lssu	е	Less Than Significant or No Impact	Potential Significant Impact Adequately Addressed in MEIR	MEIR Required Additional Review: No Significant Impact	Less Than Significant Impact Due to Mitigation Measures in Project Description	New Additional Significant Impact Not Addressed in MEIR	New Additional Mitigation Measures Required
<b>5.15</b> proje	<b>Transportation/Traffic.</b> Would the ect:						
a)	Cause an increase in traffic to the existing traffic load and capacity of the street system (i.e., result which is substantial in relation in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			1			
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or 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?	•					
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)	Result in inadequate parking capacity?						
g)	Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?						

#### Setting

TJKM<sup>2</sup> was retained to evaluate the traffic impacts associated with the proposed Neighborhoods I and J Revised Tentative Map application. The new land plan for Neighborhoods I and J maintains the types of land uses approved with the Tentative Map on July 7, 2005, but rearranges them in a manner intended to enhance the living experience, both within the neighborhoods and as viewed from the overall Mountain House community. The project also shifts some density from Residential Low and Residential Medium to the Residential Medium-High zoning designation.

<sup>&</sup>lt;sup>1</sup> This impact remains significant and unavoidable as identified in the 1994 MEIR.

<sup>&</sup>lt;sup>2</sup> TJKM Transportation Consultants completed the *Mountain House Neighborhoods I* and J Revised Tentative Map Application Traffic Study (Draft) under contract to San Joaquin County in November 2006. A copy of this *Traffic Study* can be reviewed at the San Joaquin County Community Development Department, 1810 East Hazelton Avenue, Stockton, California.

The project vicinity is shown in Figure 5.15-1 and the project site plan is shown in Figure 5.15-2. The purpose of this section is to determine whether 1) there are any additional significant transportation/traffic effects not previously examined in the approved Master EIR, 2) any new mitigation measures are required, 3) any substantial changes have occurred with respect to the circumstances under which the approved Master EIR was certified, or 4) any information is available that was not known and could not have been known at the time the Master EIR was certified such that major revisions of the previous Master EIR would be required (CEQA Guidelines Sections 15176 and 15179). A "substantial change" must involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects (CEQA Guidelines Section 15162). The transportation/traffic section assesses whether there are any additional traffic or transportation impacts that may require further mitigation not previously addressed in the 1994 Final Master EIR (1994 MEIR). The previous Neighborhoods I and J Tentative Map was approved in July 2005.

Planning and regulatory documents that have been consulted in preparation of this traffic analysis include the following:

- Mountain House New Community Master Plan (1994);
- Mountain House New Community Specific Plan II;
- Mountain House New Community Specific Plan III;
- Mountain House New Community Neighborhood F Transportation Impact Analysis; and
- Mountain House New Community Neighborhoods E and G Transportation Impact Analysis.

#### Traffic Models

The traffic assessment for the 1994 MEIR was conducted during 1993. To assess project impacts, three forecast years were considered at that time: 1) 1993 for existing conditions, 2) year 2000 for short-term impacts, and 3) year 2010 for cumulative impacts. Since the completion of the 1994 MEIR, the model that was used for that evaluation has not been kept up-to-date. The analysis presented in this section uses a more current gravity model developed for the San Joaquin County Council of Governments (SJCOG). Therefore, to determine any changes in cumulative traffic impacts as compared to the 1993 analysis, this more recently updated model has been used for all recent projects in San Joaquin County.

Before performing the future demand forecasting, it was important to calibrate the model. The network was modified to include all the future study area intersections. Based on the collected traffic counts, the AM and PM turning movement volumes were entered into the "existing condition" portion of the model. TJKM successfully performed the model calibration for the study area by revising the network topology and attributes as well as the Origin-Destination



Figure 5.15-1







#### Figure 5.15-2 PROPOSED SITE PLAN



SOURCE: TJKM, 2006

(OD) demand. The model was calibrated to within 6 percent of the relative errors between the computed and observed volumes. Therefore, the model has been calibrated to a high level of accuracy.

A total of three scenarios were studied:

- Existing Conditions;
- 2025 Cumulative-plus-Previously Approved Neighborhoods I and J Mountain House Buildout Conditions; and
- 2025 Cumulative plus Currently Proposed Neighborhoods I and J Mountain House Buildout Conditions.<sup>3</sup>

#### Thresholds of Significance

The level of service standards shown in Table 5.15-1 were taken from the San Joaquin County General Plan, Mountain House Master Plan, and San Joaquin

Congestion Management Plan. Mountain House gateway road segments include Grant Line Road from the County line to Mountain House Parkway, Mountain House Parkway from Byron Road to I-205, and Byron Road from the County line to Wicklund Road.

