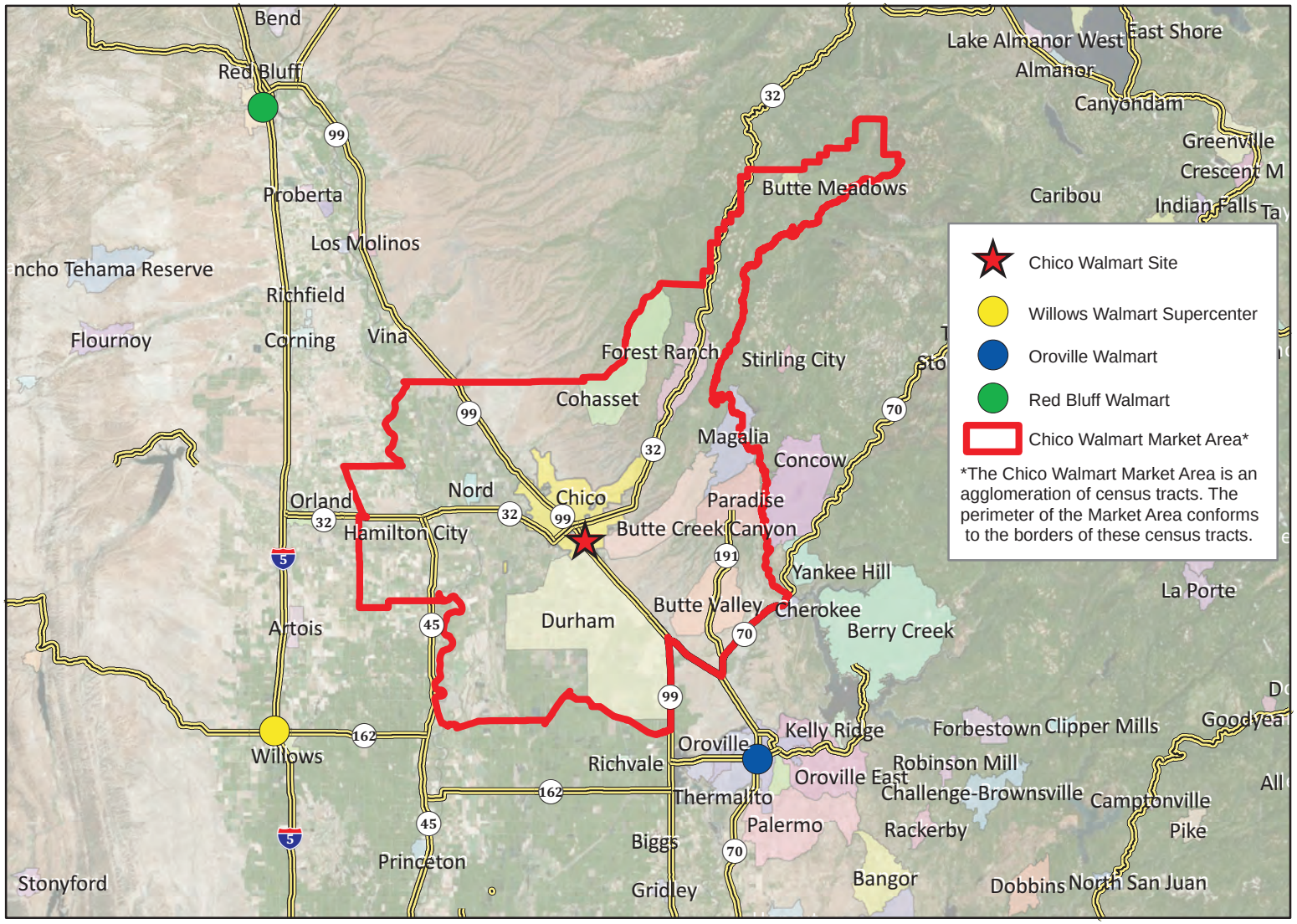
ALH Economics prepared a retail spending potential analysis, or demand analysis, for the project's market area households. This spending analysis takes into consideration average household income, the percent of household income spent on retail goods, and prospective spending on retail by the same retail categories reported by the California Board of Equalization (BOE). Pursuant to data published by the U.S. Bureau of Labor Statistics, 2013 Consumer Expenditures Survey, households in the income group with annual household incomes between $50,000 and $70,000 throughout the United States spent an average of 36 percent of household income on the type of retail goods tracked by the BOE. This is the second highest income bracket analyzed by the Consumer Expenditures Survey, and these households had average household incomes of $59,101 before taxes. These income parameters are the most appropriate Consumer Expenditures Survey match for the market area. Therefore, ALH Economics assumes that for the market area households, 36 percent of income will be spent on retail goods.

As a proxy for household spending patterns, ALH Economics analyzed statewide taxable sales trends for 2013 and converted them to estimated total sales. The results, presented in Exhibit B-4 in **Appendix J**, indicate that household spending by retail category ranges from a low of 5.2 percent on home furnishings & appliances to a high of 17.1 percent on Food & Beverage stores.

Market area retail demand projections for the market area's current and future household bases were estimated based upon the percentage share of income spent on retail and estimated distribution of retail spending. The demand projection for the current household base is presented in Exhibit 10 in **Appendix J**, and the demand estimates for the incremental new households is presented in Exhibit 11 in **Appendix J**. These demand estimates are then combined in Exhibit 12 in **Appendix J**, which presents the total demand estimate for the current 2015 time period as well as future household demand in 2018, all in 2015 dollars.

### *Retail Demand Findings*

The household demand estimates are summarized in Table 3.12-2. This indicates that the current household base has the estimated potential to spend $1.4 billion on retail goods. The largest share of spending is for Food & Beverage stores, which totals $243.5 million for the existing household base. This demand figure will increase by $9.4 million by the time the project is fully operational, totaling $252.9 million in 2018.




This map contains information from sources we believe to be reliable, but we make no representation, warranty, or guarantee of its accuracy. This map is published for the use of ALH Urban & Regional Economics its clients only. Redistribution in whole or part to any third party without the prior written consent of ALH Urban & Regional Economics is strictly prohibited.

Source: ALH Urban & Regional Economics, 2015

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Exhibit 3.12-1
Market Area Boundaries

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## Table 3.12-2: Market Area Retail Demand Estimates

| Type of Retailer | Millions | |
|---|---|---|
| | Existing 2015 | Projected 2018 |
| Motor Vehicles and Parts Dealers | $196.4 | $204.0 |
| Home Furnishings and Appliance Stores | $73.4 | $76.2 |
| Building Materials & Garden Equipment | $85.7 | $89.0 |
| Food & Beverage Stores | $243.5 | $252.9 |
| Gasoline Stations | $164.2 | $170.6 |
| Clothing and Clothing Accessories Stores | $100.9 | $104.8 |
| General Merchandise Stores | $198.1 | $205.7 |
| Food Services & Drinking Places | $181.3 | $188.3 |
| Other Retail Group | $178.5 | $185.4 |
| **Total** | **$1,422.1** | **$1,476.9** |
| Source: ALH Economics, 2016. | | |

These figures demonstrate that the market area has very strong retail spending potential, with even more potential emerging by the time the project is estimated to become fully operational in 2018.

There is the possibility of yet additional retail demand generated by other market area households, notably on-campus student households associated with the California State University campus located in Chico. Theoretically, off-campus student households are accounted for in the Butte County projections, and thus the market area projections reviewed above. However, students living in on-campus housing, dormitories, and fraternities/sororities may not be included. ALH Economics estimated these population groups to determine if the analysis should include separate estimation of their associated retail demand. This estimation is presented in Exhibit 13 in **Appendix J**, which demonstrates that 85 percent of Chico State's student population lives in off campus private housing. This leaves only a small balance of students who may not be accounted for in the preceding retail demand projections. As noted by the student budget estimates in Exhibit 13 in **Appendix J**, prepared by Chico State, students living on campus have a relatively low budget of spending on personal items, which would comprise some retail spending. Presumably, the room and board spending of these students is largely captured by the University. Accordingly, ALH Economics believes the retail demand potential from this population group is nominal, and would not contribute in a material manner to the market area retail demand projections. Thus, the analysis conservatively excludes consideration of on campus student retail spending.

## 3.12.2 - Regulatory Setting

### State

#### *California Environmental Quality Act*

CEQA requires that significant effects on the environment be analyzed, disclosed, and mitigated, if feasible, prior to the approval of discretionary land use approvals. The CEQA Guidelines require that both direct and reasonably foreseeable indirect physical changes be evaluated during the environmental review process. A direct physical change is caused by—and is immediately related to—the project. Examples of direct physical changes are construction-related dust, noise, and traffic. An indirect physical change is not immediately related to the project but is caused indirectly by the project. An example of an indirect physical change would be the construction of a new sewage treatment plant that provides additional wastewater treatment capacity, which facilitates population growth that could lead to increased air pollution.

In the context of CEQA, urban decay is considered an indirect physical impact. The development of new commercial retail space in a retail market has the potential to result in the closure of competing business, which may, in turn, result in vacant storefronts that meet the California Health and Safety Code definition of blight.

### Local

#### *City of Chico*

*General Plan*

The Chico 2030 General Plan establishes the following goal that is relevant to urban decay:

- **Goal ED-3:** Maintain a redevelopment strategy that encourages revitalization of existing neighborhoods, along with successful commercial and employment centers.

#### *Municipal Code*

The following City of Chico Municipal Code Ordinances require property owners to maintain their properties so as not to create a nuisance by creating a condition that reduces property values and promotes blight and neighborhood deterioration:

- Chapter 1.14: Nuisance Abatement
- Chapter 8.02: Junk—Storage
- Chapter 8.08: Solid Waste Disposal—Storage and Collection
- Chapter 8.20: Weed and Rubbish Abatement
- Chapter 9.20: Camping
- Chapter 9.22: Depositing Foreign Matter in Public Ways
- Chapter 9.42: Injury to Public Property
- Chapter 9.44: Obstruction of Streets and Sidewalks
- Chapter 9.46: Graffiti Removal
- Chapter 10.52: Abandoned Vehicles. Enforcement of these ordinances can help prevent physical deterioration due to any long-term closures of retail spaces. The City of Chico's Code Enforcement Department is part of the Housing and Neighborhood Services Department, and

> is currently comprised of one code enforcement supervisor (whose title is Building Official) three Code Enforcement Officers, and one Administrative Assistant.

Code enforcement within the City of Chico is done on both a proactive basis by the Code Enforcement Department and a complaint basis by the public, with the majority of enforcement activities being reactive. Public complaints can be made to the City by calling the Code Enforcement Department directly, emailing the Code Enforcement Department, or mailing a written letter. The Code Enforcement Department works with residents, property owners, City Council, and other City departments to help resolve any violations on a voluntary basis. Code Enforcement staff promote and take part in a variety of community cleanup events, including the "Drop and Dash: Divert, Don't Trash" for community members to get rid of unwanted items, instead of illegally dumping them.

The City of Chico Municipal Code Section 1.14.040 on Manner of Serving Notices and Section 1.14.050 on Request to Abate Nuisance, state that once a nuisance has been determined, the property owner will receive a written notice to abate the nuisance within a reasonable time, and advises the property owner of the potential consequences if the nuisance is not abated. In addition, according to Section 1.14.100:

> Where a property owner has failed to abate a nuisance within the time prescribed by a nuisance abatement order approved by the city council and served on such property owner in the manner provided for by this chapter, the director shall cause the nuisance to be abated either by the use of city forces or, with approval of the city manager, by employing a private contractor to perform such work.

Moreover, Sections 1.14.110–1.14.200 state that the City shall keep a record of the expenses accrued to abate the violation. Once complete, the City Clerk will schedule a hearing before the City Council to determine if the abatement work was necessary and reasonable to abate the nuisance, and the owner will receive a copy of the record of costs and the time and date of the hearing at least 10 days prior. If the city council deems the abatement work necessary and reasonable, the City will levy an assessment against the owner of the property by placing a lien against the property. If the amount is not paid by the property owner it may be collected in any manner provided by law. According to the Code Enforcement Department, the majority of violations are resolved within 30 days.

