This section of the EIR evaluates the potential traffic and circulation impacts along the State Route 68 corridor resulting from implementation of the proposed project. The analysis is largely based on a project specific traffic impact analysis prepared by Higgins Associates in May 2008 under contract with PMC as part of the EIR. The traffic impact analysis analyzes existing conditions; background conditions; background plus project conditions; and cumulative conditions. The results of this traffic impact analysis are summarized herein. For detailed supporting analysis, the reader is referred to the traffic impact analysis included in **Appendix I**.

3.10.1 ENVIRONMENTAL SETTING

EXISTING ROADWAY SYSTEM

Monterey County's roadway system is a network of 2,274 miles of County roads, State highways and City streets. The 1,278 miles of County roads are the largest component of the roadway network. The major State highways include Highways 1, 68, 101 and 156 providing travel between cities while minor Highways 25, 146, 183, 198 and 218 serve minor arterial functions similar to County roads. The Daily Vehicle Miles of Travel (VMT) and Average Daily Traffic (ADT) have increased steadily since the 1970s, with the highest levels of increase in the State Route 68 corridor between Salinas and Monterey, along Carmel Valley Road and Highway 1.

The roadway system within the project vicinity stretches from the State Route 68 at State Route 218 intersection in the west to the State Route 68 at San Benancio Road intersection in the east. The following is a brief description of each of the roadways in the project vicinity:

State Route 68 (Monterey-Salinas Highway)

State Route 68 is a two-lane rural highway connecting State Route 1 in Monterey and State Route 101 in Salinas. The speed limit on State Route 68 is 55 miles per hour. It serves as a commuter route between the City of Salinas and the Monterey Peninsula, provides access to the low-density developments along it, and functions as a scenic tourist route to the Monterey Peninsula.

State Route 218 (Canyon Del Rey Road)

State Route 218 is a two-lane highway that connects State Route 68 and State Route 1. It provides access to the cities of Del Rey Oaks, Sand City, and Seaside. The intersection of State Route 218 and State Route 68 is signal controlled.

York Road

York Road provides access to some single-family housing developments and a private school, as well as the Laguna Seca Office Park and Ryan Ranch Business Park located to

the north of State Route 68. The speed limit on York Road is 25 miles per hour. The intersection of State Route 68 and York Road is signal controlled.

Pasadera Drive

Pasadera Drive is a private road to the north side of State Route 68 providing access to the Pasadera Country Club and its associated single-family housing development. The speed limit on Pasadera Drive is 25 miles per hour. The intersection of State Route 68 and Pasadera Drive is signal controlled.

Boots Road

Boots Road provides access to a small number of residential developments to the south of State Route 68 at the same intersection where Pasadera Drive serves development to the north. The speed limit on Boots Road is 25 miles per hour. The intersection of State Route 68 and Boots Road is signal controlled.

Laureles Grade Road

Laureles Grade Road is a two-lane north/south County road that connects State Route 68 with Carmel Valley Road. The speed limit on Laureles Grade Road is 45 miles per hour and it also provides access to several residential developments. The intersection of State Route 68 and Laureles Grade Road is signal controlled.

Corral de Tierra Road

Corral de Tierra Road is located to the west of San Benancio Road. It is a two-lane collector street with a speed limit of 35 miles per hour. The intersection of State Route 68 and Corral Del Tierra Road is signal controlled.

San Benancio Road

San Benancio Road is a two-lane collector street with a speed limit of 35 miles per hour and it provides access to several residential developments. The intersection of State Route 68 and San Benancio Road is signal controlled.

Meyer Road

Meyer Road is a two-lane privately maintained road owned by Harper Canyon Realty LLC. The San Benancio Road / Meyer Road intersection is controlled by a stop sign on westbound Meyer Road.

LEVEL OF SERVICE

Performance of the County's roads and highways is evaluated based on level of service (LOS) calculations. There are six levels of service representing varying roadway conditions ranging from ideal, LOS "A" to forced flow, LOS "F." Level of Service A represents free

flow un-congested traffic conditions. Level of Service F represents highly congested traffic conditions with unacceptable delay to vehicles at intersections. The intermediate Levels of Service represent incremental levels of congestion and delay between these two extremes. The level of service definitions are presented in **Table 3.10-1**, **Level of Service Definitions**.

All of the intersections and road segments that were analyzed are located along State Route 68. Monterey County has established LOS C as the acceptable level of operation for this major thoroughfare. CalTrans has identified this roadway as having a level of service standard of LOS C/D, which is considered to be LOS C, conservatively. Therefore, LOS C was used as the acceptable level of service standard for State Route 68.

TABLE 3.10-1
LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Signalized Intersection	Roadway Segments
		Average Control Delay Per Vehicle (Seconds)	Average Travel Speed (mph)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0	> 55
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1	50.1-55
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1	45.1-50
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1	40.1-45
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1	25.1-40
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0	≤25mph

Source: Higgins Associates 2008

For purposes of the traffic impact analysis, six intersections and five roadway segments listed in **Table 3.10-2, Intersection and Roadway Segments Studied** were evaluated in the traffic impact analysis. These intersections are shown in **Figure 3.10-1, Intersections** with

the intersection locations on the figure keyed to the numbering assigned below. Intersections were analyzed for the weekday AM (i.e., 7:00 to 9:00 A.M.) and PM (i.e., 4:00 to 6:00 P.M.) peak periods. All intersections are signalized and allow right turns on red (RTOR). Three of the intersections experience high volumes of right-turns on the northbound approach, which include the intersections of State Route 68 with Laureles Grade Road, Corral de Tierra Road, and San Benancio Road.

TABLE 3.10-2
INTERSECTION AND ROADWAY SEGMENTS STUDIED

Intersections	Roadway Segments
1. State Route 218 at State Route 68	State Route 68 between:
2. York Road at State Route 68	1. State Route 218 and York Road
3. Pasadera Drive-Boots Road at State Route 68	2. York Road and Pasadera Drive-Boots Road
4. Laureles Grade at State Route 68	3. Pasadera Drive-Boots Road and Laureles Grade
5. Corral de Tierra Road at State Route 68	4. Laureles Grade and Corral de Tierra Road
6. San Benancio Road at State Route 68	5. Corral de Tierra Road and San Benancio Road

Source: Higgins Associates 2008

The study analyzed traffic conditions under the following development scenarios:

- **Existing Conditions** - Existing volumes obtained from traffic counts.
- **Background Conditions** - Existing peak-hour traffic volumes plus traffic generated from approved, but not yet constructed developments in the larger study area.
- **Background Plus Project Conditions** – Background peak-hour traffic volumes plus traffic generated by the proposed project.
- **Cumulative Conditions** - Existing traffic volumes plus the estimated traffic generated by all approved and cumulative projects in the vicinity of the project site, as well as the proposed project. Cumulative projects are developments that are in the review process but have not yet been approved.

Insert Figure 3.10-1 (Intersections)

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Existing Conditions

Existing conditions analyzes traffic volumes for the study intersections and roadway segments which were obtained from traffic counts conducted by Higgins Associates in August 2006.

Intersections

Five of the six study intersections currently operate at unacceptable levels of service for existing traffic conditions as shown in **Table 3.10-3**, **Intersection Level of Service for Existing Conditions** during the AM peak hour. During the PM peak hour, four out of six intersections operate at unacceptable levels of service.

TABLE 3.10-3
INTERSECTION LEVEL OF SERVICE FOR EXISTING CONDITIONS

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. State Route 218 at State Route 68	C/D	21.0	C	24.0	C
2. York Road at State Route 68	C/D	63.6	E	76.3	E
3. Pasadera Drive-Boots Road at State Route 68	C/D	36.8	D	29.5	C
4. Laureles Grade at State Route 68	C/D	38.8	D	82.6	F
5. Corral de Tierra Road at State Route 68	C/D	35.5	D	68.2	E
6. San Benancio Road at State Route 68	C/D	71.7	E	116.5	F

Source: Higgins Associates 2008

Roadway Segments

To determine the existing road segment operating conditions along the State Route 68 corridor, the average travel speed was determined along an approximate 6.5 mile section starting at a point just west of the State Route 68 at State Route 218 intersection and ending at a point just east of the State Route 68 at San Benancio Road intersection. There is no distinct directional flow of traffic during the AM and PM periods along State Route 68. There are segments of the corridor where the flows are fairly even in both directions during the AM and PM peak hours.

The LOS standard for the roadway segments is LOS C. During the AM peak hour *all* of the study roadway segments operate at unacceptable levels of service in both the eastbound direction and westbound direction.