Table 5.15-1 LEVEL OF SERVICE (LOS) STANDARDS				
Roadways	LOS			
Community gateway roads within Mountain House, including Byron Road, Grant Line Road, Mountain House Parkway	D			
Freeways	Е			
Alameda County roads	D			
Other roads	С			

At unsignalized intersections, at least one signal warrant (as defined

Source: TJKM, 2006.

in the *Manual on Uniform Traffic Control Devices* (MUTCD)) must be met before a traffic signal can be considered as a potential mitigation. The level of service is reported for the minor approach as well as for the whole intersection. Depending on the availability of gaps, the minor approach might be operating at level of service (LOS) D, E, or F while the intersection as a whole operates at LOS C or better. A minor approach that operates at LOS D, E, or F does not automatically translate into a need for a traffic signal. A signal warrant would still need to be met. There are many instances where only a few vehicles are experiencing LOS D, E, or F on the minor approach while the whole intersection operates at an acceptable level of service. A signal is usually not warranted under such conditions. (See further discussion under "Intersection Level of Service Methodology" below.)

#### Existing Traffic Operations and Conditions

<u>Freeways</u>. The Mountain House project area is served by the following freeways (see Figure 5.15-1):

<sup>&</sup>lt;sup>3</sup> The buildout conditions were changed from the year 2010 (1993 analysis) to the year 2025 given the more likely anticipated date of buildout.

- Interstate 580 (I-580) is a major east-west freeway located south of the project area and extending from Interstate 5 (I-5) in San Joaquin County to State Route 101 (SR 101) in Marin County. Near the project area, I-580 is a four-lane divided freeway carrying approximately 42,000 vehicles per day near its interchange with Patterson Pass Road/Mountain House Parkway (Caltrans, 2005). This freeway serves as a connector between I-5 (a principal north-south freeway for both auto and truck traffic) and the Bay Area.
- Interstate 205 (I-205) is located just to the south of the project area. Near the project area, I-205 is a six-lane divided freeway carrying approximately 112,000 vehicles per day near its interchange with Patterson Pass Road/ Mountain House Parkway (Caltrans, 2005). I-205 provides access to Tracy and to the greater San Francisco Bay Area and Silicon Valley job attraction centers to the west. Construction is currently underway to widen I-205 from four to six lanes between Eleventh Street in the Tracy area and I-5 further east.

The I-205/Mountain House Parkway interchange is located between interchanges at Eleventh Street to the east and I-580 to the west. Currently, Mountain House Parkway is a two-lane undivided roadway. The existing interchange on I-205 has a two-lane overpass (one lane in either direction). However, construction is underway to improve the interchange as of November 2006. The ultimate improvement consists of widening the existing two-lane overpass to six lanes to provide three northbound and three southbound lanes, constructing a southbound-to-eastbound loop on-ramp, and modifying the ramps to the existing intersections by the year 2025.

The 2005 Caltrans volume report indicates that the annual average daily traffic volumes on I-205 are 112,000, east and west of Mountain House Parkway. The peak month average daily traffic volumes are 116,000 east and west of Mountain House Parkway. Truck travel on I-205 is relatively high (approximately 12 to 15 percent) in the project study area.<sup>4</sup> The existing peak-hour (2005), peak-directional volume on I-205 in the vicinity of Mountain House Parkway is approximately 7,900 vehicles per hour (vph).

<u>Local Roads</u>. The following roads provide local access to the freeway and the immediate areas (see Figure 5.15-1):

- <u>Grant Line Road</u> is a two-lane, east-west road that runs parallel to and north of I-205. It provides access to the City of Tracy and also connects to the I-580 freeway to the west of I-205 via Altamont Pass Road. In the vicinity of the project area, it is generally a rural road with posted speeds limits of 45 miles per hour. Ultimately, it is planned to be a four-lane road.
- <u>Mountain House Parkway</u> is generally a four-lane, north-south roadway that provides a connection between I-205 and Byron Road. It is located at the

<sup>&</sup>lt;sup>4</sup> The project study area extends to the north of I-205 from the Alameda County/Contra Costa County line to the west and Mountain House Parkway to the east.

eastern boundary of the Mountain House community. Improvements are currently being made to widen the roadway to four lanes south of Grant Line Road. Ultimately, it is planned to be a six-lane road near Grant Line Road and an eight-lane road near the freeway. South of I-205, Mountain House Parkway extends to I-580 and has two to four lanes.