From 2013 to mid-October 2015, the Code Enforcement Department opened an average of 1,300 cases per year, with an average closure rate of approximately 91 percent. Of the 1,300 violations, approximately 13 percent occur on commercial property and 87 percent occur on residential private property. Typical types of violations that occur are for property maintenance–including graffiti, homeless encampments, zoning, or signage. When graffiti violations are spotted, property owners or community members can call the graffiti hotline to report the violation. The City of Chico Public Works Department will remove the graffiti (if feasible) within 24 to 48 hours. Property owners sign a waiver, which gives the Public Works Department permission to remove graffiti on an as-needed basis. Public works will remove the graffiti with a pressure washer, a coat of primer paint, or some other method; however, it is then up to the property owner to match their own paint.

## 3.12.3 - Methodology

ALH Economics prepared an Urban Decay Analysis that is provided in its entirety in **Appendix J**. In particular, the study evaluates the extent to which the proposed project would have competitive impacts on existing retail facilities in the market area and consequently have the potential to result in urban decay. In addition to addressing the potential impacts of the proposed project itself, the study considers cumulative impacts, taking into account the impacts from other planned and proposed retail projects in the market area.

The following is summary of the methodology used to evaluate urban decay.

ALH Economics engaged in numerous tasks to complete this assignment assessing the prospective urban decay of the project. These tasks included the following:

- Identified the project's market area, i.e., the area from which the majority of Walmart consumers are anticipated to originate;
- Developed a definition of the project, including net additional square footage estimates by type of space;
- Estimated the project's net retail sales;
- Conducted fieldwork to review the project site and evaluate existing market conditions;
- Conducted retail sales leakage analyses for the City of Chico and Town of Paradise;
- Estimated demand generated by households added to the market area by the time the project achieves stabilized sales;
- Estimated the project's impacts on existing retailers;
- Identified planned market area retail projects;
- Assessed the cumulative impacts of planned retail projects; and
- Assessed the extent to which operations of the project and the cumulative projects may or may not contribute to urban decay.

The findings pertaining to these tasks are reviewed and summarized in this report, with analytical findings presented in the exhibits in **Appendix J**.

## 3.12.4 - Thresholds of Significance

The CEQA Guidelines Appendix G Checklist does not establish any specific thresholds for urban decay. However, CEQA Guidelines Section 15131(b) establishes that a project's economic impacts on a community are considered significant only if they can be tied to direct physical changes in the market area (i.e., physical deterioration of existing retail centers/facilities).For the purpose of this analysis, urban decay is defined as, among other characteristics, visible symptoms of physical

deterioration[5] that invite vandalism, loitering, and graffiti that is caused by a downward spiral of business closures and long-term vacancies. This physical deterioration to properties or structures is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community.

## 3.12.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

### Project-Level Urban Decay

**Impact UD-1: The project would not directly result in urban decay conditions.**

#### *Impact Analysis*

This impact assesses the proposed project's potential to directly cause urban decay.

*Project Description*

This analysis evaluates the proposed expansion of the Chico Walmart store, which is located on Forest Avenue in the City of Chico. The planned development is expected to add 64,386 square feet to the 131,302-square-foot store size, though for purposes of this study, the increase is estimated at 66,500 square feet in order to allow a 3 percent buffer for potential design changes. Exhibit 2 in **Appendix J** presents the existing store size and the incremental increases in sales and support space that are part of the planned expansion.

Most of the expansion area will comprise food sales and associated support space. However, the expansion also includes sidewalk and parking lot sales areas, which is more likely to comprise garden and seasonal sales items. The expansion square footage information is summarized in Table 3.12-3.

**Table 3.12-3: Project Square Footage Summary**

| Component | Existing | Proposed | Proposed with Buffer | Net Change |
|---|---|---|---|---|
| Walmart Store | 131,302 | 195,513 | 197,802 | 66,500 |
| Fuel Station & Kiosk | 0 | 1,451 | 1,500 | 1,500 |
| Parcel 2: Retail/Restaurant | 0 | 26,300 | 26,300 | 26,300 |
| Parcel 3: Retail/Restaurant | 0 | 25,700 | 25,700 | 25,700 |
| **Total** | **131,302** | **248,964** | **251,302** | **120,000** |
| Source: ALH Economics, 2016. | | | | |

[5] The manifestations of urban decay may include such visible conditions as plywood-boarded doors and windows, parked trucks and long term unauthorized use of the properties and parking lots, extensive gang and other graffiti and offensive words painted on buildings, dumping of refuse on site, overturned dumpsters, broken parking barriers, broken glass littering the site, dead trees and shrubbery together with weeds, lack of building maintenance, homeless encampments, and unsightly and dilapidated fencing.

In addition to the Walmart expansion space, the project includes development on three parcels. One of these parcels (Parcel 1) will comprise a fueling station with eight pumps (16 fueling positions) with a retail kiosk totaling 1,500 square feet. The two other parcels (Parcels 2 and 3) are planned for retail or restaurant development, with 26,300 and 25,700 square feet, respectively. Thus, the new retail space proposed for the fuel station and Parcels 2, and 3 totals 53,500 square feet.

Collectively, the incremental Walmart store space and the proposed development on Parcels 1, 2, and 3 totals 120,000 square feet inclusive of the 3 percent buffer. This is the amount of space utilized for this analysis.

*Projected Sales*

There will be several sales components associated with the project. These include the Walmart store expansion space and the sales associated with the additional parcels to be developed, such as the fueling station, associated kiosk, and restaurant and retail space. The following provides support for the sales assumptions for each of these components.

**Walmart Expansion Space Sales**

To estimate the annual increase in sales related to the planned Chico Walmart expansion, ALH Economics relied on information from the Walmart Stores, Inc. annual Form 10-K reports from the corporation's ten most recent fiscal years[6]. Exhibit 3 and Exhibit 4 in **Appendix J** present summaries of store distribution by type, total store square footage, average store sizes, and calculations of sales per square foot for the corporation's Walmart U.S. business segment, which comprises Walmart Supercenter, Discount, and Neighborhood Market stores.

During the past 10 years, sales in the Walmart U.S. segment ranged from $428 to $457 per square foot in current dollars. On a constant dollar basis, adjusted to 2015 dollars, per square foot sales performance ranged from $556 in 2005 to $440 in 2014, averaging $484 per square foot overall. Thus, overall, it appears that the Walmart average per square foot store sales have declined steadily over the past decade. This is likely related to two factors. First, the Great Recession dampened sales among most retailers. While Walmart has been more resilient than most stores due to its discount orientation, the chain's sales per square foot have not kept pace with inflation. Second, Walmart has been adjusting its mix of store formats over time and this shift appears to be affecting the chain's sales per square foot metric.

For example, within the Walmart U.S. segment, the corporation operates the following three store formats[7]:

- Supercenters are defined as large format stores (178,000 square feet per store on average), which offer "general merchandise and grocery";
- Discount stores have a smaller format (105,000 square feet per store on average) and are described as offering "general merchandise and a limited grocery"; and

[6] At the time of the analysis, the most recent Form 10-K report was for the fiscal year ending January 31, 2015. Data from prior 10-K reports back to the 2005 fiscal year were considered in the analysis of sales trends.

[7] Store format descriptions as provided in the Wal-Mart Stores, Inc. Form 10-K report for the fiscal year ending January 31, 2015, page 8

- Neighborhood Markets offer "grocery," and have an average size of 37,000 square feet per store.

The percentage of Supercenter stores in the chain's portfolio has risen steadily from 29 percent in fiscal year 2000 and peaking at 79 percent in fiscal year 2013. With the rise of Neighborhood Markets especially since 2012, Supercenters most recently comprise 75 percent of all U.S. Walmart stores. During the same period, Walmart's sales per square foot metric has declined in constant dollar terms, suggesting that the average Supercenter generates comparable to slightly lower sales per square foot levels than the smaller format stores[8]. One potential explanation for this finding is that the larger Supercenter format typically has a substantial amount of support space (e.g., food sales support and expanded stockroom/receiving area), which appears to be necessary for the level of grocery operations. Consequently, even though the average Supercenter likely generates higher levels of sales when compared with the smaller format stores, these sales are spread over a larger amount of retail space (the combination of sales and support areas as reported in the 10-K filings), which limits the sales per square foot performance.

For the purpose of analysis, ALH Economics assumes Walmart expansion space sales at the $484 per square foot average presented in Exhibit 4 in **Appendix J**. This sales figure is applied to all expansion space associated with the store, including non-sales space, with the exception of the Food Tenant Area, which comprises expansion space for the existing Subway restaurant. A separate sales figure more appropriate for a fast food tenant is applied to the food tenant expansion space. Together, these sales estimates result in a net new store sales estimate of $32.2 million for the 66,500 net new square feet including the buffer space.

The Walmart expansion space sales will comprise several retail categories, corresponding to the categories used for reporting purposes by the BOE. These categories are noted below.

**Fuel Station Sales**

Sales for the fueling station are based on a different sales metric than the Walmart expansion space. The project will include eight pumps (16 fueling positions). For the purposes of this analysis, it is assumed that the fuel station will retail 5,000 gallons of petroleum products per day, which equates to 1,825,000 annual gallons sold.

Generally speaking, ALH Economics estimated the fueling station sales based on gasoline prices during the time period associated with the Chico sales base included in this study (e.g., 3rd quarter 2013 through 2nd quarter 2014, with adjustments to 2015)[9]. In this manner, estimated sales are benchmarked to the approximate existing sales base for purposes of the analysis. In addition, the analysis also backs out the many fuel taxes and other fees added to the price of gasoline, as these taxes are not included in gasoline sales reported in the State of California's taxable retail sales figures.

[8] In other words, if the Supercenter format was markedly more productive than the smaller format stores on a sales per square foot basis, then overall sales per square foot would be expected to increase at a faster rate as the store mix shifted between 2003 and 2010.

[9] The purpose of this adjustment is to be able to estimate gasoline sales at a price point comparable to the price point reflected in the current sales base estimated for 2015.

The gasoline sales analysis is presented in Exhibit 5 in **Appendix J**. During the benchmark period from 3rd quarter 2013 through 2nd quarter 2014, gasoline prices in California averaged $3.89 per gallon. In order to determine the taxable basis of the per gallon price it was necessary to back out fuel taxes, which are currently estimated per gallon at $0.184 for federal fuel tax, $0.395 for state fuel tax, and $0.140 for state underground storage tank fee. In addition, there is a state 2.25 percent sales tax rate on fuel (excluding diesel) and most local jurisdictions also receive 1 percent of the taxable sales price. Based upon these taxes, ALH Economics estimates that the taxable basis of the estimated gasoline price is $3.05. Pursuant to taxable sales information provided by the City of Chico, gasoline sales in 2015 averaged 17.8 percent lower than the 2013–2014 benchmark period[10]. Thus, the analysis assumes a gasoline sales price of $2.51 per gallon. This equates to estimated taxable gasoline sales of $4,576,190 a year for the project's fuel station.

**Additional New Sales**

There are several other components of net new sales that will occur at the project. These include sales at the small kiosk associated with the fuel station and sales at the retail or restaurant space associated with Parcels 2 and 3. ALH Economics assumes the kiosk sales occur at the same rate as Food & Beverage stores in general, which is estimated at $595 per square feet (see Exhibit 6 in **Appendix J**). As the kiosk is likely to comprise a convenience shopping location for gas patrons, such as for drinks and snacks, this category is generally relevant. This results in an estimate of nearly $900,000 in annual sales for the kiosk.

Parcels 2 and 3 are generally planned for retail or restaurant space. To facilitate the analysis, ALH Economics assumed that each parcel is divided into 50 percent restaurant and 50 percent retail, with corresponding annual sales of $500 and $429 per square foot, respectively. These correspond to sales estimates of $13.0 million for restaurant sales and $11.2 million for retail sales. The retail sales figure corresponds to a generalized average for a range of retailers, as the specific nature of the retail users for these parcels is not presently known.

*Projected Retail Sales by Category*

**BOE Retail Sales Categories**

The new sales generated by the project will be spread across several different retail categories, with a concentration among grocery items. To perform a more detailed analysis, ALH Economics allocated all the project's anticipated sales to categories that match the classifications reported by the BOE, which publishes taxable retail sales figures for cities and counties. To maximize the use of these data, the analysis is benchmarked to the BOE retail categories and the related sales figures reported in its Taxable Sales in California publication (with some adjustments, as noted in the Retail Sales Base Characterization chapter.) These categories, as typically reported for cities, include:[11]

- Clothing & Clothing Accessories
- General Merchandise Stores
- Food Stores

[10] The taxable base sales price per gallon is adjusted pursuant to analysis of recent retail sales trends for the City of Chico (i.e., first quarter 2015 and first quarter 2014). This is the most recent sales performance data available through the City's tax consultant. See Exhibit 10 in Appendix J.