During the PM peak hour, the following State Route (SR) roadway segments operate at unacceptable levels of service in the *eastbound* direction:

- SR 68 between SR 218 and York Road

- SR 68 between York Road and Pasadera Drive/Boots Road
- SR 68 between Pasadera Drive/Boots Road and Laureles Grade Road
- SR 68 between Laureles Grade Road and Corral de Tierra Road
- SR 68 between Corral de Tierra Road and San Benancio Road

In the *westbound* direction, the following roadway segments operate at unacceptable levels of service during the PM peak hour:

- SR 68 between SR 218 and York Road
- SR 68 between Pasadera Drive/Boots Road and Laureles Grade Road
- SR 68 between Corral de Tierra Road and San Benancio Road

Existing roadway segment operations, during the AM and PM peak periods summarized in **Table 3.10-4, Roadway Segment Level of Service for Existing Conditions** are briefly discussed below in terms of travel time.

TABLE 3.10-4
ROADWAY SEGMENT LEVEL OF SERVICE FOR EXISTING CONDITIONS

Roadway Segment	Direction	LOS Standard	AM Peak Hour			PM Peak Hour		
			Volume (Veh/hr)	Average Speed[1] (mph)	LOS	Volume (Veh/hr)	Average Speed[1] (mph)	LOS
State Route 68 between:								
1. SR 218 and	EB	C/D	1,432	37.0	E	1,067	39.0	E
York Road	WB	C/D	1,345	34.0	E	1,726	42.0	D
2. York Rd. and	EB	C/D	788	40.0	E	1,133	23.0	F
Pasadera Drive/Boots Road	WB	C/D	1,415	39.0	E	1,205	51.0	B
3. Pasadera Drive/Boots Road and	EB	C/D	772	40.0	E	1,090	11.0	F
Laureles Grade	WB	C/D	1,351	40.0	E	1,102	40.0	E
4. Laureles Grade and	EB	C/D	876	44.0	D	1,309	21.0	F
Corral de Tierra Road	WB	C/D	1,373	35.0	E	1,074	52.0	B
5. Corral de Tierra Road and	EB	C/D	1,020	26.0	E	1,365	21.0	F
San Benancio Road	WB	C/D	1,305	31.0	E	1,149	28.0	E

Notes: 1 Average travel speed obtained from data collection in the field using GPS technology.

EB = Eastbound
WB = Westbound
Veh/hr = vehicles per hour
Mph miles per hour

Source: Higgins Associates 2008

AM Peak Period

Eastbound: During the AM peak period, the longest travel time for the 6.5 mile section of the corridor was 9 minutes, 36 seconds with the average travel speed ranging between 26 mph (LOS E) and 44 mph (LOS D), in the eastbound travel direction. The most congested sections of the corridor identified were between York Road and San Benancio Road.

Westbound: During the AM peak period, the longest travel time for the 6.5 mile section of the corridor was 10 minutes with the average travel speed ranging between 31 mph (LOS E) and 40 mph (LOS E), in the westbound travel direction. The most congested sections of the corridor identified were east of the Corral de Tierra Road and Laureles Grade Road.

PM Peak Period

Eastbound: During the PM peak period, the longest travel time for the 6.5 mile section of the corridor was 19 minutes with the average travel speed ranging between 11 mph (LOS F) and 39 mph (LOS E), in the eastbound travel direction. The most congested sections of the corridor identified were between Corral de Tierra Road and Pasadera Drive.

Westbound: During the PM peak period, the longest travel time for the 6.5 mile section of the corridor was 9 minutes, 30 seconds with the average travel speed ranging between 28 mph (LOS E) and 52 mph (LOS B), in the westbound travel direction. The most congested sections of the corridor identified were east of Corral de Tierra Road.

Off-Peak Period

Eastbound: During the off-peak period, the longest travel time for the 6.5 mile section of the corridor was 8 minutes, 36 seconds with the average travel speed ranging between 26 mph (LOS E) and 55 mph (LOS A), in the eastbound travel direction. The most congested sections of the corridor identified were between Pasadera Drive and Laureles Grade Road and between Corral de Tierra Road and San Benancio Road.

Westbound: During the off-peak period, the longest travel time for the 6.5 mile section of the corridor was 9 minutes with the average travel speed ranging between 20 mph (LOS F) and 53 mph (LOS A), in the westbound travel direction. The most congested sections of the corridor identified were east of State Route 218 and west of San Benancio Road.

The results show that congestion is experienced on SR 68 during both and AM and PM peak hours, with the most critical congestion occurring in the eastbound direction during the PM peak hour. The longest eastbound travel time along the 6.5 mile section of the

State Route 68 corridor was 9 minutes 36 seconds during the AM peak hour and 19 minutes during the PM peak hour.

Transit

Monterey-Salinas Transit (MST) provides fixed-route bus service in Monterey County and Peninsula cities. MST Line 21 provides service between Monterey and Salinas via State Route 68 with stops at various locations along State Route 68. MST has reduced Line 21 service in recent years due to a lack of ridership on the route. In August 2003, weekday mid-day service was eliminated, and on July 30, 2005 service was further reduced to the current schedule which includes only one weekday morning round trip and a single westbound one-way trip on weekday afternoons. According to MST, most passengers traveling between Monterey and Salinas use MST's Line 20, which travels through Marina, due to the poor on-time performance of Line 21.

Pedestrian Facilities and Bicycle Facilities

Pedestrian facilities include sidewalks, crosswalks and pedestrian signals. There is not a significant amount of foot-traffic in the vicinity of the proposed project and therefore sidewalks are not provided along State Route 68, San Benancio Road or Meyer Road. Crosswalks and pedestrian signal phasing are provided at the signalized study intersections.

There are three basic types of bicycle facilities recognized in the County of Monterey:

- Bike path (Class I) - A completely separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists.

- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. Bike lanes allow one-way bike travel. Through travel by motor vehicles or pedestrians is prohibited, but crossing by pedestrians and motorists is permitted.

- Bike route (Class III) - Provides shared use of the roadway, designated by signs or permanent markings and shared with motorists.

However, there are no bicycle facilities provided in the project vicinity.

Previously Recommended Improvements Along the State Route 68 Corridor

As shown in **Table 3.10-4, Roadway Segment Level of Service for Existing Conditions**, certain segments along SR 68 currently operate below the LOS C/D standard established by Caltrans. In order to achieve acceptable levels of service for all of the SR 68 study intersections and road segments under existing conditions (and maintain this level of service through the cumulative scenario), the roadway would require widening to four

lanes between Toro Park and SR 1. The widening of SR 68 has been discussed and debated for several years.

Alternatively, a four-lane freeway parallel to the SR 68 corridor was considered as part of the Fort Ord Reuse Plan. The County of Monterey and Caltrans have considered this "South Fort Ord Bypass" along an alignment approximately one-half mile north of the existing SR 68 roadway. However, there are no short or long-term funding sources available for either one of these alternatives.

Furthermore, there are no feasible interim improvements that could be implemented along the corridor that would achieve and maintain the acceptable level of service standards, and widening the entire corridor to a four-lane facility is not feasible at this time.

In 2001, the SR 68 Improvement Advisory Committee (sponsored by the County of Monterey) identified and prioritized a list of improvements for existing and future traffic conditions that would facilitate a slight reduction in the travel time along the corridor. These improvements included several projects that are either completed, or contained in TAMC's regional fee program.

Subsequent to the 2001 SR 68 Improvement Advisory Committee recommendations, the Transportation Agency for Monterey County (TAMC) prepared a *Nexus Study for a Regional Development Impact Fee* dated May 14, 2004. Most of the Advisory Committee's recommendations for SR 68 are now identified within the project list used to establish the TAMC fee.
In addition to the Advisory Committee's recommendations, study reports for other local projects have also recommended several minor improvements. As discussed below under Background Conditions, many of these minor improvements are assumed to be in place within 1 to 5 years.

Regional Impact Fee Nexus Study Update

TAMC is currently in the process of updating the 2004 *Nexus Study for a Regional Development impact Fee*. As of this writing, the project list in the Regional Impact Fee Nexus Study Update includes a project referred to as "SR 68 Commuter Improvements", which would widen SR 68 to four lanes from the existing 4-lane section adjacent to Toro Park to Corral de Tierra Road. This potential improvement is discussed later in this section.

Background Traffic Conditions (Existing Plus Approved Projects)

The assignment of approved project trips combined with existing traffic is used to obtain "Background" traffic volumes. This scenario documents the impact of existing traffic combined with those projects approved but not yet constructed, upon the larger roadway network.