 <u>Byron Road</u> is a two-lane rural road that runs parallel to the Union Pacific Railroad (UPRR) and transects the northern portion of the Mountain House community. It provides access to downtown Tracy to the east and Contra Costa County to the west. Byron Road forms the southern boundary of Neighborhoods I and J. Ultimately it is planned as a four- or six-lane roadway.

#### Transit Services

The San Joaquin Regional Transit District (SJRTD) provides public transit services in the Stockton metropolitan area as well as countywide, intercity, commuter, and rural transit services. The SJRTD provides bus services between the San Joaquin County region and other Bay Area cities and Sacramento. The SJRTD operates nearly 20 bus trips per day between San Joaquin County (Stockton, Tracy, Lodi, Escalon, Ripon, and Manteca) and the South Bay, East Bay, Sacramento, and Napa regions. Current SJRTD commuter routes are shown below in Table 5.15-2.

The SJRTD provides County Area Transit (CAT) Elderly and Disabled Dial-A-Ride service to qualifying San Joaquin County residents. This service is available to Mountain House residents. Passengers can be taken directly to the Tracy Wal-Mart and the West Valley Mall. Fares are \$1.00 for the Elderly and Disabled Dial-A-Ride service. For travel within Tracy or to outlying cities or areas, passengers will need to transfer to Tracy's Dial-A-Ride, the Tracer, or SJRTD's "Hopper" service. Fares are \$1.10 each way on SJRTD's Hopper and \$0.75 on the Tracer. Transfers are not provided to County Area Transit General Public Dial-A-Ride passengers.

In May 1997, the San Joaquin Regional Rail Commission (SJRRC), the Alameda Congestion Management Agency (ACCMA), and the Santa Clara Valley Transportation Authority (VTA) executed an agreement to create the Altamont Commuter Express (ACE) Joint Powers Authority (JPA). The ACE rail service became operational on October 19, 1998. The closest station to the west is Livermore with additional stations at Pleasanton, Fremont, Great America, Santa Clara and San Jose.

The closest ACE station to Mountain House is located in Tracy at Tracy Boulevard near Linne Road. This station has 525 parking spaces. Parking for ACE riders is free and available on a first-come, first served basis. Monthly fares range from \$65.00 to \$259.00 depending on the number of zones traveled. Three ACE trains and two buses provide service to the Tri-Valley and Bay areas.

#### Table 5.15-2 SAN JOAQUIN COUNTY REGIONAL TRANSIT DISTRICT (SJRTD) INTERREGIONAL COMMUTER BUS SERVICE (as of October 2006)

Routes	Trips Per Day	Communities Served
Routes 51-55, 67-68 – Livermore	7	Routes 51 and 52 from Stockton, Route 54 from Manteca, Routes 53 and 55 from Manteca and Tracy, Route 67 from Ripon, and Route 68 from Escalon.
Route 57 – Dublin- Pleasanton (Hacienda Business Park)	1	Stockton, Manteca, and Tracy via Highway 99 to Hacienda Business Park in Pleasanton and the Federal Correctional Institution in Dublin.
Route 62, 64 – Lockheed 1 & 2	2	Tracy to Lockheed Martin in Sunnyvale; Manteca to Lockheed Martin in Sunnyvale.
Route 66, 72 – Lockheed 3, 4	2	Stockton, Manteca, and Tracy via Highway 99 to Lockheed Martin in Sunnyvale.
Route 63 – Sacramento via Highway 99	1	Downtown Sacramento via Highway 99; subscription bus serves commuters traveling from east Stockton and Lodi via Highway 99 to downtown Sacramento.
Route 65 – Sacramento via I-5	1	Downtown Sacramento via I-5; subscription bus serves commuters traveling from west Stockton via I-5 to downtown Sacramento.
Route 70 – San Jose	1	Stockton, Manteca, and Tracy. This bus services multiple locations in the San Jose area.
Route 71 – Dublin/ Pleasanton BART 2	1	The Dublin/Pleasanton BART 2 subscription bus serves commuters from west Stockton, Lathrop, and Tracy who work in the Bay Area.
Route 73 – Northrop Grumman/Sunnyvale	1	The Northrop Grumman/Sunnyvale subscription bus serves commuters traveling from Stockton, Manteca, and Tracy to Northrop Grumman and National Semiconductor in Sunnyvale.
Route 74 – Mountain View/Palo Alto	1	The Mountain View/Palo Alto subscription bus serves commuters traveling from Stockton, Manteca, and Tracy to multiple employer locations in the Mountain View and Palo Alto areas.
Route 75 – Santa Clara	1	This route has pick-up points in Stockton, Manteca, and Tracy. This bus services multiple locations in the Santa Clara and San Jose areas and includes a stop in Milpitas.