[11] The category list is based on the 2013 Taxable Sales in California report, which was the most recent full year of reported data provided by the BOE at the time of this study.

- Food Services & Drinking Places
- Home Furnishings & Appliances
- Building Materials
- Motor Vehicles & Parts
- Service Stations
- Other Retail Stores

The BOE records a retailer's sales in only one sales category. For example, the actual sales for a Walmart are reported by the BOE under the General Merchandise classification. For purposes of this study, however, the impact of the Chico Walmart expansion is more appropriately analyzed across several retail categories since the new retail space within the store will likely compete with a range of retailers, including those classified under Food & Beverage Stores, General Merchandise, Clothing, and Other Retail by the BOE.

**Distribution of Project Sales**

The Walmart store sales are allocated based upon the distribution of the store's anticipated net new sales space as presented in Exhibit 2 in **Appendix J**. This includes some space anticipated to be dedicated to general merchandise sales, food, and apparel sales. The assumption is that all indoor sales area not designated for general merchandise sales, apparel sales, or food tenant area will comprise Food & Beverage Store sales. This includes the food sales support, stockroom/receiving area, and ancillary areas noted in Exhibit 2 in **Appendix J**.

The fueling station, associated kiosk, and Parcels 2 and 3 sales are assumed to be distributed as reviewed above, reflecting the Gasoline Stations, Food & Beverage Stores, Food & Drinking places, and Other Retail categories. Thus, the total net new sales associated with the project are estimated at $61.8 million pursuant to the study's sales assumptions documented in Exhibit 2 in **Appendix J**. By retail category, the $61.8 million in sales is distributed as shown in Table 3.12-4.

## Table 3.12-4: Summary of Project Sales

| Retail Category | Net New Sales |
|---|---|
| General Merchandise Stores | $5,148,061 |
| Clothing & Clothing Accessories Stores | $84,739 |
| Food & Beverage Stores | $27,575,589 |
| Building Materials & Garden Equipment and Supplies | $1,234,955 |
| Gasoline Stations | $4,576,190 |
| Food Services & Drinking Places | $13,296,790 |
| Other Retail Group | $11,153,571 |
| **Total** | **$61,834,939** |
| Source: FCS, 2016 | |

The following analysis defines the market area from which the majority of the project's sales are likely to be generated and the range of existing and planned retailers that are anticipated to compete with the project's new retail space.

*Market Area Support of Project Sales*

For the purpose of this study, ALH Economics developed an estimate of the percentage of project sales from market area resident spending. This estimate is based on considering the geographic size of the market area, the project size and tenant orientation, population density of the area, amount of existing retail in the market area, and project proximity to major thoroughfares, including State Route 99. Pursuant to all these considerations, ALH Economics estimates that 80 percent of the project's demand would be generated from market area shoppers.

Pursuant to this 80 percent market area sales assumption, the estimated portion of project sales generated by market area residents is $49.5 million; this leaves the estimated portion of sales generated from other sources at $12.4 million (see Exhibit 8 in **Appendix J**). These $49.5 million in market area generated sales are summarized in Table 3.12-5, which identifies that the largest percentage of the total comprises $22.1 million in Food & Beverage Store Sales, at 45 percent. The next highest amount of the total is $10.6 million in Food & Drinking Sales (22 percent), followed closely by another $8.9 million in Other Retail sales (18 percent).

**Table 3.12-5: Project Sales Generated by Market Area Residents**

| Retail Category | Market Area Generated | |
|---|---|---|
| | Amount | Percent |
| General Merchandise Stores | $4,188,448 | 8% |
| Clothing & Clothing Accessories Stores | $67,791 | 0% |
| Food & Beverage Stores | $22,060,471 | 45% |
| Building Materials & Garden Equipment and Supplies | $987,964 | 2% |
| Gasoline Stations | $3,660,952 | 7% |
| Food Services & Drinking Places | $10,637,432 | 21% |
| Other Retail Group | $8,922,857 | 18% |
| **Total** | **$49,467,951** | **100%** |
| Source: ALH Economics, 2016. | | |

As noted in Table 3.12-5, market area support is also estimated to account for $4.1 million in General Merchandise sales, $3.7 million in Gasoline Station sales, and less than $100,000 in Clothing sales at the project. The remaining 20 percent of project sales are anticipated to originate from other sources, such as area hotel guests, people who work in Chico but live beyond the market area, and other shoppers traveling through the area.

*Project Sales Impacts*

**Retail Sales Base Characterization**

*Approach*

For the purpose of this study, ALH Economics characterized the retail sales bases of Chico and Paradise with regard to the extent to which they attract or leak retail demand generated by their population base. Toward this end, ALH Economics uses a retail model that estimates retail spending potential for an area based upon household counts, income, and consumer spending patterns. The model then computes the extent to which the area is or is not capturing this spending potential, based upon taxable sales data published by the BOE or provided by local government municipal tax consultants. This analysis can be most readily conducted for cities, groupings of cities, or counties, consistent with the geographies reported by the BOE.

For any study area, retail categories in which spending by locals is not fully captured are called "leakage" categories, while retail categories in which more sales are captured than are generated by residents are called "attraction" categories. This type of study is generically called a retail demand, sales attraction, and spending leakage analysis, or retail gap analysis. Generally, attraction categories signal particular strengths of a retail market while leakage categories signal particular weaknesses. ALH Economics' model, as well as variations developed by other urban economic and real estate consultants and economic analysts, compares projected spending to actual sales.

For the purpose of generating a Retail Demand, Sales Attraction, and Spending Leakage Analysis for the relevant cities, and the market area as a whole, ALH Economics obtained taxable retail sales data for 3rd quarter 2013 through 2nd quarter 2014 as reported by the BOE and adjusted the taxable sales to reflect total, more current sales. These were the most recent BOE data available at the time the study was conducted. Using the retail sales data, combined with household counts from the demographic estimates benchmarked to Butte County Association of Governments forecasts and household income figures estimated by Nielsen Reports, ALH Economics conducted Retail Demand, Sales Attraction, and Spending Leakage Analyses. These analyses compared total estimated household spending with actual retail sales in both Chico and Paradise. To the extent possible, sales estimates were updated to reflect a more current time period than measured by the BOE data. This included analyzing sales tax trend data in Chico from 2nd quarter 2014 through 2nd quarter 2015, to generate sales adjustment factors by category to result in an estimated 2015 retail sales base. These data were provided by the City of Chico via the City's tax consultant. Comparable data were not available for the Town of Paradise; therefore, sales adjustments for Paradise were based upon the CPI index, with the exception of gasoline sales, which was adjusted as the same rate as Chico because the volatility of gasoline sales is not tied to the CPI index. Retail sales for both cities were also adjusted upward to adjust for nontaxable sales in key sales categories, including Food & Beverage stores and the drug store component of other retail sales. All these adjustments are noted as relevant in the analysis.

**Household Spending Estimates**

ALH Economics' Retail Demand, Sales Attraction, and Spending Leakage Analysis requires household count, average household income, and percent of income spent on retail inputs for the area of analysis. As noted in Table 3.12-1, the household income profiles vary substantially between Chico

and Paradise, with average incomes much higher in Paradise. Accordingly, the percent of income spent on retail is assumed to be greater in Chico, as these households have less disposable income, and thus a higher percentage of spending on retail. These assumptions are generally consistent with the aforementioned findings pertaining to the U.S. Consumer Expenditures Survey. As referenced earlier, households in the income group with annual household incomes between $50,000 and $70,000 throughout the United States spent an average of 36 percent of household income on the type of retail goods tracked by the BOE. The survey findings further indicated that U.S. households with incomes greater than $70,000 spent an average of 25 percent of income on retail (see Exhibit B-5 in **Appendix J**). Thus, as incomes increase, the percent of spending on retail purchases decreases. Based on these findings, with interpolation based upon the summary presented in Exhibit B-5 in **Appendix J**, and the respective average household incomes of $60,892 in Chico and $97,570 in Paradise, ALH Economics assumed that the Chico households would spend 35 percent of income on retail while the Paradise households would spend 30 percent of income on retail. As presented in Table 3.12-6, these assumptions result in per household spending estimates of $21,743 for Chico households and $29,271 for Paradise households.

## Table 3.12-6: Market Area Average Household Income

| City | 2015 Income | Percent Spent on Retail | Average HH Spending |
|---|---|---|---|
| Chico | $60,892 | 36% | $21,743 |
| Paradise | $97,570 | 30% | $29,271 |
| Source: ALH Economics, 2016. | | | |

**Retail Demand, Sales Attraction, and Spending Leakage Findings**

**City of Chico.** The estimate of Chico's retail sales base pursuant to the most recently available BOE data is presented in Exhibit 14 in **Appendix J**. This figure, reflective of annual retail sales ending the 2nd quarter of 2014, is approximately $1.7 billion. With interim adjustments to mid-2015 based on changes in citywide retail sales trends, the sales base was estimated to increase modestly, but still rounds to a total of $1.7 billion by the end of 2nd quarter 2015 (see Exhibit 15 in **Appendix J**). This indicates average sales on a per household basis of $45,323. This figure reflects sales captured per household, not demand per household. Pursuant to the estimated distribution of household demand based upon the pattern noted earlier in Exhibit B-4 in **Appendix J**, and cited in Table 3.12-6, estimated retail spending per household in Chico is $21,743 (see Exhibit 16 in **Appendix J**). This demand figure is substantially lower than the sales per household figure, indicating in the aggregate that Chico captures more sales than is spent by its own households. In other words, Chico as a whole attracts retail sales. This result is not surprising, as Chico has a large retail base with limited retail in most neighboring locations.

Overall, the Retail Demand, Sales Attraction, and Spending Leakage estimates in Exhibit 16 in **Appendix J** suggest that just over 50 percent of the sales achieved in Chico are attracted from elsewhere. As Exhibit 16 in **Appendix J** further indicates, this retail sales attraction extends across every retail category, including Food & Beverage Stores, Gasoline Stations, and other categories reflective of the project's anticipated sales. Based on these findings, there does not appear to be

opportunity for retail new to the City of Chico to stem leakage and recapture sales lost to local retailers, unless the market area as a whole experiences leakage, which subsequent analysis suggests is not the case (see later discussion on Market Area sales base). Therefore, instead of comprising recaptured sales leakage, sales achieved by new Chico retailers will comprise sales generated by new household growth, sales diverted away from existing retailers, sales that serve to strengthen the City's existing sales attraction, or some combination thereof.

**Town of Paradise.** The findings for the Town of Paradise display a very different trend than Chico. The estimated 3rd quarter 2013 through 2nd quarter 2014 sales base in Paradise totaled $187.7 million (see Exhibit 17 in **Appendix J**). Adjusted to 2015 based upon changes in the CPI index, coupled with the more volatile estimate of changes in gasoline sales, results in a slightly lower 2015 sales estimate of $181.8 million (see Exhibit 18 in **Appendix J**; the decline is due to the lower cost of gasoline). Per household sales generally equaled $15,164, compared with the per household demand estimate of $29,271. Thus, in contrast to the City of Chico, Paradise is estimated to experience sales leakage in all major retail categories. This is attributable to the relatively thin retail base in the Town of Paradise. As noted in Exhibit 19 in **Appendix J**, the degree of retail sales leakage varies by category, but overall approaches close to 50 percent of household spending potential. Leakage is greatest in the Clothing & Clothing Accessories category, at 96.3 percent, and lowest in the Food & Beverage stores category, at 9.0 percent. Only the sales leakage in food and beverage stores is a single digit figure, with all other levels of leakage in the double-digit range. This finding indicates that in contrast to the City of Chico, and the market area as a whole, the Town of Paradise has the opportunity to recapture sales leakage, in the event new retail locates in Paradise.

The leakage in Paradise can be expressed in terms of the amount of supportable square feet of retail space, demonstrating the extent to which Paradise households are likely supporting retail in other locations, most notably the City of Chico (see Exhibit 20 in **Appendix J**). This is accomplished based on industry average assumptions regarding store sales performance and an allocation of additional space for services, such as banks, personal services, and business services. ALH Economics refers to an industry resource to develop per square foot sales estimates. As referenced earlier, this resource, Retail Maxim, prepares an annual publication that culls reports for numerous retailers and publishes their annual retail sales on a per square foot basis. This type of information for a range of retailers or type of retailers is presented in Exhibit B-1 in **Appendix J** annually from 2010 through 2013. The figures are then averaged and presented in 2015 dollars as a generalized estimate of sales per square foot per year applicable to the retail categories for which Paradise exhibits leakage. The resulting sales per square foot range from a low of $297 per square foot for General Merchandise Stores to a high of $595 per square foot for Food & Beverage Stores (e.g., grocery stores). Finally, the analysis assumes 15 percent of retail space will be occupied by uses whose sales are not reflected in the major BOE categories, yet which require commercial space. This typically includes service retail, such as finance, personal, and business services.