The list of relevant approved projects for this analysis scenario was developed in consultation with the Caltrans District 5 and County of Monterey Planning and Public Works staff. This scenario demonstrates how traffic trips generated by existing traffic plus approved projects will affect the surrounding roadway network prior to development of the project. Approved, as well as pending, projects are listed in Section 5.0, Cumulative Impacts Summary. In addition, it is assumed that the following improvement projects are to be in place under "Background Traffic Conditions":

- Adding second westbound left turn lanes at the State Route 68 intersections with Laureles Grade Road, and San Benancio Road;
- Adding a fourth southbound York Road leg and a second York Road southbound left-turn lane at the York Road/State Route 68 intersection; and
- Adding a fourth northbound Corral de Tierra Road leg and a second State Route 68 westbound left-turn lane at the Corral de Tierra Road/State Route 68 intersection.

The approved projects would generate an estimated total of 156,305 daily trips within the larger regional study area, with 8,771 trips (4,303 in, 4,468 out) during the AM peak hour, and 14,573 trips (7,736 in, 6,837 out) during the PM peak hour. It is anticipated that the trips generated by the approved projects will impact the study area roadway network prior to impacts being experienced by the proposed project.

Intersections

The traffic that would be generated by the approved projects was combined with the existing traffic volumes to obtain volumes for background traffic conditions. Five of the six study intersections, except the intersection at State Route 218 at State Route 68, would operate at unacceptable levels of service for background traffic conditions as shown in **Table 3.10-5, Intersection Level of Service for Background Conditions** during both the AM and PM peak hour.

TABLE 3.10-5
INTERSECTION LEVEL OF SERVICE FOR BACKGROUND CONDITIONS

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. State Route 218 at State Route 68	C/D	22.5	C	32.5	C
2. York Road at State Route 68	C/D	88.1	F	81.6	F
3. Pasadera Drive-Boots Road at State Route 68	C/D	69.0	E	44.2	D
4. Laureles Grade at State Route 68	C/D	60.3	E	91.2	F
5. Corral de Tierra Road at State Route 68	C/D	131.5	F	144.5	F

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
6. San Benancio Road at State Route 68	C/D	82.9	F	136.6	F

Notes: Assumes improvements completed prior to implementation of the proposed project.

Source: Higgins Associates 2008

Roadway Segments

Those roadway segments along State Route 68 that are currently operating at unacceptable levels of service under existing conditions would continue to operate at unacceptable levels of service under background conditions. The level of service for the road segments, as well as AM and PM peak period volumes under Background traffic conditions, are summarized in **Table 3.10-6, Roadway Segment Level of Service for Background Conditions**.

TABLE 3.10-6
ROADWAY SEGMENT LEVEL OF SERVICE FOR BACKGROUND CONDITIONS

Roadway Segment	Direction	LOS Standard	AM Peak Hour			PM Peak Hour		
			Volume (Veh/hr)	Average Speed[1] (mph)	LOS	Volume (Veh/hr)	Average Speed[1] (mph)	LOS
State Route 68 between:								
1. State Route 218 and York Road	EB WB	C/D C/D	1,612 1,464	36.6 33.3	E E	1,224 1,951	38.8 36.9	E E
2. York Rd. and Pasadera Drive/Boots Road	EB WB	C/D C/D	869 1,548	40.1 34.1	D E	1,296 1,323	22.2 46.9	F C
3. Pasadera Drive/Boots Road and Laureles Grade	EB WB	C/D C/D	858 1,472	41.7 29.0	D E	1,241 1,223	10.9 34.9	F E
4. Laureles Grade and Corral de Tierra Road	EB WB	C/D C/D	976 1,508	38.1 28.8	E E	1,483 1,218	15.7 51.6	F B
5. Corral de Tierra Road and San Benancio Road	EB WB	C/D C/D	1,125 1,444	35.7 14.6	E F	1,536 1,289	20.1 15.6	F F

Notes: 1 Average travel speed calculated in Synchro software.
EB = Eastbound
WB = Westbound
Veh/hr = vehicles per hour
Mph miles per hour

Source: Higgins Associates 2008

Background Conditions Improvements

The same intersection and roadway segment improvements recommended under existing conditions ("previously recommended improvements") would also be recommended under background conditions. However, these previously recommended improvements, (consisting of 4 lane widening of the entire length of State Route 68 or alternatively the South Fort Ord Bypass), have not been included in a recent TAMC development impact fee program and therefore no funds are available for the implementation of these improvements. Therefore, these improvements are not considered feasible.

3.10.2 Regulatory Setting

COUNTY OF MONTEREY

The County of Monterey has two primary planning documents, the *Monterey County General Plan* (Monterey County 1982), *Toro Area Plan* (Monterey County 1986), that provide goals, objectives and policies related to transportation and circulation.

Monterey County General Plan

Goal 37 To promote a safe, effective, and economical transportation system that will service the existing and future land uses of the county.

Policies

37.2.1 Transportation demands of proposed development shall not exceed an acceptable level of service for existing transportation facilities, unless appropriate increases in capacities are provided for.

37.5.1 The design and location of new development shall consider and incorporate provisions for appropriate transportation modes.

Toro Area Plan

Policies

39.1.1.1 The county shall be encouraged to work with the state, local agencies, and citizens groups to alleviate traffic congestion on, and still maintain the scenic beauty of, State Route 68. With the goal of eventually constructing a scenic four-lane divided highway, the County shall support the following interim measures:

1. extension of Portola Drive through Serra Village in order to alleviate the traffic load on State Route 68 and traffic hazards at the Toro Park intersection;

2. construction of a two-lane bypass in the area north of the present Corral de Tierra/San Benancio State Route 68 intersection within the present plan lines;

3. methods of easing congestion at Toro Regional Park including, but not limited to, relocating entrance facilities, relocating the bus stop, and providing additional parking spaces;

4. construction of a divided four-lane segment between River Road and Torero Drive and a low profile interchange (or other acceptable traffic solutions) at Toro Park; and

5. construction of bus stops, pull-outs, and shelters where needed.

39.1.1.2 Improvement of State Route 68 intersections, replacement of the Toro Creek bridge, construction of alternate passing lanes, public transit roadway improvements, and improved bicycle safety measures should be undertaken at the earliest time that funding becomes available.

39.1.1.3 The County shall require significant financial contributions from each new subdivision in the Toro Planning Area in order to expedite funding and construction of State Route 68.

39.2.2.1 Improvements to Corral de Tierra and San Benancio Roads shall be designed to accommodate bicycles, horses, and people.

39.2.5.1 To minimize traffic safety hazards, creation of new direct access points should be prohibited from single-family residences onto State Route 68 and discouraged onto Laureles Grade, River Road, Corral de Tierra Road, and San Benancio Road.

41.2.3 The County shall encourage a study of the feasibility of increasing the accessibility of Toro residents to mass transit, either through park and ride lots or new bus service, particularly in the Corral de Tierra, San Benancio, and River Road areas.

Monterey County Regional Transportation Plan

The Transportation Agency for Monterey County (TAMC) is responsible for periodically completing a long-range transportation planning document known as the Regional Transportation Plan (RTP). The purpose of the RTP is to provide policy guidelines regarding planning and programming of transportation projects in Monterey County for the next twenty years. The RTP identifies existing and future needs, evaluates modes and alternatives, and determines what can be completed with anticipated funding. As required by the California Transportation Commission Guidelines, each Regional Transportation

Agency shall develop and update goals, objectives and policies for inclusion in the Policy Element of the RTP.

3.10.3 IMPACTS AND MITIGATION MEASURES

STANDARDS OF SIGNIFICANCE

The following thresholds for measuring a project's environmental impacts are based on CEQA Guidelines and standards used by the County of Monterey. For the purposes of this EIR, impacts are considered significant if the following could result from implementation of the proposed project:

1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);

2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

3) 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;

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

5) Result in inadequate emergency access;

6) Result in inadequate parking capacity; or

7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks).

In accordance with the California Environmental Quality Act (CEQA) and agency and professional standards, specific impact criteria have been applied to the study intersections and road segments to determine if a significant impact would occur due to the implementation of the proposed project. According to the Monterey County Public Works Department's policies and professional standards, a significant impact is defined to occur under the following scenarios:

Signalized Study Intersection:

- The addition of project traffic causes operations to deteriorate from an acceptable level of service (in this case LOS C or better) to an unacceptable level (LOS D, LOS E or LOS F), or

- The addition of project traffic increases the critical movement's volume-to-capacity ratio by 0.01 or more at intersections operating at LOS D or LOS E, or

- The proposed project adds any traffic (one vehicle) to an intersection operating at LOS F.