Source: TJKM, 2006.

#### Airports

There are two municipal airports within a 10-mile radius of the Mountain House community. The Stockton Metropolitan Airport is located on the southern boundary of the City of Stockton. This airport is located between two major north-south thoroughfares: I-5 (located 1.5 miles to the west of the airport) and State Highway 99 (which borders the airport on the east side).

The Tracy Municipal Airport, located at the southern end of Tracy, includes 166 acres used for aircraft parking, taxiways, and runway space. There are two active runways at the airport.

Neither of the airports mentioned above are major airports that serve interstate travel or international travel. International travel is through Oakland International Airport or the San Francisco International Airport, which are approximately 44 and 55 miles, respectively, to the west of the Mountain House community.

#### Intersection Level of Service Methodology

Level of service (LOS) is a qualitative measure describing traffic conditions at a road or intersection, including driver perceptions of these conditions (see Table 5.15-3). The level of service generally describes these conditions based on such factors as speed and travel time, delay, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility (i.e., roadway or intersection) that is analyzed. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Peak-hour intersection conditions are reported as delay in seconds per vehicle with corresponding levels of service. In the traffic analysis presented in this section, operating conditions at all study intersections were evaluated using SYNCHRO 6.0 software emulating the Highway Capacity Manual (HCM) 2000 methodology (Transportation Research Board, 2000). This method provides an overall intersection level of service. The *Traffic Study* contains a detailed description of the methodology.

At one-way and all-way stop-controlled intersections, level of service was evaluated using the 2000 Highway Capacity Manual (HCM) Unsignalized Intersections analysis methodology. The method ranks level of service on an A through F scale similar to that used for signalized intersections, but uses control delay in seconds as its measure of effectiveness.

A total of 16 existing and future major intersections have been identified in the Master Plan for evaluation. TJKM collected the existing peak-hour turning movements for five of the existing study intersections as shown in Figure 5.15-3. Three of the five existing intersections are signal controlled. The results of the level of service analyses are shown in Table 5.15-4 below. All intersections currently operate at LOS C or better.

## Significant Impacts Identified in the 1994 Master Plan EIR (MEIR)

The following were significant transportation impacts identified in the 1994 MEIR with the buildout of the entire Mountain House project:

1) At buildout, the project trips would contribute significantly to projected traffic growth and level of service deficiencies on the road system. Some

г

Level of Service	Type of Flow	Delay	Maneuverability	Control Delay/ Vehicle (s/veh)ª
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase and not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	<u>&lt;</u> 10.0
В	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	> 10-20
С	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20-35
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result in some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	> 35-55
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	> 55-80
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with oversaturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	> 80

Table 5.15-3 LEVEL OF SERVICE (LOS) CRITERIA FOR SIGNALIZED INTERSECTIONS

<sup>a</sup> s/veh = seconds per vehicle.

Source: TJKM, 2006.