The result of the supportable space analysis indicates that the estimated Paradise leakage of $169.1 million is equivalent to support approximately 470,000 square feet of additional retail square footage. After subtracting space for motor vehicles and part sales, the amount of space supportable by the estimated Paradise leakage totals about 420,000 square feet of retail space. This provides

insight into the retail dynamics in the market area, and demonstrates an opportunity for new retail outlets in the market area to recapture sales leakage and increase the local retail base.

*Project Sales Impacts*

This section estimates the extent to which the project's sales may have a negative sales impact on the existing retail sales base. For study purposes, ALH Economics developed an estimate of the size of the market area retail sales base, including the preceding findings for the City of Chico and Town of Paradise, and estimates for the balance of the market area. This provides a more meaningful basis for analysis than examining the sales base in just the City of Chico alone, where the project is located.

**Approach**

ALH Economics has developed an analytic approach that estimates the impact of the project's incremental sales on existing retailers. For this analysis, the approach assumes that if the project is adding sales to a category in an amount greater than any potential recaptured leakage in the category, then at worst, the amount of sales in that category in excess of any recaptured leakage would be diverted away from existing area retailers. In cases when this applies, this can be a conservative assumption, given that diverted sales beyond the amount of recaptured leakage could also occur among other retailers beyond the market area or relevant city boundaries. In cases where new household growth occurs, demand captured from these new households can offset impacts by increasing total sales captured by retailers throughout the area under study.

**Market Area Retail Sales Base**

To best assess the project's sales impacts it is optimal to have an understanding of the size of the existing retail sales base. Because the market area includes unincorporated County areas beyond Chico and Paradise it was necessary to develop an estimation procedure for the amount of sales occurring in these unincorporated areas. The study approach to estimating these sales is documented in Exhibit 21 and Exhibit 22 and associated support exhibits in **Appendix J**. The approach combines analysis using BOE data and sales estimates for relevant areas generated by Nielsen Reports, which are then benchmarked to BOE data for the relevant geographies. In cases where key sales data points are missing, ALH Economics engaged in a procedure documented in Exhibits B-6 to B-18 in **Appendix J** to estimate the missing data points.

Overall, for the Butte County portion of the market area, the approach is benchmarked to BOE data for Butte County, and backs out sales data for all incorporated areas to result in an estimate of sales for the unincorporated county areas. A share of the unincorporated area sales is estimated to comprise market area sales based upon the share of the unincorporated area households located in the market area. This share is 51.9 percent, as noted in Exhibit 21 in **Appendix J**, which was derived from the demographic estimates presented in Exhibit 8 in **Appendix J**.

Based upon these steps, ALH Economics estimates that in the 2013–2014 timeframe, the unincorporated area market area sales totaled $180.7 million. As with other sales, ALH Economics adjusted these sales to 2015 dollars pursuant to the CPI index and a separate adjustment factor for gasoline sales, resulting in an estimated market area 2015 retail sales base of $2.1 billion.

**Retail Leakage Considerations**

Combining the earlier estimated market area retail demand estimates (see Exhibit 10 in **Appendix J**) with the market area sales base (see Exhibit 22 in **Appendix J**) results in the ability to estimate the extent to which the market area as a whole experiences retail sales attraction or leakage, beyond just the constituent cities. The result, presented in Exhibit 23 in **Appendix J**, demonstrates that similar to the City of Chico, the market area as a whole is a retail sales attraction area. As with the City of Chico, market area retail attraction is present in all major retail sales categories.

Because there is no retail leakage in either Chico or the market area as a whole, ALH Economics assumes there is no potential for project support to be gained by recapturing existing leakage. The leakage noted in Paradise likely contributes to the attraction in Chico and the market area. Thus, no net gain in area sales from the existing population base are anticipated. This could be different if the project were to include retailers unique to the market, such that consumers would choose to increase their spending vector, but given that the Walmart store already exists and that discount food shopping opportunities already exist, and that no unique additional retailers have yet been identified for the Project, this is an unlikely occurrence.

**Future Growth Considerations**

As noted earlier, the market area is estimated to grow by 2,488 households between 2015 and 2018, the year the project is estimated to be fully operational. These new households will generate additional demand for retail sales, as documented in Exhibit 11 in **Appendix J**. These new sales are estimated to total $54.9 million, and includes sales in all the categories of estimated project sales.

*Estimated Project Sales Base Impacts*

**Approach**

ALH Economics analyzed the project impacts on the existing sales base based upon the amount of estimated net new project sales to the sales base. This means that the sales captured by the existing Walmart store are already considered in the retail base. As estimated in Exhibit 8 in **Appendix J**, the portion of net new sales anticipated to be contributed by market area consumers totals $49.5 million.

These sales were examined as impacts on the existing sales base, taking into account additional demand that would result from new household growth. This does not mean that the new households are anticipated to spend all their retail dollars at the project, but that as new retail dollars are spent in the market it provides support for all retailers, which may or may not include the project's retailers. Thus, if the project diverts retail dollars spent at existing retailers, new demand generated by household growth can potentially offset these sales diversions. Moreover, new demand for sales categories not represented by the project can additionally provide support for yet other retailers, and hence support retail occupancy by additional new retailers.

**Sales Base Impacts**

The analysis assessing the project's impacts on the market area's estimated existing retail sales base is summarized in Table 3.12-7. Taking into consideration prospective demand generated by households new to the market area prior to the full operation of the project (2018), the overall sales impacts will result in an estimated sales decline of $18.3 million for existing retailers, or 0.9 percent

of existing market area sales. Overall, this is a nominal level of impact, which comprises approximately 25 percent of all project sales. Thus, overall, 75 percent of the project's $61.8 million in estimated sales will comprise net new sales to the City of Chico's retail base.

**Table 3.12-7: Project Sales Impacts on Existing Sales Base**

| Retail Category | Total Net New Sales | Sales Impact Less New Demand | Remaining Demand | Percent Impact on Sales Base | Amount Impact > 3% |
|---|---|---|---|---|---|
| Motor Vehicle & Parts Dealer | $0 | $0 | $7,575,837 | 0.0% | $0 |
| Home Furnishings & Appliances | $0 | $0 | $2,831,589 | 0.0% | $0 |
| Building Materials & Garden Equipment | $0 | $0 | $3,307,296 | 0.0% | $0 |
| Food & Beverage Stores | $22,060,471 | $12,667,084 | $0 | 3.1% | $492,439 |
| Gasoline Stations | $3,660,952 | $0 | $2,675,114 | 0.0% | $0 |
| Clothing & Clothing Accessories | $67,791 | $0 | $3,823,181 | 0.0% | $0 |
| General Merchandise Stores | $4,118,448 | $0 | $3,522,950 | 0.0% | $0 |
| Food Services & Drinking Places | $10,637,432 | $3,642,162 | $0 | 1.6% | $0 |
| Other Retail Group | $8,922,857 | $2,034,919 | $0 | 0.8% | $0 |
| **Total** | **$49,467,951** | **$18,344,165** | **$23,735,966** | **0.9%** | **$492,439** |
| Source: ALH Economics, 2016. | | | | | |

For some project sales categories, new market area demand will exceed the portion of project sales estimated to be generated by market area households, thus no impact will result, and demand available for other retailers will result. These categories include the project's anticipated sales categories of Gasoline Stations, General Merchandise Stores, and Clothing & Clothing Accessories Stores. There are yet other sales categories that will experience no sales impacts, as these are categories not represented by project sales. These categories include Motor Vehicles & Parts Dealers, Home Furnishings & Appliances, and Building Materials & Garden Equipment.

However, there are three categories where future demand is less than project sales, with the potential for sales impacts to result. These categories include Food & Beverage Stores, Food Services & Drinking Places, and the Other Retail Group. For these three categories, the project is estimated to have a 0.8 percent to 3.1 percent impact on the existing sales base categories. These percentage impact levels are relatively low, especially given the dynamic nature of the retail industry, which results in periodic fluctuations in sales performance. Historic fluctuations in retail sales nationally suggest that a ±3 percent variation in sales is not uncommon. In the typical ebb and flow of retailing, stores commonly experience sales increases and declines, and stores respond by implementing new merchandising, product repositioning, service changes, and other new strategies. Examples of this

kind of annual fluctuations are presented in Exhibit B-1 in **Appendix J**, which includes historical sales per square foot figures for a sample of retail categories. This data trend shows categories where sales have been noted to fluctuate on an annual basis, including some fluctuations greater than 3 percent. Therefore, it is most relevant to focus on examining percentage impacts above the 3 percent threshold. This then lays the foundation for estimating the remaining impacts on the commercial retail base in the market area after consideration of all offsetting factors.

As noted in Table 3.12-7, the Food & Beverage Stores category is the only category of sales impact that exceeds the 3 percent threshold attributable to normal annual market fluctuations. With a 3.1 percent sales impact, the sales in this category only slightly exceed the threshold representing a dollar amount less than $500,000. Given the size of the market area's retail base, especially in Food & Beverage Store sales, this is a very negligible level of sales impact.

*Conclusion Regarding Project Impacts on Store Closures*

As stated above, with growth taken into consideration and each retail sector's ability to absorb up to a 3 percent decline in sales, the project's residual sales impacts would total less than $500,000. This is a nominal level of impact, and is not believed to be sufficient to cause existing stores to close. This is especially the case since these sales impacts are anticipated to occur in the Food & Beverage stores category, in which most stores competitive with Walmart are larger stores such that this level of sales, even in addition to the 3 percent, if dispersed widely enough would not likely comprise a tipping point leading to store failure and closure. Therefore, the project would not cause the type of severe economic effects on existing market area retailers that would result in store closures that could and potentially lead to conditions recognized as "urban decay" under CEQA, and impacts would be less than significant.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

## Cumulative Urban Decay Impacts

**Impact UD-2: The project would not contribute to cumulative urban decay impacts.**

### *Impact Analysis*

This impact assesses the potential for the project to contribute to cumulative urban decay impacts.

*Competitive Grocery Stores*

**Identification of Competitive Grocery and Food Stores**

There are a number of grocery and food stores distributed throughout the market area, including regional and national chain stores such as Safeway, and general merchandise stores with a strong

grocery component, such as Costco and Target. There are also numerous independent stores, mostly of a natural foods or ethnic orientation. In addition, there are smaller markets selling food items useful for the preparation of limited meal preparation. All of the identified stores are mapped on Exhibit 3.12-2 and Exhibit 3.12-3. For the purpose of this analysis, ALH Economics identified and visited over 30 market area grocery and food stores or stores selling some food items. Some of these stores were not singled out in the analysis and thus are not included in the maps because they were not deemed competitive with the food sales component of a Walmart store, largely because they are more convenience than food oriented, and do not sell products highly competitive with food stores.

**Conventional Grocery and Food Stores.** Conventional stores are full-service grocery stores that offer most or all of the following: a fresh bakery, fresh meat and seafood, frozen foods including frozen meat, fresh produce, a deli counter, and prepared foods. Other specialties sometimes include organic foods, a flower selection, a pharmacy, or a photo center. The market area has these types of stores located in both Chico and Paradise, but only one in any of the market area's unincorporated areas. In Chico, there are four such stores, representing the Raley's, Safeway, and Save Mart chains (see below for discussion of more upscale stores). All four of these stores in Chico are located in shopping centers, which span the older, somewhat worn Towne & Country Center anchored by Save Mart (with a moderate number of small shop vacancies), to Skypark Plaza anchored by Raley's, which includes sub-regional tenants such as Ross Dress for Less, Tuesday Morning, and Jo-Ann Fabrics. With the exception of Towne & Country Center, which had five shop vacancies at the time the fieldwork was conducted, none of the grocery-anchored shopping centers have more than one or two small shop vacancies.