Un-signalized Study Intersection:

- The addition of project traffic causes any traffic movement to operate at LOS F, or any traffic signal warrant to be met.

Study Roadway Segment:

- The addition of project traffic causes a roadway segment operating at LOS A through LOS E to degrade to a lower level of service of LOS D, E or F, or

- The addition of one project trip to a segment already operating at LOS F.

METHODOLOGY

A traffic impact analysis was prepared by Higgins Associates in May 2008 under contract to PMC.

Intersection Methodologies

Intersection traffic operations were evaluated based on the Level of Service (LOS) concept. Qualitative Level of Service (LOS) analyses were performed for the study intersections, based on the *2000 Highway Capacity Manual* methodologies using the Synchro analysis software. A saturation flow rate of 1,600 vehicles per lane per hour was used for the eastbound and westbound through movements along State Route 68 per Caltrans District 5 recommendations.

Road Segment Methodologies

In the traffic impact analysis, qualitative Level of Service (LOS) analyses were performed for the study road segments and study corridor based on the latest Geographic Positioning System (GPS) and Geographic Information Systems (GIS) based technology. The GPS approach to determine travel speed, travel time, and delay along State Route 68 provided a more accurate sense of the existing traffic operations along State Route 68 than the other methodologies previously mentioned. The collected data is then used to determine the travel speed, travel time, and delays along the corridor. The GPS data obtained under existing traffic conditions was used to calibrate the Synchro traffic analysis software in order to assess the roadway segment operations under background, project and cumulative traffic conditions.

Safety Issues Evaluation

To evaluate safety issues at the San Benancio Road/Meyer Road intersection the following tasks were performed: San Benancio Road/Meyer Road intersection analysis; San Benancio Road traffic operation analysis; and Meyer Road traffic operations evaluation. These tasks included evaluation of sight distance; traffic volumes and level of service; and accident analysis.

Site Reconnaissance

To establish existing traffic flow conditions, intersection traffic counts were collected during the weekday AM (7:00 A.M. – 9:00 A.M.) and PM (4:00 P.M. – 6:00 P.M.) peak hours at the six study intersections. The traffic counts were conducted between August 15, 2006 and August 29, 2006. The traffic count dates are shown in **Table 3.10-7, Dates of Manual Traffic Counts at Study Intersections**. From the peak period traffic counts, the AM and PM peak hour turning movement volumes were identified.

TABLE 3.10-7
DATES OF MANUAL TRAFFIC COUNTS AT STUDY INTERSECTIONS

Intersection	Count Date
State Route 218 / State Route 68	August 15, 2006
York Road / State Route 68	August 16, 2006
Boots Road-Pasadera Drive / State Route 68	August 16, 2006
Laureles Grade / State Route 68	August 16, 2006 and August 29, 2006
Corral de Tierra Road / State Route 68	August 22, 2006
San Benancio Road / State Route 68	August 16, 2006

Source: Higgins Associates 2008

PROJECT IMPACTS AND MITIGATION MEASURES

Intersection Level of Service Impacts

Impact 3.10-1 Under background plus project conditions, four of the six study intersections would continue to operate at LOS F conditions in the AM and/or PM peak hour. The project's contribution of at least one traffic trip to these intersections constitutes a **significant** impact.

The proposed project would generate an estimated 163 daily trips, with 13 trips generated during the AM peak hour (3 in, 10 out) and 17 trips generated during the PM peak hour (11 in, 6 out). The project trip assignment was combined with the "Existing Plus Approved Project" traffic forecasts to evaluate traffic conditions under project conditions.

The traffic that would be generated by the proposed project was combined with the background traffic volumes to obtain background plus project traffic conditions. The AM and PM peak hour project trips and intersection levels of service are summarized in **Table 3.10-8, Intersection Level of Service for Background Plus Project Conditions.**

TABLE 3.10-8
INTERSECTION LEVEL OF SERVICE FOR BACKGROUND PLUS PROJECT CONDITIONS

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. State Route 218 at State Route 68	C/D	22.6	C	32.6	C
2. York Road at State Route 68	C/D	88.9	F	82.0	F
3. Pasadera Drive-Boots Road at State Route 68	C/D	70.0	E	44.7	D
4. Laureles Grade at State Route 68	C/D	60.9	E	91.9	F
5. Corral de Tierra Road at State Route 68	C/D	132.4	F	146.0	F
6. San Benancio Road at State Route 68	C/D	84.9	F	139.1	F

Notes: Assumes that recommended improvements assumed under background conditions completed prior to implementation of the proposed project.

Source: Higgins Associates 2008

As shown in **Table 3.10-8**, **Intersection Level of Service for Project Conditions,** five of the six study intersections would continue to operate at unacceptable levels of service (LOS D or worse) under background plus project traffic conditions. The proposed project would not degrade the operations of any of the study intersections when compared to levels of service under background conditions. In fact, compared to background conditions, the worst increase in delay caused by the project (Intersection #6) is only 2.5 seconds. However, the project will contribute at least one trip to four intersections that currently operate at LOS F. Based on County standards of significance, this increase is significant. A brief description of the operations at each signalized intersection that would operate with deficiencies under background plus project traffic conditions is provided below.

York Road and State Route 68, Intersection #2 (Signalized) would continue to operate at LOS F during the weekday AM and PM peak hours (average delay of 88.9 and 82.0 seconds, respectively). Since this intersection operates at LOS F during both weekday AM and PM peak hours, the addition of one trip to this signalized intersection during the weekday AM or PM peak hours would be considered significant.

Pasadera Drive/Boots Road and State Route 68, Intersection #3 (Signalized) would continue to operate at LOS E during the weekday AM peak hour and LOS D during the PM peak hour (average delay of 70.0 and 44.7 seconds, respectively). The volume-to-capacity ratio of this signalized intersection would remain 1.10 during weekday AM peak hour and 1.00 during the weekday PM peak hour under both background and background plus

project traffic conditions. Therefore, the addition of traffic to this intersection would be considered less than significant.

Laureles Grade and State Route 68, Intersection #4 (Signalized) would continue to operate at LOS E during the weekday AM peak hour and LOS F during the PM peak hour (average delay of 60.9 and 91.9 seconds, respectively). The volume-to-capacity ratio of this signalized intersection would remain 0.84 during the weekday AM peak hour under both background and background plus project traffic conditions. Therefore, the addition of traffic to this intersection during the AM peak hour would be considered less than significant. However, the intersection operates at LOS F during the weekday PM peak hour. Therefore, the addition of one trip to this signalized intersection during the weekday PM peak hour would be considered a significant impact.

Corral de Tierra Road and State Route 68, Intersection #5 (Signalized) would continue to operate at LOS F during the weekday AM and PM peak hours (average delay of 132.4 and 146.0 seconds, respectively). Since this intersection operates at LOS F during both AM and PM peak hours, the addition of one trip to this signalized intersection during the weekday AM or PM peak hours would be considered a significant impact.

San Benancio Road and State Route 68, Intersection #6 (Signalized) would operate at LOS F during the weekday AM and PM peak hours (average delay of 84.9 and 139.1 seconds, respectively). Since this intersection operates at LOS F during both AM and PM peak hours, the addition of one trip to this signalized intersection during the weekday AM or PM peak hours would be considered a significant impact.

A series of intersection safety improvements along State Route 68 are included in the *Regional Transportation Plan* (TAMC 2005) including: adding a second State Route 68 westbound left-turn lane at the Laureles Grade Road/State Route 68 intersection; adding a fourth (north) Corral de Tierra Road leg and a second State Route 68 westbound left-turn lane at the Corral de Tierra Road/State Route 68 intersection; and adding a second State Route 68 westbound left-turn lane at the San Benancio Road/State Route 68 intersection. These improvements are assumed to be fully funded and in place under background traffic conditions, and therefore are not identified as mitigation required by this project. These safety improvements will be beneficial to the State Route 68 corridor, but will not resolve existing intersection LOS deficiencies to which the project will contribute traffic.

The major improvements previously discussed under existing and background traffic conditions (4-laning the entire SR 68 corridor) would improve the operations at the study intersections to acceptable levels of service under background plus project traffic conditions. However, no funding is available for the implementation of the widening of State Route 68 to four lanes, or implementation of the South Fort Ord Bypass, nor have any of these improvements been included in the Regional Transportation Plan. Therefore, these improvements are not considered feasible mitigation under CEQA. With no feasible mitigation available to mitigate the project's incremental traffic trips, impacts at the four intersections identified above will remain **significant and unavoidable**.

Roadway Segment Impacts

Impact 3.10-2 Under background plus project conditions, all five of the study roadway segments along State Route 68 would continue to operate at unacceptable levels of service (LOS D or worse) in the AM and/or PM peak hour. Because four out of five segments operate at LOS F in either the AM or PM peak hour, the addition of one or more project trips to these segments represents a **significant** impact.

The road segment levels of service under background plus project traffic conditions, as well as AM and PM peak hour volumes on the study road segments, are summarized in **Table 3.10-9, Roadway Segment Level of Service for Background Plus Project Conditions**.

TABLE 3.10-9
ROADWAY SEGMENT LEVEL OF SERVICE FOR BACKGROUND PLUS PROJECT CONDITIONS

Roadway Segment	Direction	LOS Standard	AM Peak Hour			PM Peak Hour		
			Volume (Veh/hr)	Average Speed[1] (mph)	LOS	Volume (Veh/hr)	Average Speed[1] (mph)	LOS
State Route 68 between:								
1. State Route 218 and	EB	C/D	1,613	36.6	E	1,228	38.8	E
York Road	WB	C/D	1,468	32.9	E	1,953	36.7	E
2. York Road and	EB	C/D	870	40.1	D	1,300	22.2	F
Pasadera Drive/Boots Road	WB	C/D	1,552	33.9	E	1,325	46.9	C
3. Pasadera Drive/Boots Road and	EB	C/D	859	41.7	D	1,245	10.8	F
Laureles Grade	WB	C/D	1,476	28.8	E	1,225	34.8	E
4. Laureles Grade and	EB	C/D	977	38.0	E	1,487	15.6	F
Corral de Tierra Road	WB	C/D	1,512	28.6	E	1,220	51.5	B
5. Corral de Tierra Road and	EB	C/D	1,126	35.5	E	1,540	19.9	F
San Benancio Road	WB	C/D	1,448	14.5	F	1,298	15.4	F

Notes: 1 Average travel speed calculated in Synchro software.
EB = Eastbound
WB = Westbound
Veh/hr = vehicles per hour
Mph miles per hour

Source: Higgins Associates 2008

As shown in **Table 3.10-9, Roadway Segment Level of Service for Project Conditions** each study roadway segment on State Route 68, eastbound and westbound, would continue to operate below LOS C during both the AM or PM peak periods, as they would under existing and background traffic conditions. A brief description of the operations along each

roadway segment that would operate with deficiencies under background plus project traffic conditions is provided below.

State Route 68 between State Route 218 and York Road (Roadway Segment #1) would continue to operate at LOS E in the eastbound direction and LOS E in the westbound direction during the weekday AM peak hour (average speeds of 36.6 and 32.9 mph, respectively); and LOS E in the eastbound direction and LOS E in the westbound direction during the weekday PM peak hour (average speeds of 38.8 and 36.7 mph, respectively). The level of service would not degrade when compared to background plus project traffic conditions. Therefore, the addition of trips generated by the proposed project would be considered a less than significant impact.

State Route 68 between York Road and Pasadera Drive/Boots Road (Roadway Segment #2) would continue to operate at LOS D in the eastbound direction and LOS E in the westbound direction during the weekday AM peak hour (average speeds of 40.1 and 33.9 mph, respectively); and LOS F in the eastbound direction and LOS C in the westbound direction during the weekday PM peak hour (average speeds of 22.2 and 46.9 mph, respectively). Since this roadway segment operates at LOS F in the eastbound direction during the weekday PM peak hour, one additional trip to eastbound State Route 68 between York Road and Pasadera Drive/Boots Road during the weekday PM peak hour would be considered a significant impact.

State Route 68 between Pasadera Drive/Boots Road and Laureles Grade Road (Roadway Segment #3) would continue to operate at LOS D in the eastbound direction and LOS E in the westbound direction during the weekday AM peak hour (average speeds of 41.7 and 28.8 mph, respectively); and LOS F in the eastbound direction and LOS E in the westbound direction during the weekday PM peak hour (average speeds of 10.8 and 34.8 mph, respectively). Since this roadway segment operates at LOS F in the eastbound direction during the weekday PM peak hour, one additional trip to eastbound State Route 68 between Pasadera Drive/Boots Road and Laureles Grade Road during the weekday PM peak hour would be considered a significant impact.

State Route 68 between Laureles Grade Road and Corral de Tierra (Roadway Segment #4) would continue to operate at LOS E in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 38.0 and 28.6 mph, respectively); and LOS F in the eastbound direction and LOS B in the westbound direction during the weekday PM peak hour (average speeds of 15.6 and 51.5 mph, respectively). Since this roadway segment operates at LOS F in the eastbound direction during the weekday PM peak hour, one additional trip to eastbound State Route 68 between Laureles Grade Road and Corral de Tierra during the weekday PM peak hour would be considered a significant impact.

State Route 68 between Corral de Tierra and San Benancio Road (Roadway Segment #5) would continue to operate at LOS E in the eastbound direction and LOS F in the westbound during the weekday AM peak hour (average speeds of 35.5 and 14.5 mph, respectively); and LOS F in the eastbound and westbound directions during the weekday

PM peak hour (average speeds of 19.9 and 15.4 mph, respectively). Since this roadway segment operates at LOS F in the westbound direction during the weekday AM peak hour and in the eastbound direction during the weekday AM and PM peak hours, one additional trip to eastbound State Route 68 between Corral de Tierra and San Benancio Road during the weekday AM or PM peak hour or westbound State Route 68 between Corral de Tierra and San Benancio Road during the weekday AM peak hour would be considered a significant impact.

As identified previously, to operate at acceptable levels of service, State Route 68 would require widening to accommodate an additional eastbound lane for the entire length evaluated. Alternatively, implementation of the South Fort Ord Bypass has been identified as an alternative to widening State Route 68 as part of the recommended Advisory Committee list of improvements. Either of these improvements would improve the operating conditions along the corridor to acceptable levels of service, but are not considered feasible mitigation at this time.

The Transportation Agency of Monterey County (TAMC) is currently in the process of updating the 2004 Nexus Study for a Regional Development Impact Fee. The proposed project list in the *Regional Impact Fee Nexus Study Update* includes a project referred to as the "State Route 68 Commuter Improvements", which would widen 2.3 miles of State Route 68 to four lanes from the existing four lane section (adjacent to Toro Park) to Corral de Tierra Road. The geometric design details of this improvement are not known at this time. The *Regional Impact Fee Nexus Study Update* has not been approved; however, the County of Monterey currently collects a regional transportation impact fee to be used toward regional improvements.

In consultation with Monterey County Public Works Department, Higgins Associates evaluated a portion of this proposed "Commuter Improvement" project currently being considered by TAMC as part of the *Regional Impact Fee Nexus Study Update*. Higgins Associates evaluated a shorter version of that project that would result in a reduction in travel time along the corridor, by constructing a 1.1 mile extension of four lane freeway from where the freeway currently ends to the west end of Toro Park Estates. This 1.1 mile freeway extension would provide several benefits to the State Route 68 corridor. One benefit would be a reduction in the travel time on State Route 68 in both directions. The freeway extension would reduce the combined eastbound and westbound travel time through the State Route 68 corridor by approximately 286 seconds (4.7 minutes) during the weekday AM and PM peak hours. The traffic generated by the proposed project would increase the combined eastbound and westbound travel time through the State Route 68 corridor by approximately 32. Therefore, implementation of the freeway extension would more than offset the increase in travel time caused by the proposed project. The calculations, which used the Synchro arterial analysis reports, estimate the reduction in travel time with the freeway extension and are shown in Appendix O of the Traffic Impact Analysis included in **Appendix I** of the EIR. They are based on the average travel speeds through the State Route 68 corridor.

Another benefit of extending the freeway would be a reduction in the length of the queue on westbound State Route 68 east of San Benancio Road during the weekday AM peak hour, which is currently up to 2.5 miles long. This improvement would also reduce the number of accidents per year on State Route 68, as the state-wide accident rates on four-lane freeways are about half of those on two lane highways. In addition, it would eliminate the observed phenomenon of drivers exiting westbound State Route 68 at the Portola Drive interchange to cut through the neighborhoods in Toro Park Estates. Drivers do this to get ahead of traffic by re-entering the State Route 68 traffic stream at Torero Drive. This phenomenon, which occurs daily during the weekday AM peak hour, was evident in the data collection and was confirmed through discussions with Monterey County staff. If this improvement was to be implemented, a decision would have to be made regarding the existing intersection on SR 68 at Torero Drive. There would be several options; the intersection could be closed off and only used as an emergency access. In this case, existing traffic would be diverted to the Portola Drive interchange. Another option would be to convert the intersection to right-in, right-out access only, in which case the road segment would operate more as an expressway than a freeway. Other options could also be explored, such as allowing eastbound State Route 68 left-turns onto Torero Drive, but prohibiting southbound Torero Drive left-turns onto State Route 68.