The Town of Paradise and the nearby Magalia census-designated place have another four traditional grocery stores, each representing a different grocery retailer, including Safeway, Save-Mor Foods, Save Mart, and Holiday Market. These stores serve various market segments, with Save-Mor in Magalia comprising the most conventional store in a stand-alone location and Holiday Market comprising the most well-appointed store, including a healthy lifestyle orientation and a gluten-free section. These stores range from comprising stand-alone stores to anchoring small to medium-sized shopping centers. Vacancy is highest in the older Old Town Plaza shopping center where Safeway is located, where four shop vacancies were noted.

**Upscale Grocery and Food Stores.** Upscale stores focus on providing extensive or exclusive product selection, often in a stylized setting. There is usually an emphasis on fresh foods, gourmet products, and organic foods at upscale stores. These stores have wider aisles and nicer decors, such as wood flooring in the produce section. It can sometimes be difficult to distinguish upscale stores from the more traditional stores, but ALH Economics believes that two market area stores exhibit more of an upscale orientation. These include two Lifestyle-oriented Safeway stores in Chico, one at Park Plaza shopping center and the other at the East Avenue Marketplace. These shopping centers have three and two small shop vacancies, respectively, but the centers are in relatively good condition. There are no upscale stores in the Paradise area, although the Holiday Market identified as a conventional store shares some characteristics with an upscale store, such as attractive wood flooring in the store.

**Specialty and Niche Market Stores.** Specialty and niche market stores are usually smaller stores that are distinguished from other stores by offering a certain type of grocery selection that is different

from conventional stores. This may be the store's own, local, or imported brands of items, or oftentimes organic or natural foods products. In the project's market area, there are three examples of these stores. These include the Trader Joe's and two natural foods-oriented stores, Chico Natural Foods Cooperative and S&S Produce. There are no such stores in the Paradise portion of the market area. Only the Trader Joe's is located in a shopping center, with the other two stores comprising stand-alone stores along a commercial corridor. Similar to most of the other Chico grocery-anchored shopping centers, North Valley Plaza, where Trader Joe's is located, features one to two in-line shop vacancies, with the center as a whole in moderate condition.

**Discount Grocery and Food Stores.** Discount stores are characterized by lower-than-average price points. Sometimes these are manifested by bulk sales, which allow the customer to get more for their dollar relative to most other grocery stores. The market area has five discount food stores in Chico and one in Paradise. The Chico stores include WinCo Foods, FoodMaxx, Grocery Outlet, and, while not specifically a grocery store, Cash & Carry, which is a restaurant supply wholesaler with numerous bulk-oriented food products for sale at very favorable prices. In addition, Costco is also a discount food retailer, although Costco as a whole is considered a general merchandise store. There is another Grocery Outlet store located in Paradise that is also a discount grocery retailer. The WinCo store in Chico is a stand-alone store, but is located very near a major node of retail in Chico, including Chico Mall, a regional shopping center. The Grocery Outlet store is co-located with K-Mart, but is next to the Almond Orchard Shopping Center, which has a number of small shop vacancies. The Food Maxx and Cash & Carry stores are both located in shopping centers, including Chico Crossroads and Mangrove Plaza, respectively. The Chico Crossroads center has three small shop vacancies while Mangrove Plaza has none.

The Grocery Outlet store in Paradise is located in the same shopping center as the Paradise Safeway, the Old Town Plaza. As noted earlier, this center has numerous vacancies, but is in moderate condition.

**Ethnic Markets.** Ethnic food stores are stores that are distinguished from other stores by offering food products unique to a specific international culture or cuisine. These stores are often but not always smaller than conventional food stores. The market area does not feature many of these stores, two of which are highlighted in the City of Chico. These include a market selling Asian food products and a Hispanic-oriented market. Both stores are small and located in small strip shopping centers.

**Small Local Markets.** In communities too small to support grocery stores, small local markets often supply key food products to support select food supply needs. These markets typically feature some combination of fresh produce, fresh or frozen meats, eggs, dairy, and numerous beverages. The products are sufficient to prepare limited meals, but do not provide the breadth or depth of products available at larger stores. There are many such markets in the market area, but the ones of most significance are located in the small unincorporated communities at the fringes of the market area, or at the edges of the incorporated areas. As depicted on Exhibit 26 in **Appendix J**, these stores are located in Paradise; Magalia, which is north of Paradise; Forest Ranch, which is northeast of Chico; Durham, which is south of Chico; and Hamilton City, which is west of Chico. All of these stores sell

food items that can serve household needs in between major shopping trips to locations with more expansive grocery options, notably Chico or Paradise given their relative proximity.

**Grocery and Food Stores Most Susceptible to Impacts**

As cited in the previous discussion, the grocery sales impacts associated with the project are estimated to total $12.7 million. However, when the retail sector's ability to absorb up to a 3 percent decline in sales is taken into consideration, the residual grocery sales impacts attributable to the project drop to less than $500,000. In all likelihood the grocery sales impacts will be experienced to some level throughout the market area, with shoppers who might otherwise plan to shop at Walmart choosing to extend their shopping trip to include food sales. The market area already includes a number of discount food shopping opportunities, most of which are clustered in the area near the project (e.g., WinCo Foods, FoodMaxx, and Costco). ALH Economics believes it is unlikely that many of these existing discount food shoppers will significantly change their shopping habits because there is yet an additional discount food shopping option available. Instead, such stores are likely to experience sales impacts on a par with other market area stores and thus would not bear a disproportionate amount of the sales impact.

*Petroleum Sales Impacts*

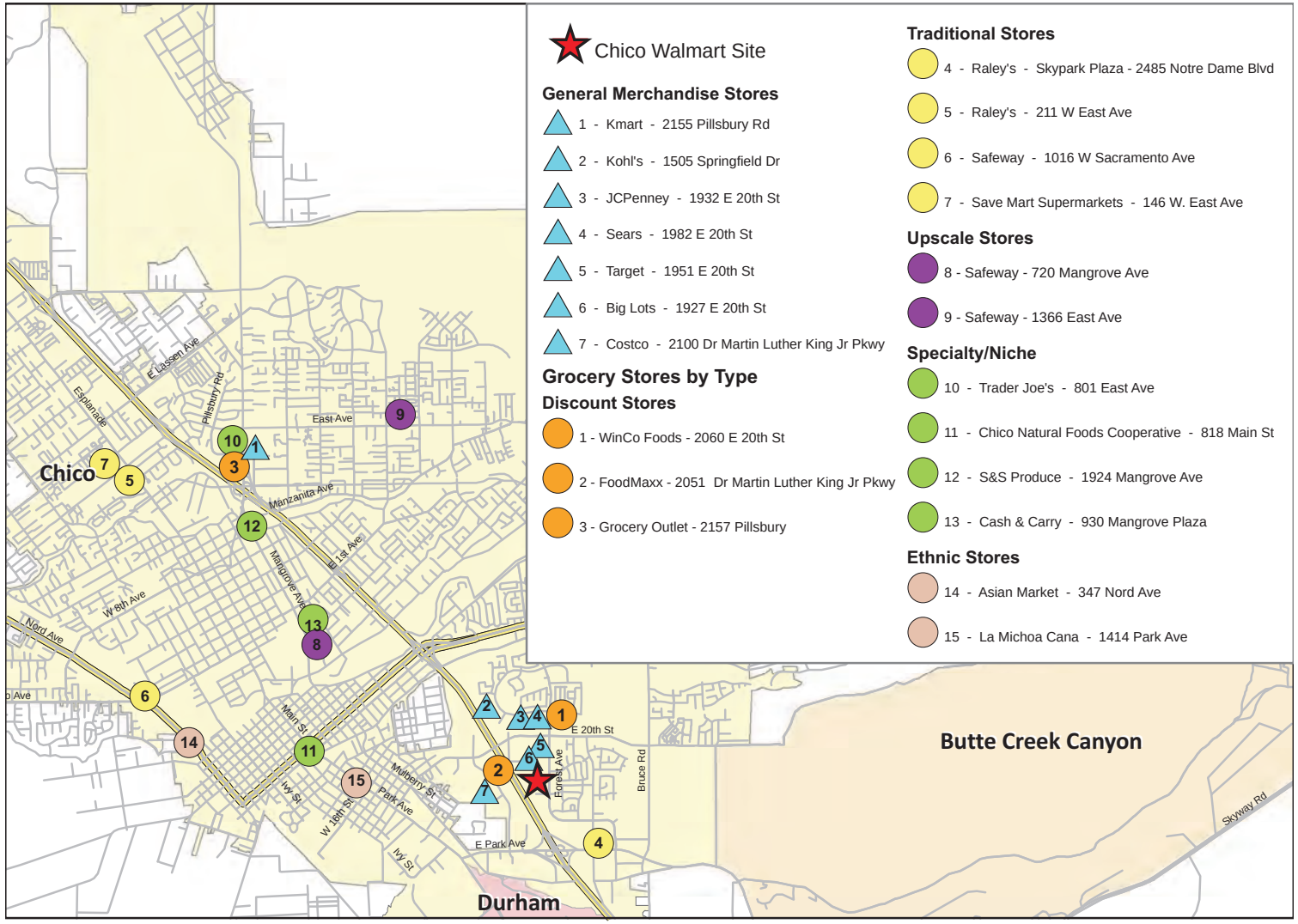
This section addresses the project's planned fuel station and presents analysis regarding the market area's prospective support for the facility. This use is singled out because it is a specific project component and will comprise new sales to the Walmart site. Existing market area gas stations south of State Route 32 are identified and the project's support is explored in the context of these facilities.

**Area Fuel Stations**

The project is planned to include a fuel station with eight pumps (16 fuel positions). In addition, this component of the project will include a small, 1,500-square-foot kiosk, assumed to comprise convenience food sales. The project's annual gasoline sales are estimated to total $4.6 million. The kiosk is estimated to comprise an additional $900,000 (rounded) in annual sales. These are anticipated to comprise primarily convenience-oriented sales, such as snacks and drinks.

ALH Economics identified existing gasoline stations in the general environs of the planned fuel station. These existing stations are located south of State Route 32. Fuel sales are generally convenience oriented, and are also price-driven. Therefore, it is most appropriate to focus on assessing the project's possible impact on economy-priced fuel stations in the vicinity of the proposed project.

The existing fuel stations and their proximity to the project site are mapped in Exhibit 3.12-4. The gas station map numbers generally are displayed from north to south. The map identifies 13 stations, with several located close to the project site. The stations are further identified in Exhibit 28 in **Appendix J**, which includes information on name, address, distance from the project site, number of pumps, price of gas per gallon, name of convenience store, and information on any features of the convenience stores, beyond the typical features of snacks, drinks, lottery tickets, auto supplies, and sundry products.

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Source: ALH Urban & Regional Economics, 2015

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# Exhibit 3.12-2
## Chico Grocery and General Merchandise Stores

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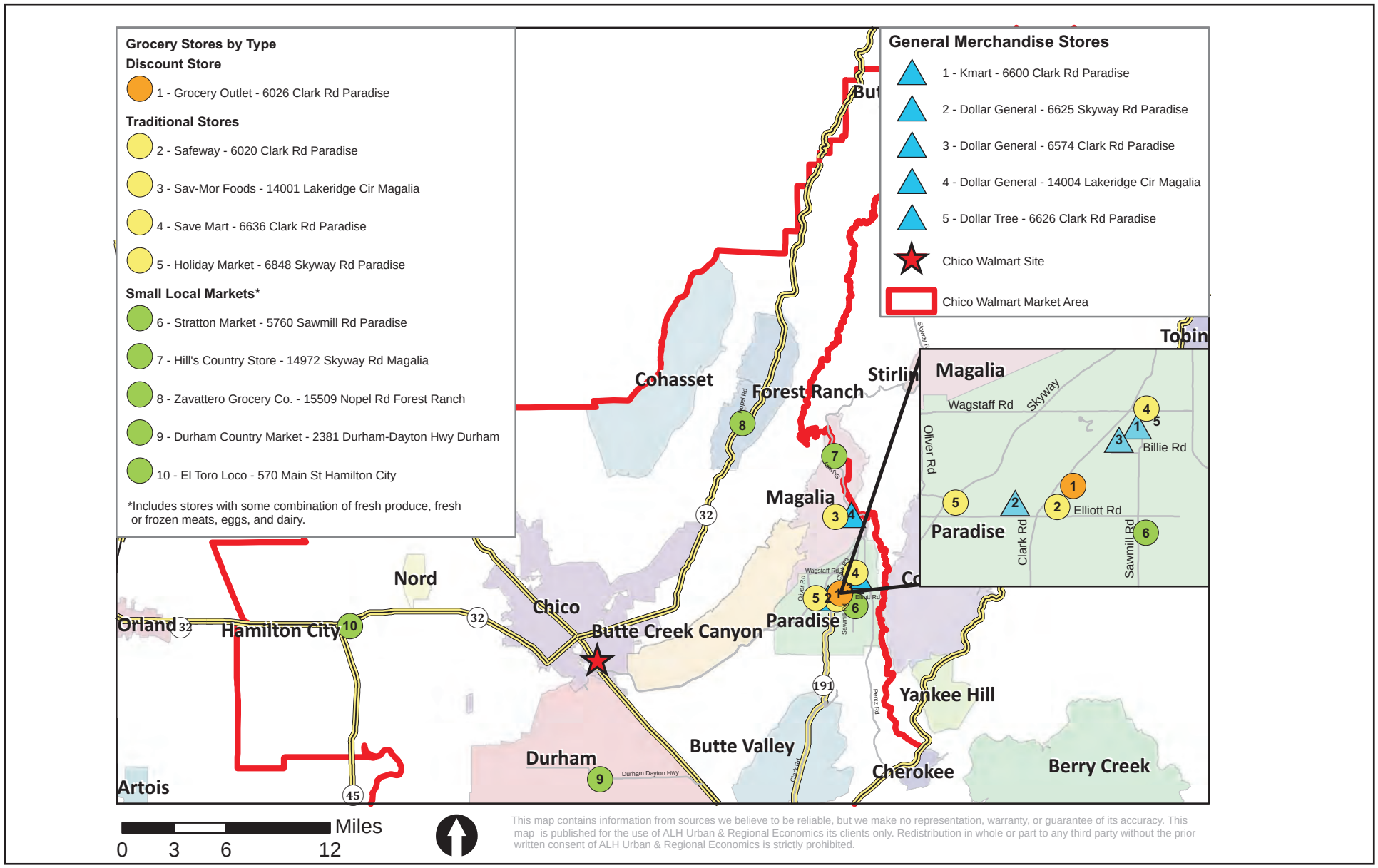


Source: ALH Urban & Regional Economics, 2015

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# Exhibit 3.12-3
## Other Market Area Grocery and General Merchandise Stores

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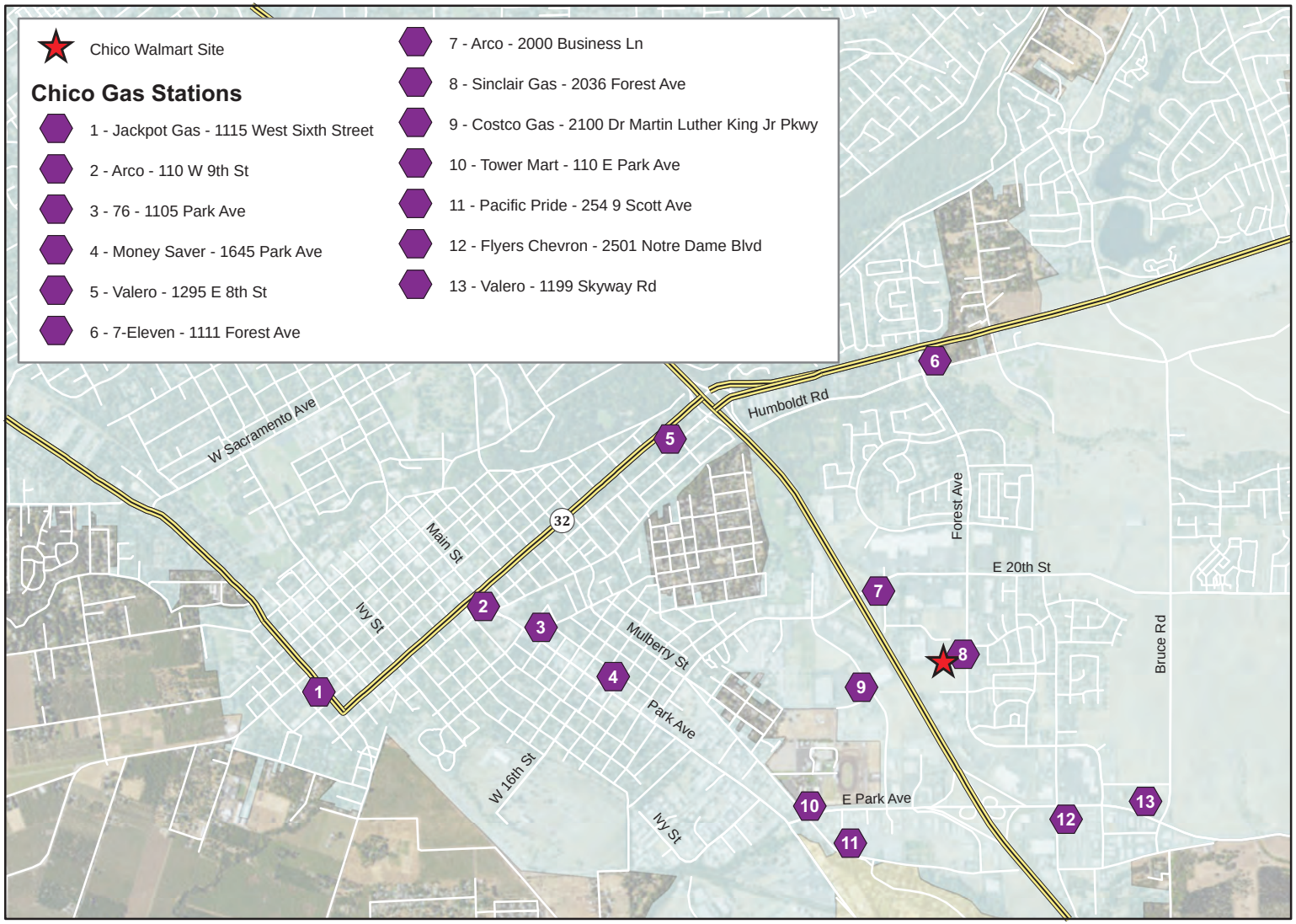


Miles
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Source: ALH Urban & Regional Economics, 2015

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Exhibit 3.12-4
Chico Walmart Expansion Site and Area Gas Stations, South of State Route 32

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The existing area gas stations have a total 60 pumps. This count excludes the pumps located at the Pacific Pride gas station located 2.2 miles from the project site (map number 11 on Exhibit 27 in **Appendix J**) because this station is oriented towards commercial trucks. Thus, this station is not anticipated to be competitive with the planned Walmart fuel station. Moreover, Pacific Pride is the only gas station in this area that is positioned to serve tractor trailers, and therefore effectively functions as a truck stop, albeit without typical truck stop amenities such as scales, overnight parking, and restaurant. Further, given this orientation, Pacific Pride would have little appeal to non-commercial customers due to its location, industrial appearance, and prevalence of trucks.

Gasoline prices in the project site's environs vary, with the prices posted on November 4, 2015 included in Exhibit 28 in **Appendix J**. This date corresponds to a date of fieldwork examining the gas stations and their associated convenience stores. As a point of reference, the credit prices for regular gas ranged from a low of $2.44 a gallon at the 7-Eleven store located 1.4 miles north of the project site to a high of $2.75 a gallon at the Flyers Chevron located 1.1 miles southeast of the project site. For cash purchases, gas was priced lowest at the Arco located 0.3 mile from the project site at $2.37 a gallon, which was only slightly exceeded by the price of $2.39 a gallon at the Costco gas station located approximately 1.0 mile from the project site. Thus, this area appears to have a strong selection of lower-priced gasoline stations.

Almost all of the identified gas stations are accompanied by a convenience store. This includes 11 of the 13 gas stations, with two of the stations lacking a store, including the more commercial-oriented Pacific Pride station. Most of these convenience operations are fairly typical, while a few included unique features such as deli sandwiches, car wash, or expanded alcohol and grocery options. These unique features likely serve as an additional draw for these stations, especially the car wash feature. The convenience store associated with the gas station closest to the project site, Sinclair Gas, includes some of these unique features, which will help differentiate this operation from the Walmart fuel station.

**Project Impact on Existing Fuel Stations**

With its proposed eight pumps, the project will expand the existing fuel sales inventory by 13 percent. The percentage increase throughout the market area will be much less, as there are many additional fuel stations located throughout the market area. As noted in Exhibit 15 in **Appendix J**, gasoline sales in 2015 are estimated to total $121.6 million and $187.0 million in the City of Chico and the market area, respectively. The project's anticipated $3.7 million in fuel sales generated by market area residents will comprise only a small addition to these gasoline sales bases. Moreover, the market area is anticipated to generate future demand for gasoline sales in excess of the project's estimated addition to supply, i.e., $6.3 million in new sales compared with the Walmart gasoline sales of $3.7 million.

The specific pricing of Walmart gas is not available; however, the information in Exhibit 27 in **Appendix J** indicates there are already a number of economy-priced gas stations in Chico, including in the area near the project site. Thus, the project's fuel station is not anticipated to have a specific advantage over other existing gas stations, and therefore is not anticipated to draw gasoline sales away from any specific gas station. Instead, it is likely that existing Walmart shoppers in need of gasoline at the time of their shopping trip will divert their gasoline purchase from any number of

other gasoline stations located throughout the market area, and thus will not impact any one gas station to an extent that would impact individual gas station viability. Moreover, as demonstrated in the analysis, new market area demand for gasoline sales will more than exceed the anticipated Walmart fuel station gasoline sales. Thus, any potential for sales diversions throughout the market area will be more than offset by additional new demand generated by the time the project achieves its first full year of operations.

As noted, ALH Economics anticipates that the Walmart fuel station sales will be generated from throughout the market area, and will not be drawn away from any specific gas station close to the project site. This conclusion extends equally to the sales achieved at the kiosk planned to be co-located with the fuel station. With a limited sales estimate of approximately $900,000, this kiosk will not result in a significant level of sales diverted from existing fuel station convenience retailers. Nor are these sales anticipated to compete with more substantial food stores or small markets, as the these purchases are typically associated with a gasoline purchase, and are unlikely to divert sales away from other types of stores.

*General Merchandise Impacts*

This retail use is singled out because Walmart is a general merchandise retailer. However, the increment in general merchandise sales generated by market area consumers is anticipated to be relatively low, at $4.2 million. Future growth in retail demand will more than offset this increment in sales. There are many general merchandise retailers in the market area. In Chico, this includes Kmart, Kohl's, JCPenney, Sears, Target, Big Lots, and Costco. Other parts of the market area as noted in Exhibit 26 have numerous Dollar General stores, another Kmart (BigK), and a Dollar Tree store. These stores are not anticipated to experience significant sales impacts associated with the project, in part because the sales are so low, because the stores are widely dispersed throughout the market area, and because future growth is anticipated to offset the estimated sales.

*Other Project Impacts*

As noted in Exhibit 24 in **Appendix J**, there will be projected sales impacts in the Food Services & Drinking Places retail group and the Other Retail group. These levels of sales total $3.6 million and $3.0 million, respectively. As noted, these sales impacts are well below the 3 percent threshold discussed regarding retail variability. Thus, these sales impacts are not anticipated to be material. This is especially the case since these impacts are not anticipated to be localized given the large size of the market area, such that no particular restaurant or set of restaurants or retailer are likely to experience impacts at a level that will materially impact viability and lead to closure.

*Identified Retail Development Projects*

Based on overall cumulative projects information, ALH Economics identified 10 potential cumulative retail development projects in the market area relevant to the urban decay analysis. Information about these projects was primarily derived from interviews with local government sources, reviews of planning department information, and supplemental project information. These 10 projects are described in Exhibit 29 in **Appendix J**, which includes their address, square footage, development status, anticipated completion date, and estimated extent to which their market area overlaps with the project's market area. This latter factor is an important consideration in assessing the degree to

which the cumulative projects are likely to be competitive with the project, and the extent to which they will draw upon the same pool of demand as the project.

Of the cumulative projects, seven are located in the City of Chico, two are located in the Town of Paradise, and one is located in Unincorporated Butte County. By area, these projects are summarized below, with more project detail included in Exhibit 29 in **Appendix J**.