The following mitigation measure, once improvements are constructed, would off-set the travel time on State Route 68 in both directions; reduce the length of the queue on westbound State Route 68 east of San Benancio Road during the weekday AM peak hour; reduce the number of accidents per year on State Route 68; and eliminate the observed trend of drivers cutting through Toro Park Estates and re-enter the State Route 68 at Torero Drive during the weekday AM peak hour. However, based on the standards of significance, the measure will not fully mitigate the project's impacts because the project will contribute one trip or more to segments that currently, and will continue, to operate at LOS F.

Mitigation Measure

MM 3.10-2 Prior to issuance of building permits the project applicant, alone or in concert with other stakeholders, shall fund, initiate and complete a Caltrans Project Study Report (PSR) process for a 1.1 mile State Route 68 widening project. This project, designed to result in a net reduction in travel time along the State Route 68 corridor, would widen State Route 68 to four (4) lanes from where the freeway currently ends to the west end of Toro Park Estates. The PSR process will identify total project costs, as well as the applicant's fair share of those costs. In addition to paying for all or part of the "soft costs" of the widening PSR and design process, the applicant shall also pay a proportionate share of the proposed project's construction hard costs prior to issuance building permits.

Should Caltrans require that the PSR include the 2.3 mile "SR 68 Commuter Improvements" project identified within the updated TAMC

Regional Impact Fee Nexus Study, the applicant shall only be responsible for funding a proportionate share of that larger study, as well as the proposed project's fair share of hard construction costs.

Implementation of mitigation measure **MM 3.10-2** will mitigate the proposed project's contribution to State Route 68 improvements to the extent feasible. The measure provides a mechanism to contribute toward specific State Route 68 operational improvements, regardless of the status or timing of improvements planned by TAMC. This improvement, once implemented, would reduce the travel time on State Route 68 in both directions; reduce the length of the queue on westbound State Route 68 east of San Benancio Road during the weekday AM peak hour; reduce the number of accidents per year on State Route 68; and eliminate the observed trend of drivers cutting through Toro Park Estates and re-enter the State Route 68 at Torero Drive during the weekday AM peak hour. However, as some segment operations along State Route 68 will continue to operate at LOS F, the project's contribution to traffic volume is considered a **significant and unavoidable impact.**

Please also refer to mitigation measure MM 3.10-7 regarding the proposed project's payment of the TAMC Regional Transportation Fees. As described in that analysis, the project may be eligible for a credit toward the TAMC fee by contributing toward the improvements specified in mitigation measure **MM 3.10-2**.

Increased Accident Potential Along San Benancio Road

Impact 3.10-3 The traffic generated by the proposed project may result in an increase in the accident potential along San Benancio Road. This would be considered a **less than significant impact**.

San Benancio Road between State Route 68 and Harper Canyon Road has a traffic volume of approximately 5,700 vehicles per day and currently operates at LOS B. According to Higgins Associates, the proposed project would add approximately 170 daily trips on San Benancio Road, which represents a three percent increase in traffic on this roadway. This would not affect the level of service along this roadway, however the increased traffic would create additional safety hazards along this local roadway as it would increase the potential for accidents.

Between January 2001 and March 2006 there were five collisions on San Benancio Road between State Route 68 and Harper Canyon Road. This represents an accident rate of 0.481 accidents per million vehicle miles, which is well below the state average accident rate of 1.24 accidents per million vehicle miles. All of the collisions involved property damage with no injuries or fatalities. Even with an elevated average speed of 46 miles per hour (mph) above the posted speed limit of 35 mph and increased traffic volumes over the years the accident rate has remained relatively low. Therefore, the increased traffic associated with the proposed project would have a **less than significant impact** to the accident rate along Benancio Road. No mitigation measures are necessary.

Increased Safety Hazards Along Meyer Road

Impact 3.10-4 Traffic generated by the proposed project would result in increased trips on Meyer Road, which currently does not meet the standards for a tertiary private road and therefore may result in safety hazards along this roadway. This would be considered a **potentially significant impact**.

Meyer Road is a two-lane privately maintained road owned by Harper Canyon Realty LLC. Meyer Road is classified as a tertiary road as it provides access to no more than 100 tributary dwelling units. The San Benancio Road / Meyer Road intersection is controlled by a stop sign on westbound Meyer Road. The level of service is anticipated to operate at acceptable levels due to the limited number of trips by the proposed project on this roadway. However, Meyer Road currently does not meet Monterey County's standard for tertiary private roads, which requires that the roadway be a minimum of 20 feet wide. This limits the ability for two cars to pass each other on Meyer Road. Meyer Road currently varies in width from 10 to 13 feet prior to turning into an unimproved road. Physical and topographic constraints limit Meyer Road from meeting Monterey County's standard for tertiary private roads. However, according to Higgins Associates, the roadway should at a minimum meet the standard for a cul-de-sac private road, which requires a minimum width of 18 feet. Increased traffic associated with the proposed project would further exacerbate the need for a wider roadway in order to ensure that the proposed project would not increase safety hazards. Therefore, this would be considered a **potentially significant impact.**

Mitigation Measure

MM 3.10-4 Prior to approval of final improvement plans, the project applicant shall contract with a certified engineer to design roadway improvements to widen and resurface Meyer Road per the County of Monterey standards for a cul-de-sac private road (e.g. 18-foot wide roadbed). The roadway improvement plans shall be subject to review and approval by the County of Monterey and shall be constructed prior to occupancy of any of the residential units at the project site.

Implementation of the above mitigation measure will require that the project applicant widen and resurface Meyer Road to improve operations. Therefore, the impact to operations on Meyer Road would be reduced to a **less than significant** level.

Project Access and Sight Distance at the Meyer Road/San Benancio Road Intersection

Impact 3.10-5 Implementation of the proposed project would result in an increase in vehicle access at the Meyer Road/San Benancio Road intersection, which currently does not meet the American Association of State Highway and Transportation Officials (AASHTO) sight distance standards. This would be considered a **potentially significant impact**.

Localized access to the project site would be provided by Meyer Road via San Benancio Road, which would increase the traffic volumes at the Meyer Road/San Benancio Road intersection. There are several contributing factors that limit sight distance at the Meyer Road/San Benancio Road intersection including but not limited to the following: the intersection is not stop or signal controlled; the average travel speed is 45 to 46 mph on San Benancio Road which is significantly over the posted speed limit over 35 mph; and the vertical curvature of San Benancio Road. Currently, the sight distance at this intersection is approximately 240 feet north of the Meyer Road and about 250 feet south of Meyer Road, which is considered substandard sight distances per AASHTO standards. According to Higgins Associates, the minimum sight distance should be 423 feet to the south of Meyer Road and 426 feet to the north of Meyer Road to provide safe operation conditions at this intersection. The proposed project would add approximately 173 daily trips on San Benancio Road. This increase in traffic associated with the proposed project will further exacerbate the need for sight distance improvements at the Meyer Road/San Benancio Road intersection, which would be considered a **potentially significant impact**. The following mitigation measures would reduce this impact.

Mitigation Measures

MM 3.10-5a Prior to approval of final improvement plans, the Monterey County Public Works Department shall require that the project applicant contract with a qualified traffic engineer to prepare a sight distance improvement plan at the Meyer Road/San Benancio Road intersection. The improvement plan shall include but not be limited to the following: trimming the vegetation and grading the embankment in the vicinity of the intersection and installing right turn tapers into and out of Meyer Road. The design of all intersection improvements shall be subject to review and approval by the County of Monterey Public Works Department. All improvements shall be completed prior to occupancy of any residential units.

MM 3.10-5b Prior to approval of final improvement plans, the Monterey County Public Works Department shall require that the project applicant shall design and construct a minimum 50-foot long by 12-foot wide southbound San Benancio Road left-turn lane at the Meyer Road/San Benancio Road intersection in accordance with the Monterey County Public Works Department standards and guidelines.

Implementation of the above mitigation measure **MM 3.10-5a** and **MM 3.10-5b** would remove impediments to sight distance and provide better right-turn and left-turn movement at the Meyer Road/San Benancio Road intersection, which would improve sight distance at the Meyer Road/San Benancio Road intersection. In addition, implementation of mitigation measure **MM 3.10-4**, which requires that Meyer Road be resurfaced to raise the elevation, which would also improve sight distance. Therefore, this impact would be reduced to a **less than significant** level.