**City of Chico**

The seven identified cumulative projects in the City of Chico include the following:

- New Earth Market, an upscale, 25,000-square-foot grocery store comprising redevelopment of a former retail site in Chico, located 4.1 miles northwest of the project site, under construction and anticipated to be completed in 2016;
- Galaxies Restaurant, an 18,200-square-foot sports bar, restaurant, and family entertainment center currently undergoing plan check, located 4.2 miles northwest of the project site, with potential completion in 2016;
- Ulta Beauty, a 10,000-square-foot beauty store which has been approved for development near the existing Costco store, located 1.1 miles southwest of the project site;
- Panera Bread/Noodles, a 7,600-square-foot restaurant under construction, comprising infill development 0.8 mile north of the project site;
- Ready Chef Go, a 6,500-square-foot restaurant under construction, comprising backfilling of a former vacant space (e.g., blockbuster video) approximately 3.0 miles northwest of the project site;
- Starbucks, a new 5,200-square-foot coffee store under construction, 4.2 miles northwest of the project site; and
- A potential Italian restaurant located in the same center as the under-construction New Earth Market, located 4.1 northwest miles from the project site. This project is anticipated, but no application has yet been received by the City of Chico.

All but one of these seven projects is anticipated to be completed by the end of 2016. The completion date for the last project, the potential Italian restaurant, has not yet been determined. Because specific definition for this project is not known, and there is no active application, this project is subsequently not included in the more detailed cumulative projects analysis.

All but one of the Chico cumulative projects is anticipated to have 100 percent overlap with the project's market area. This is because these projects are relatively small, and are unlikely to attract demand from beyond the project's relatively large market area. Instead, most of these projects are anticipated to mostly draw demand only from within the City of Chico, and thus all their sales are anticipated to be generated by market area residents. The exception to this assumption is the New Earth Market. There is an existing New Earth Market located in the City of Yuba City. ALH Economics visited this store to gain an understanding of the store's market orientation. This store is an upscale market with a strong focus on natural foods. The store in Yuba City also includes a pizza bar and a

specialty coffee drink bar. There is no similar store already located in Chico. Moreover, this store is located over 4.0 miles from the Walmart store, in the northern part of the City of Chico. Thus, ALH Economics anticipates that this store may draw some demand from a unique market area with only partial overlap with the project's market area. For analytical purposes, this percentage overlap is estimated as 75 percent, reflecting the potential for this store to draw consumers from further to the north than the project. Because of its more specialty nature, Walmart food shoppers are not likely to comprise New Earth Market food shoppers; thus, the stores will not be competitive with each other. However, in general, they are likely to draw partially from the same market area and overall pool of consumers.

**Town of Paradise**

The two identified cumulative projects in the Town of Paradise include the following:

- A Walmart-anchored shopping center near the entrance to the Town of Paradise 10 miles east of the project site, with up to 227,000 square feet of retail, including a 160,000-square-foot Walmart store. There is an application on file but there has been no progress on the application in at least two years, and major infrastructure improvements will be required prior to site development.
- A Safeway store located at Lower Skyway and Black Olive, about 11.4 miles east of the project. This project is very preliminary with only conceptual plans on file; thus, no definitive plans for development are available.

ALH Economics believes that neither of the two Paradise projects is sufficiently defined to be considered a new development project suitable for inclusion in the cumulative impact analysis. It would be speculative to include the Safeway store in the analysis since there is no existing definition of the project, which could alternatively include expansion of an existing Safeway store in Paradise.

However, in order to ensure a conservative analysis, ALH Economics assumes that the Paradise Walmart-anchored center could be developed at some point in time following the project's development. Given the timing involved in preparing an EIR and the understanding that there are no current plans to move forward with this project, ALH Economics considers it likely that this project would be developed well after the project's anticipated 2018 completion. Further, if developed, ALH Economics anticipates that this project would have only 22.5 percent overlap with the project's market area (see Exhibits 29 and B-19 in **Appendix J**). This limited overlap is due to the expectation that a Walmart-anchored project in Paradise would not draw consumers from Chico or areas to the north, south, or west of Chico, but more from Paradise and areas beyond Paradise that are not included in the project's market area.

**Butte County**

The one identified cumulative project in the market area's unincorporated portion of Butte County is listed below:

- A Dollar General store in Durham located at the southeast corner of Midway and the Durham-Dayton Highway, with construction anticipated to begin by the end of 2015 and completed in 2016.

This project is anticipated to have 80 percent market area overlap with the project. While this project is located in Durham, which is fully located within the project's market area, there are likely to be some shoppers attracted to the store from outside the market area to the south of Durham.

*Cumulative Project Sales Estimates and Sales Impacts*

**Sales Estimates**

Sales figures for cumulative projects anticipated to be developed within the project's general timeframe are estimated in Exhibit 30 in **Appendix J**. These total sales estimates per project reflect the share of each cumulative project's sales that are anticipated to be sourced from the same market area as the project. The estimates were developed with sensitivity to the size and nature of the prospective retail space, and range from $403 per square foot to $1,040 per square foot, as general sales estimations. These figures reflect estimates for specialty/organic grocery stores, restaurants, or specific retailers.

Pursuant to the market area overlap assumptions for the full amount of planned retail development among the cumulative projects, which totals 308,600 square feet, the estimated sales originating from the project's market area total $61.4 million. Excluding the Paradise Walmart project lowers the planned amount of development to 81,600 square feet, with $39.8 million in sales originating from the project's market area.

These estimated retail sales generated by market area households are distributed by retail category in Exhibit 31. These distributions were pursuant to the type of retail and information about sales distributions in filing documents for the two general merchandise retailers—Walmart and Dollar General. The results indicate that the largest portions of cumulative project market area sales will occur in three retail categories, including Food Services & Drinking Places, Food & Beverage Stores, and Other Retail. These findings are summarized in the following Table 3.12-8.

**Table 3.12-8: Cumulative Project Sales**

| Retail Category | Excluding Paradise Walmart Project | Including Paradise Walmart Project |
|---|---|---|
| Motor Vehicle & Parts Dealers | $0 | $0 |
| Home Furnishings & Appliances | $81,920 | $1,302,346 |
| Building Materials & Garden Equipment | $0 | $0 |
| Food & Beverage Stores | $13,247,212 | $23,010,618 |
| Gasoline Stations | $0 | $0 |
| Clothing & Clothing Accessories | $70,400 | $1,290,826 |
| General Merchandise Stores | $678,400 | $2,247,519 |

## Table 3.12-8 (cont.): Cumulative Project Sales

| Retail Category | Excluding Paradise Walmart Project | Including Paradise Walmart Project |
|---|---|---|
| Food Services & Drinking Places | $21,541,447 | $23,800,525 |
| Other Retail Group | $4,185,627 | $9,786,982 |
| **Total** | **$39,805,006** | **$61,438,815** |
| Source: ALH Economics, 2016. | | |

As noted in Table 3.12-8, lesser amounts of sales will occur in the General Merchandise, Home Furnishings and Appliance Stores, and Clothing and Clothing Accessories Categories, with no sales in the remaining categories.

The cumulative project sales are combined with the project market area-derived sales in Exhibit 32 in **Appendix J** to estimate the total amount of new sales that will need to be generated by market area households to support the planned projects. These sales figures total $89.3 million excluding the Paradise Walmart project, and $110.9 million including the Paradise Walmart project. Exhibit 32 in **Appendix J** also displays how these sales are distributed by retail sales category.

*Impact Analysis*

In an analysis parallel to the project impact analysis, the cumulative project impact analysis is documented in Exhibit 33 in **Appendix J** for the cumulative projects excluding the Paradise Walmart project. This exhibit takes into consideration the anticipated sales by retail category from the project and the cumulative projects, focusing on the sales anticipated to originate from the project's market area for each project. As with the project's sales impact analysis, the cumulative projects analysis includes consideration of interim demand that will be generated by the time the project experiences its estimated first full operational year in 2018. As noted, the analysis in Exhibit 33 in **Appendix J** does not include consideration of the Paradise Walmart project, as this project is not anticipated to be completed by 2018.

**Impacts Excluding Paradise Walmart Project**

The results in Exhibit 33 in **Appendix J** indicate maximum cumulative project impacts on market area retailers totaling $57.3 million. This compares with the project's impact analysis of $18.3 million. When the 3 percent sales buffer is taken into consideration, the resulting impact is $32.2 million. Table 3.12-9 highlights the comparative sales impact findings for the project alone, as well as the project in combination with the competitive portion of the cumulative retail projects.

**Table 3.12-9: Comparative Sales Impacts 2018**

| Retail Category | Project | Project and Cumulative Projects | |
|---|---|---|---|
| | | Total | >3% |
| Motor Vehicle & Parts Dealers | $0 | $0 | $0 |
| Home Furnishings & Appliances | $0 | $0 | $0 |
| Building Materials & Garden Equipment | $0 | $0 | $0 |
| Food & Beverage Stores | $12,667,084 | $25,914,296 | $13,739,651 |
| Gasoline Stations | $0 | $0 | $0 |
| Clothing & Clothing Accessories | $0 | $0 | $0 |
| General Merchandise Stores | $0 | $0 | $0 |
| Food Services & Drinking Places | $3,642,162 | $25,183,609 | $18,472,877 |
| Other Retail Group | $2,034,919 | $6,220,545 | $0 |
| **Total** | **$18,344,165** | **$57,318,451** | **$32,212,528** |

Note:
The sales figures shown in this table exclude the Paradise Walmart Project.
Source: ALH Economics, 2016.

The figures in Table 3.12-9 indicate that three categories will experience incremental sales impacts on top of the sales impacts from the project alone that are more than negligible, especially relative to the existing sales base. These include Food & Beverage Store impacts, Food Services & Drinking Places impacts, and Other Retail impacts.

- Food & Beverage Store Impacts. The Food & Beverage sales impacts are estimated at $25.9 million, which would be reduced to $13.8 million when the 3 percent sales buffer representative of the retail industry is taken into consideration. The incremental impacts are largely attributable to the estimated sales of the New Earth Market currently under construction. This store will be located in the northern portion of the City of Chico, near Trader Joe's. This is a store that will be unique to the market, and given its product orientation and instore offerings it will be most competitive with Chico's existing upscale food stores, select specialty stores, as well as more natural food stores. These include two Safeway stores, Trader Joe's, S&S Produce, and Chico Natural Foods Cooperative. However, consumers are anticipated to originate from a large area to shop at this store, even if only on an occasional basis; therefore, other stores may experience negative sales impacts as well. These stores are not anticipated to include any of Chico's discount food retailers, as the price point of New Earth Market is not comparable to discount pricing.

Chico's upscale food stores, specialty food stores, and natural foods stores all serve existing customer niches. Safeway is a strong, well-established retailer that is anticipated to be able to withstand sales declines attributable to the cumulative project impacts. The same is true of Trader Joe's, which is a very well-established specialty food store. In like manner, S&S Produce and Chico Natural Foods

likely have a very strong customer base, and are also anticipated to be able to withstand any sales declines associated with the introduction of the cumulative projects. Further, grocery stores located near CSU Chico are also likely to have less of a risk of sales erosion due to their dependence on student sales. Thus, if any stores are to experience negative sales impacts associated with the development of the New Earth Market, they are likely to be among the more traditional grocery stores in the general vicinity of New Earth Market.

Based upon location, two existing market area stores may be the most susceptible to these losses, and given the size of the impact, if concentrated enough could be sufficient to erode sales to the level of unsustainability, such that one existing grocery store might close. These stores include the Raley's on W. East Avenue or the Save Mart on W. East Avenue. This Raley's store is located next to an Orchard Supply Hardware store in the Chico East Plaza and has an antiquated interior, including produce coolers that appear aged. The store product mix has a bit of an upscale orientation, but is not sufficient for the store to be considered upscale, especially given the lack of an upscale appearance. Thus, this store appears to lack recent investment and could be at risk if it bears a disproportionate amount of sales impacts from the cumulative food sales impacts. However, this comprehensive store includes an on-site bakery, staffed bank, interior eating area, florist, pharmacy, prepared foods, expanded personal area, and greetings cards, magazines, and seasonal products.

Alternatively, the nearby Save Mart Supermarket is located in the slightly run down Towne & Country center, which with five shop vacancies has more than any other grocery-anchored shopping center in Chico. This center also appears to lack recent reinvestment, with an older façade and poorly weathered brick exterior. The Save Mart store, however, is a very comprehensive store, with numerous in-store options such as a staffed seafood counter, staffed butcher, deli counter, staffed bank, pharmacy, expanded personal area, greetings cards and magazines, and seasonal products. With its staffed seafood and butcher counters, the Save Mart store is a bit more comprehensive than the Raley's store.

Whether or not one of the above two stores close as a result of the cumulative food stores impacts, the study concludes that one market area store could be at risk of closure. This risk could be diminished if the cumulative project food sales are lower than projected, or if market area attraction is enhanced by the even stronger retail base resulting from the new project development. This store impact is likely to occur in Chico rather than Paradise because Paradise area households are less likely to patronize the New Earth Market than households located closer.

- Food Service & Drinking Places. The Food Services & Drinking Places category is anticipated to have $18.5 million in sales impacts after the 3 percent buffer is taken into account. This impact is attributable to several major new restaurants entering the Chico market. These include Galaxies, Panera, Ready Chef Go, and Starbucks. This is a fairly large volume of impact and suggests that there could be significant impacts on existing market area restaurants. This impact could be lessened if the project's assumed restaurant space is not fully leased by 2018, if the cumulative restaurants do not achieve the estimated level of sales, or if they achieve the estimated sales over time as the restaurants mature and stabilize. However, this volume of impact suggests that some existing market area restaurants could experience sales losses sufficient to prompt closure. Restaurants in general have a high failure rate, so it would not be

unusual for older restaurants to fail when newer restaurants with high customer demand enter the market.

- Remaining Impacts. After the 3 percent buffer is taken into account, there are no other sales impacts due to the cumulative projects that are likely to be material to existing retailers.

*Impacts Including Paradise Walmart Project*

The preceding analysis was conducted to coincide with the timeframe anticipated for the project's first full year of operations. This excluded the Paradise Walmart project because it is unlikely that the Paradise Walmart project could be completed by that timeframe. This is because while there is an active application for the Paradise Walmart store, no action has been taken in at least two years, and substantial infrastructure work would need to occur before the project could be completed, as well as annexation of the project into the City of Paradise and preparation of an Environmental Impact Report.

Accordingly, ALH Economics believes a later timeframe is appropriate for analysis of the Paradise Walmart project. Given the lengthy timeframe likely for the necessary actions prior to development, the analysis assumes at least a three year lapse after completion of the Chico Walmart Expansion project. This would bring the earliest timeframe for the Paradise Walmart Project to be completed in 2021. Accordingly, prospective market area demand was projected out to the year 2021 so that the parallel impact analysis could be based on the anticipated household base by that time. This analysis is shown in Exhibit 34 in **Appendix J**, which shows projected incremental market area demand for retail totaling $116.7 million.

Taking this projected growth into account and adding the share of Paradise Walmart sales results in the impact analysis presented in Exhibit 35 in **Appendix J** and summarized in Table 3.12-10. This summary shows cumulative project impacts of $48.7 million, which is reduced to $25.8 million with the 3 percent sales buffer taken into account.

**Table 3.12-10: Comparative Sales Impacts 2021**

| Retail Category | Project | Project and Cumulative Projects | |
|---|---|---|---|
| | | Total | >3% |
| Motor Vehicle & Parts Dealers | $0 | $0 | $0 |
| Home Furnishings & Appliances | $0 | $0 | $0 |
| Building Materials & Garden Equipment | $0 | $0 | $0 |
| Food & Beverage Stores | $12,667,084 | $25,089,908 | $12,915,262 |
| Gasoline Stations | $0 | $0 | $0 |
| Clothing & Clothing Accessories | $0 | $0 | $0 |
| General Merchandise Stores | $0 | $0 | $0 |
| Food Services & Drinking Places | $3,642,162 | $19,557,941 | $12,847,209 |
| Other Retail Group | $2,034,919 | $4,058,133 | $0 |

### Table 3.12-10 (cont.): Comparative Sales Impacts 2021

| Retail Category | Project | Project and Cumulative Projects | |
|---|---|---|---|
| | | Total | >3% |
| **Total** | **$18,344,165** | **$48,705,981** | **$25,762,471** |

Note:
The sales figures shown in this table include the Paradise Walmart Project.
Source: ALH Economics, 2016.

Because of interim expectations of market area growth, the impacts by the time the Paradise Walmart Project could be completed are less than the cumulative project impacts coincident with the timing of the project's first full year of operations in 2018. This comparison is shown in Table 3.12-11. With each successive year prior to completion of the Paradise Walmart Project the cumulative impacts will continue to decline, as additional growth occurs in the market area. Thus, because of the delay in construction, the addition of the Paradise Walmart Project is not anticipated to change the results of the cumulative impact analysis.

### Table 3.12-11: Comparative Sales Impacts Greater than 3 percent of Existing Sales Base

| Retail Category | Without the Paradise Walmart Project by 2018 | With the Paradise Walmart Project by 2021 |
|---|---|---|
| Motor Vehicle & Parts Dealers | $0 | $0 |
| Home Furnishings & Appliances | $0 | $0 |
| Building Materials & Garden Equipment | $0 | $0 |
| Food & Beverage Stores | $13,739,651 | $12,915,262 |
| Gasoline Stations | $0 | $0 |
| Clothing & Clothing Accessories | $0 | $0 |
| General Merchandise Stores | $0 | $0 |
| Food Services & Drinking Places | $18,472,877 | $12,847,209 |
| Other Retail Group | $0 | $0 |
| **Total** | **$32,212,528** | **$25,762,471** |

Source: ALH Economics, 2016.

This finding is strengthened by reconsideration of the earlier finding of retail sales leakage in Paradise. As noted earlier, Paradise leaks a considerable amount of household retail spending, equivalent to almost one-half of all demand generated by Paradise households. This level of leakage was estimated to be equivalent to support 470,000 square feet of retail space, based on the estimated 2015 household base. This supportable square feet estimate would only increase by 2021, which is the timeframe for the potential Walmart Paradise project development. Since the Walmart

Paradise project is assumed to total an estimated 227,000 square feet, this suggests that the project would be well supported by its own market area, which will extend beyond Paradise to surrounding unincorporated areas, including areas not part of the Chico Walmart Expansion project's market area. Therefore, inclusion of the potential Paradise Walmart project does not change the findings of the project's cumulative impact analysis.

**Cumulative Impacts Conclusion**

The cumulative impacts analysis concludes that at worst, one grocery store and some restaurants could close as a result of cumulative project development. The grocery store would likely be a conventional-oriented store in Chico. It is more difficult to forecast what or how many restaurants might close, as it will depend upon how successful the cumulative restaurants are and which restaurants experience erosion in their customer base due to changing dining patterns. Since all of the cumulative restaurants are located in Chico, it is likely that any restaurants that close will also be in Chico, as they will likely draw demand away from other Chico restaurants.

*Urban Decay Determination*

**Project and Cumulative Project Vacancy Impacts**

The preceding analysis indicates that the project alone is not anticipated to cause any existing retailers to close and vacate their commercial spaces. However, cumulative project impacts could contribute to the potential closure of one grocery store and one or more restaurant spaces in the City of Chico. More specifically, sales impacts in excess of typical fluctuations (3 percent) could generate the following retail vacancies:

- Food & Beverage Store sales impacts of $13.7 million could equate to 23,100 square feet of space when using a store sales estimate of $595 per square foot, which is a general standard for grocery stores (see Exhibit B-1 in **Appendix J**);
- Food Services & Drinking Places sales impacts of $18.5 million could equate to 37,000 square feet of space when using a restaurant sales estimate of $500 per square foot, which is a general figure for restaurants (see Exhibit B-1 in **Appendix J**).

Alternatively, if no offset is considered for market fluctuations, the effect on grocery store vacancy could equate to 43,500 square feet of space, which is more consistent with the size of a full-service grocery store. For the sake of a preparing a conservative analysis, it is assumed that about 60,100 to 80,500 square feet of retail space could experience closures in Chico as a result of the cumulative projects.

Given the size of the Chico retail base, it would take about 75,000 square feet of incremental vacancy to increase the vacancy rate by 1.0 percent. Thus, the prospective cumulative project vacancy impacts would raise the City of Chico's vacancy rate by about this amount. Despite the number of vacancies shown above, Chico's retail vacancy rate as presented in Exhibit 36 in **Appendix J** is 4.4 percent. A 1.0 percent increase in this vacancy rate would raise the vacancy rate to 5.4 percent, which continues to be well within the range of a robust, healthy commercial retail sector. Thus, this potential increase in retail vacancies would not be sufficient to cause urban decay or resulting impacts to the physical environment of Chico.

In addition to increasing the prevailing vacancy rate by a nominal amount, the market has demonstrated the ability to backfill retail vacancies, including larger vacancies such as might be caused by the closure of a grocery store. The numerous examples presented in Exhibit 38 in **Appendix J** demonstrate that the market is resilient, and that larger scale vacancies can be successfully backfilled. This provides support and evidence to suggest that continued backfilling can occur, without risk that the market would devolve into urban decay. In addition, as noted in Exhibit 33 in **Appendix J**, there will be yet additional new market area demand in other retail categories not served by the cumulative projects. This level of demand totals $21.9 million, which will generate support for additional retailers new to the market, which can help fill cumulative project-induced or other vacancies. This includes demand in many retail categories, including Motor Vehicles & Parts Dealers, Clothing & Clothing Accessories, General Merchandise, Home Furnishings & Appliances, and Building Materials & Garden Equipment.

**Urban Decay Conclusions**

In developing a conclusion regarding the potential for urban decay, ALH Economics relied on the definition presented earlier, which focused on determining whether or not physical deterioration would likely result from the opening of the project and other cumulative retail developments. ALH Economics' conclusion is based on consideration of current market conditions, findings regarding sales and vacancy impacts, and regulatory controls, as summarized below:

*Current Market Conditions*

The fieldwork and market research indicated that retail market conditions are moderate to very strong in the market area's core commercial areas, with low to moderate retail vacancy rates. Retail leasing activity is occurring, especially in Chico, which comprises the more robust portion of the market area, and existing vacant properties are well-maintained.

*Sales and Vacancy Impacts*

ALH Economics anticipates that the proposed project combined with cumulative projects sales impacts could result in closure of existing retailers. The analysis suggests that one grocery store and some restaurants could experience a significant enough decline in sales to trigger closure. The result could be the equivalent of up to 80,000 square feet of vacant space, anticipated to occur in the City of Chico. Even if this amount of vacancy results, however, the resulting increase in Chico's retail vacancy rate will be nominal, and would remain well within the range indicative of a healthy retail market. Moreover, the market's demonstrated retail absorption, including backfilling of larger retail spaces, coupled with the strong to moderately strong market conditions, suggest that vacancies occurring as a result of the cumulative project impacts would likely be backfilled within a reasonable time and not be characterized by prolonged vacancy.

Even if some sites experience prolonged vacancy, the prevailing conditions in the market area suggest that these vacancies would be well-maintained and would not devolve into urban decay or deterioration. Moreover, it should be noted that when tenants vacate prior to lease expiration, they continue to be responsible for rent and their share of building operating expenses. While not all tenants would be able to continue these payments, national or regional retailers are more likely to have this capability. This is an important consideration because landlords would continue to receive income on these vacated spaces through committed lease payments, which means they would have

available financial resources to continue to maintain their properties. The underlying, long-term strength of the market area is such that property owners will have a strong incentive to maintain their properties in order to be well-positioned to attract tenants.

*Regulatory Controls*

During project-related fieldwork conducted in November 2015, ALH Economics found there were little-to-no visible signs of litter, graffiti, weeds, or rubbish associated with existing commercial nodes in the project's market area. Thus, ALH Economics concludes that existing measures to maintain private commercial property in good condition in Chico and Paradise are generally effective and would serve to help preclude the potential for urban decay and deterioration in the event that any existing retailers in the market area close as a result of the operations of the project and other cumulative retail projects.

In conclusion, while some existing stores may experience negative impacts following the addition of the Project combined with cumulative retail developments, there is limited evidence to suggest that vacated retail or restaurant spaces would exhibit traditional signs of deterioration or decay, such as graffiti, refuse dumping, and dilapidated fencing. Existing vacant spaces throughout the area appear to be well-maintained, including longer-term vacancies. This, plus the recent area leasing activity, indicates that the City of Chico is an inherently appealing retail market. Based upon these findings, it is concluded that the Walmart Expansion Project and the identified cumulative projects will not cause or significantly contribute to urban decay.

### *Level of Significance Before Mitigation*

Less than significant impact.

### *Mitigation Measures*

No mitigation is necessary.

### *Level of Significance After Mitigation*

Less than significant impact.

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