Inadequate Emergency Access

Impact 3.10-6 Implementation of the proposed project would result in residential development requiring emergency vehicle access. This would be considered a **less than significant impact**.

Implementation of the proposed project will include construction of 17 residential units that may require emergency vehicles to access the project site. The proposed project will be constructed according to the Monterey County Public Works Department roadway standards and shall be subject to Salinas Rural Fire Protection District's approval. There are a few unimproved roads located on the project site that would remain as access roads for utility service to the project site. These roadways may also be used as additional access points for emergency vehicles in time of need. In addition, during the review of the final roadway plans, Salinas Rural Fire Protection District will ensure that roadways are designed to accommodate their vehicles and that fire lanes are designated. Therefore, the impact to emergency access is considered **less than significant**. No mitigation measures are necessary.

Parking Capacity

Monterey County Zoning Ordinance 21.58 requires that the proposed project provide two parking spaces per single-family residential unit. The proposed project would be required to design each residential lot in accordance with Monterey County Zoning Ordinance 21.58. Therefore, adequate parking would be provided and there would be **no impact** associated with inadequate parking capacity.

Conflict with adopted policies, plan or programs supporting alternative transportation

There is not a significant amount of foot-traffic in the vicinity of the proposed project and therefore sidewalks are not provided along State Route 68, Meyer Road, or San Benancio Road. However, crosswalks and pedestrian signal phasing are provided at the signalized study intersections. No bicycle facilities are located in the vicinity of the proposed project. Although, the proposed project would result in a slight increase in population, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks).

CUMULATIVE IMPACTS AND MITIGATION MEASURES

Cumulative Adverse Impact on Level of Service

Impact 3.10-7 Implementation of the proposed project would contribute to a cumulative increase in traffic volumes that would result in or exacerbate unacceptable levels of service on the local roadway network. This is considered a **significant cumulative impact**.

A number of other projects have been proposed within the study area that have not yet been approved or even formally submitted for evaluation. The list of cumulative projects relevant to this traffic study was developed in consultation with the County of Monterey Planning and Public Works staff and is included in **Appendix I**. The proposed project, combined with the cumulative relevant projects, would generate an estimated 27,071 daily trips, with 2,138 trips (1,241 in, 897 out) during the AM peak hour and 2,707 trips (1,187 in, 1,520 out) during the PM peak hour.

Intersections

Intersection levels of service for cumulative traffic conditions are summarized in **Table 3.10-10, Intersection Level of Service for Cumulative Project Conditions**.

TABLE 3.10-10
INTERSECTION LEVEL OF SERVICE FOR CUMULATIVE PROJECT CONDITIONS

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. State Route 218 at State Route 68	C/D	31.6	C	72.4	E
2. York Road at State Route 68	C/D	124.4	F	106.6	F
3. Pasadera Drive-Boots Road at State Route 68	C/D	123.3	F	106.5	F
4. Laureles Grade at State Route 68	C/D	107.0	F	160.9	F
5. Corral de Tierra Road at State Route 68	C/D	197.5	F	268.9	F
6. San Benancio Road at State Route 68	C/D	159.8	F	237.0	F

Source: Higgins Associates 2008

All six study intersections would operate at unacceptable levels of service under cumulative traffic conditions. Similar to background plus project conditions, five of the six study intersections would be impacted by the project because of LOS F operating conditions. Each signalized intersection operating deficiently under cumulative traffic conditions is described below.

State Route 218/State Route 68, Intersection #1 (Signalized) would operate at LOS C during the weekday AM peak hour and LOS E during the weekday PM peak hour (average delay of 31.6 and 72.4 seconds, respectively). Since this signalized intersection would degrade from LOS C during the PM peak hour under background plus project conditions to LOS E during the PM peak hour under cumulative project conditions, this would be considered a significant impact. Widening and re-striping the northbound approach to include one left-turn lane, one through lane, and one right-turn lane; widening and re-stripe the eastbound approach to include two left-turn lanes, tow through lanes and one right-turn lane; and installing right-turn overlap phasing at this intersection would improve operations to acceptable LOS C during the AM and PM peak hours.

York Drive/State Route 68, Intersection #2 (Signalized) would operate at LOS F during the weekday AM and PM peak hours (average delay of 124.4 and 106.6 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip to this intersection during the AM or PM peak hours would be considered a significant impact. The addition of a second eastbound through lane in conjunction with the addition of a second westbound through lane as recommended under existing conditions would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

Pasadera Drive-Boots Road/State Route 68, Intersection #3 (Signalized) would operate at LOS F during the weekday AM peak hour and LOS E during the weekday PM peak hour (average delay of 123.3 and 106.5 seconds, respectively). During the AM peak hour, this signalized intersection would degrade from LOS E with a volume-to-capacity ratio of 1.10 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.30 under cumulative traffic conditions. During the PM peak hour, this intersection would degrade from LOS D with a volume-to-capacity ratio of 1.00 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.17 under cumulative traffic conditions. Since the AM peak hour level of service would degrade from LOS E to LOS F and the volume-to-capacity ratio would increase by 0.20 and the PM peak hour level of service would degrade from LOS D to LOS F and the volume-to-capacity ratio would increase by 0.17 during the PM peak hour this would be considered a significant cumulative impact. The addition of a second eastbound through lane in addition to the addition of a second westbound through lane recommended under existing conditions, would improve operations at this intersection to an acceptable LOS B during the AM and PM peak hours.

Laureles Grade/State Route 68, Intersection #4 (Signalized) would operate at LOS F during the weekday AM and PM peak hours (average delay of 107.0 and 160.9 seconds, respectively). During the AM peak hour, this signalized intersection would degrade from LOS E with a volume-to-capacity ratio of 1.11 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.28 under cumulative traffic conditions. Since the AM peak hour level of service would degrade from LOS E to LOS F and the volume-to-capacity ratio would increase by 0.17 and the PM peak hour level of service is LOS F, the addition of one trip to this intersection during either the AM or PM peak hour would be considered a significant impact. Converting the northbound right-turn to right-turn overlap phasing in conjunction with the addition of a second eastbound through lane and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS B during the AM peak hour and LOS C during the PM peak hour.

Corral de Tierra Road / State Route 68 (Intersection #5) would operate at LOS F during the weekday AM and PM peak hours (average delay of 197.5 and 268.9 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip would be considered a significant impact. Converting the northbound right turn to right-turn overlap phasing in conjunction with the addition of a second eastbound through lane

and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

San Benancio Road / State Route 68 (Intersection #6) would operate at LOS F during the weekday AM and PM peak hours (average delay of 159.8 and 237.0 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip would be considered a significant impact. The addition of a second eastbound through lane and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

The improvements listed above would improve the operating conditions at the study intersections to acceptable levels of service. However, no funding is available for the implementation these major improvements. Therefore, these improvements are not considered feasible mitigation under CEQA. No other feasible mitigation measures have been identified. Since five of six study intersections would continue to operate at LOS F under cumulative traffic conditions, the addition of any trips would be considered a **significant cumulative impact**.

Roadway Segments

Cumulative traffic conditions for road segment levels of service, as well as AM and PM peak hour volumes on the study road segments, are summarized in **Table 3.10-11, Roadway Segment Level of Service for Cumulative Project Conditions.**

TABLE 3.10-11
ROADWAY SEGMENT LEVEL OF SERVICE FOR CUMULATIVE PROJECT CONDITIONS

Intersection	Direction	LOS Stan-dard	AM Peak Hour			PM Peak Hour		
			Volume (Veh/hr)	Average Speed[1] (mph)	LOS	Volume (Veh/hr)	Average Speed[1] (mph)	LOS
State Route 68 between:								
1. State Route 218 and	EB	C/D	1,708	36.3	E	1,415	32.4	E
York Road	WB	C/D	1,573	26.6	E	2,057	24.5	F
2. York Road and	EB	C/D	959	39.3	E	1,579	16.8	F
Pasadera Drive/Boots Road	WB	C/D	1,781	28.7	E	1,485	44.8	D
3. Pasadera Drive/Boots	EB	C/D	933	40.8	D	1,516	8.7	F
Road and Laureles Grade	WB	C/D	1,715	18.7	F	1,378	25.3	E
4. Laureles Grade and	EB	C/D	1,062	33.4	E	1,803	12.6	F
Corral de Tierra Road	WB	C/D	1,749	21.8	F	1,347	47.3	C
5. Corral de Tierra Road	EB	C/D	1,252	23.5	E	1,889	13.8	F
and San Benancio Road	WB	C/D	1,700	10.4	F	1,498	9.8	F

Notes: 1 Average travel speed calculated in Synchro software.
EB = Eastbound
WB = Westbound
Veh/hr = vehicles per hour
Mph miles per hour

Source: Higgins Associates 2008

As shown in **Table 3.10-11, Roadway Segment Level of Service for Cumulative Project Conditions** each study roadway segment, eastbound and westbound on State Route 68, would continue to operate below LOS C during both the AM or PM peak periods as they would under existing, background, and background plus project traffic conditions. Similar to background plus project conditions, the addition of one vehicle to the LOS F conditions along four of the five study segments and the degradation of westbound State Route 68 between State Route 218 and York Road will result in the proposed project's contribution to a significant cumulative impact. A brief description of the operations along each roadway segment that would operate with deficiencies under background plus project traffic conditions is provided below.

State Route 68 between State Route 218 and York Road (Roadway Segment #1) would continue to operate at LOS E in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 36.6 and 32.4 mph, respectively); and would continue to operate at LOS E in the eastbound and LOS F in the westbound direction during the weekday PM peak hour (average speeds of 29.6 and 24.5 mph, respectively). The level of service on westbound State Route 68 would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions during the PM peak hour. Therefore, any trips generated by the proposed project on westbound State Route 68 between State Route 218 and York Road during the PM peak hour would be considered a significant cumulative impact.

State Route 68 between York Road and Pasadera Drive/Boots Road (Roadway Segment #2) would operate at LOS E in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 39.3 and 28.7 mph, respectively); and LOS F in the eastbound direction and LOS D in the westbound direction during the weekday PM peak hour (average speeds of 16.8 and 44.8 mph, respectively). During the weekday AM peak hour, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS D under background plus project traffic conditions to LOS E under cumulative traffic conditions. During the weekday PM peak hour, westbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS C under background plus project traffic conditions to LOS D under cumulative traffic conditions. In addition, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS D under background plus project traffic conditions to LOS E under cumulative traffic conditions during the AM peak hour and continue to operate at LOS F during the weekday PM peak hour. Therefore, any trips generated by the proposed project on eastbound State Route 68 between York Road and Pasadera Drive/Boots Road during either the AM or PM peak hours or on westbound State

Route 68 between York Road and Pasadera Drive/Boots Road during the PM peak hour would be considered a significant cumulative impact.

State Route 68 between Pasadera Drive/Boots Road and Laureles Grade Road (Roadway Segment #3) would operate at LOS D in the eastbound direction and LOS F in the westbound direction during the weekday AM peak hour (average speeds of 40.8 and 18.7 mph, respectively); and LOS F in the eastbound direction and LOS E in the westbound direction during the weekday PM peak hour (average speeds of 8.7 and 25.3 mph, respectively). During the weekday AM peak hour, westbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. In addition, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would continue to operate at LOS F during the weekday PM peak hour. Therefore, any trips generated by the proposed project on eastbound State Route 68 between York Road and Pasadera Drive/Boots Road during the weekday PM peak hour or on westbound State Route 68 between York Road and Pasadera Drive/Boots Road during the weekday AM peak hour would be considered a significant cumulative impact.

State Route 68 between Laureles Grade Road and Corral de Tierra (Roadway Segment #4) would continue to operate at LOS E in the eastbound direction and LOS F in the westbound direction during the weekday AM peak hour (average speeds of 33.4 and 21.8 mph, respectively); and LOS F in the eastbound direction and LOS C in the westbound direction during the weekday PM peak hour (average speeds of 12.6 and 47.3 mph, respectively). During the weekday AM peak hour, westbound State Route 68 between Laureles Grade Road and Corral de Tierra would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. In addition, eastbound State Route 68 between Laureles Grade Road and Corral de Tierra would continue to operate at LOS F during the weekday PM peak hour under cumulative traffic conditions. Therefore, any trips generated by the proposed project on westbound State Route 68 between Laureles Grade Road and Corral de Tierra during the weekday AM peak hour or on eastbound State Route 68 between Laureles Grade Road and Corral de Tierra during the weekday PM peak hour would be considered a significant cumulative impact.

State Route 68 between Corral de Tierra and San Benancio Road (Roadway Segment #5) would operate at LOS F in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 23.5 and 10.4 mph, respectively); and LOS F in the eastbound and westbound directions during the weekday PM peak hour (average speeds of 13.8 and 9.8 mph, respectively). During AM peak hour operations, eastbound State Route 68 between Corral de Tierra and San Benancio Road would be degraded from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. During the weekday PM peak hour, eastbound and westbound State Route 68 between Corral de Tierra and San Benancio Road would continue to operate at LOS F under cumulative traffic conditions. In addition, westbound State Route 68 between Corral de Tierra and San Benancio Road would continue to operate at LOS F during the weekday AM peak hour under cumulative traffic conditions. Therefore, any trips generated by the

proposed project on eastbound or westbound State Route 68 between Corral de Tierra and San Benancio Road during the weekday AM or PM peak hours would be considered a significant cumulative impact.

The cumulative trips associated with the proposed project and other development would degrade the level of service or would exacerbate an unacceptable LOS F operating condition at four of five study segments. This would be considered a **significant cumulative impact**.

The following mitigation measure would require that the project applicant contribute their fair share towards the regional traffic impact fee (also referred to as the Transportation Agency of Monterey County (TAMC) impact fee) to help fund regional improvements in the County and reduce the project's cumulative impact to affected intersections and roadway segments.

Mitigation Measure

MM 3.10-7 The Monterey County Resource Management Agency shall require the project applicant to pay any traffic impact fees in effect at the time of building permits application. Such fees include the TAMC Regional Impact Fee, which will mitigate for cumulative impacts to roadway segments and intersections along State Route 68. If the proposed project contributes monetarily toward the extension of the State Route 68 (see mitigation measure MM 3.10-2) in an amount greater than their calculated TAMC Impact Fee responsibility, the proposed project shall be credited for the TAMC fee and the fee considered satisfied, as they will be contributing their fair share toward cumulative impacts and regional improvements identified within the TAMC nexus study.

The traffic analysis for this project identified the need for additional intersection improvements along the Highway 68 corridor under the cumulative scenario. These projected improvements include:

- Widen and restripe the northbound approach of the SR 218/SR 68 intersection to include one left-turn lane, one through lane, and one right-turn lane. Widen and restripe the eastbound approach to include two left-turn lanes, two through lanes and one right-turn lane. Install right turn overlap phasing at this location.

- At the Laureles Grade/SR 68 intersection, convert the northbound right-turn to right-turn overlap phasing.

- At the Corral de Tierra Road/SR 68 intersection, convert the northbound right-turn to right-turn overlap phasing.

The project's contribution to these cumulative mitigation improvements would be satisfied by the project's payment of the TAMC Regional Development Impact Fee, or by the project's mitigation requirements under mitigation measure 3.10-2. This is consistent with the County and TAMC's methodology for addressing cumulative traffic impacts.

The TAMC Regional Development Impact Fee Program is one element of TAMC's proposed *14-Year Improvement Plan*. However, the Regional Development Impact Fee Program has not been adopted. The County of Monterey has voluntarily been collecting regional traffic impact fees consistent with the *Draft Nexus Study* (TAMC 2004) to contribute towards funding improvements on the regional roadways. The County Public Works Department has deemed payment of a regional traffic impact fee as appropriate mitigation for regional impacts. The defeat of Measure A means that TAMC will not be receiving additional revenue through a half-cent tax increase, which is one of the funding sources identified for construction of needed improvements. Therefore, it may take longer for TAMC to implement regional roadway improvements, but does not preclude voluntarily moving forward with the improvements.

Although TAMC does not have the mechanism in place to implement specific projects (such as State Route 68 freeway extension), the County of Monterey has been collecting TAMC fees for other projects throughout the County. It is thus recommended that the applicant pay the County of Monterey their fair share to the TAMC fee program. Through the payment of the regional traffic impact fees, the proposed project would directly contribute to future improvements, which would help off-set any cumulative traffic impacts on regional roadways caused by increased trip volume associated with the proposed project.

Payment of regional impact fees (as identified in MM 3.10-7) will mitigate the project's cumulative impacts to the extent feasible; however, as the timing and extent of physical improvements along the State Route 68 corridor are not known at this time, the cumulative impact to intersections and roadway segments will remain **significant and unavoidable** until such time that the physical improvements are constructed.

REFERENCES/DOCUMENTATION

Higgins Associates. *Traffic Impact Analysis*. May 28, 2008.

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Monterey, County of. *Toro Area Plan*. September 1983 with Amendments through 1998.