## Figure 5.15-3 **EXISTING PEAK HOUR VOLUMES & LANE CONFIGURATIONS**

SOURCE: TJKM, 2006



			AM Peak	Hour	PM Peal	k Hour
Inters	sections	Exiting Control	Delay (s/veh)	LOS	Delay (s/veh)	LOS
1.	Great Valley Parkway/Central Parkway		Future	Intersectio	on	
2.	Great Valley Parkway/Entrance to Neighborhood I	Future Intersection				
3.	Mountain House Parkway/ Central Parkway	Future Intersection				
4.	Mountain House Parkway/ Bethany Road extension	Future Intersection				
5.	Mountain House Parkway/ Byron Road	Signalized	12.0	В	16.0	В
6.	Mountain House Parkway/ Mascot Boulevard	Signalized	8.1	А	7.1	А
7.	Mountain House Parkway/ Grant Line Road	Signalized	8.7	А	7.8	А
8.	Mountain House Parkway/ I-205 Westbound Ramps	One-Way STOP	(23.6)	(C)	(14.7)	(B)
9.	Mountain House Parkway / I-205 Eastbound Ramps	One-Way STOP	(19.4)	(C)	(21.6)	(C)
10.	Grant Line Road/Central Parkway		Future	Intersectio	on	
11.	Grant Line Road/Great Valley Parkway		Future	Intersectio	on	
12.	Great Valley Parkway/ Mascot Boulevard		Future	Intersectio	on	
13.	Great Valley Parkway/ Main Street		Future	Intersectio	on	
14.	Great Valley Parkway/ De Anza Boulevard	Future Intersection				
15.	Great Valley Parkway/ Kelso Road		Future	Intersectio	n	
16.	Great Valley Parkway/Byron		Future	Intersectio	on	

Table 5.15-4 EXISTING LEVELS OF SERVICE

Notes: X = Intersection level of service.

(X) = Level of service for the minor approach.

(X.X) = Minor approach delay in seconds per vehicle

s/veh = seconds per vehicle.

Source: TJKM, 2006.

of these associated impacts would be unavoidable. The project would generate a need for transit services to, from, and within the site.

2) The Master Plan project traffic increases on I-205, I-580, and I-5 would range from 10,000 to 23,000 daily vehicles over levels projected without the project in 2010. Most of the projected increases would exacerbate highly deficient levels of service already projected at some locations in 2010 without the project. The traffic impacts on I-205 could potentially be mitigated with regional improvements, but the impacts on I-580 west of I-205 north of I-205 would be unavoidable.

- 3) Intersection improvements at Mountain House Parkway and Grant Line Road would be required to accommodate project traffic.
- 4) Improvements would be needed at several County and other roads, including portions of Grant Line Road, Mountain House Parkway, Byron Road, Altamont Pass Road, Eleventh Street, State Route (SR) 4 and Tracy Boulevard leading to SR 4.
- 5) Adequately sized internal roadways would be required to accommodate substantial amount of internal traffic.
- 6) The Master Plan project would generate a significant demand for parking. However, adequate parking supply would be provided based on the parking ordinance.
- 7) The Master Plan project would increase the demand for bicycle travel within the project site as well as between the site and adjacent developed areas.
- 8) The project would increase the number of vehicles crossing the existing Southern Pacific railroad tracks that run through the site.

## Findings Related to Significant Impacts Identified in 1994 MEIR

The following mitigation measures were adopted to mitigate the above impacts. However, the 1994 MEIR concluded that the level of service for regional roadways, including certain locations at I-205 and I-580, would remain unacceptable, resulting in a significant and unavoidable impact.

<u>Mitigation Measure M4.12-1</u>: This measure addressed the need for 1) a Transportation Systems Management (TSM) program, 2) a Transportation Management Association (TMA), 3) local transit service, 4) increased proximity of residential and commercial uses as a Master Plan policy, 5) flexible work programs/hours to reduce peak hour travel, 6) Transit Oriented Development (TOD) guidelines for neighborhood centers as Master Plan policy, 7) community contributions to an Altamont Station study and development for rail use, 8) an annual Transportation Monitoring Program to allow revisions to transportation mitigation measures, and 9) a new implementation measure for the Master Plan addressing need for a telecommuting center within Mountain House.

The findings for the 1994 MEIR did not address this specific mitigation measure. The Master Plan does address 1) a monitoring program, 2) contributions to the Altamont Station, 3) promotion of telecommuting, and 4) a Transportation Demand Management (TDM) program. A TDM program was prepared for Mountain House in 1997. The TDM program is to be

administered by the MHCSD until a Transportation Management Association is formed. The TDM program is to be updated every five years. As of November 2006, the monitoring report includes traffic counts and level of service analysis on all community gateways and other affected County roads. The report will be expanded to include more detailed analysis of the adequacy of the near-term trigger points and reports on the progress toward implementation of the required transportation improvements.

<u>Mitigation Measure M4.12-2</u>: The Master Plan was amended to address reducing freeway traffic congestion by 1) contributions to widening of I-205 or contributions to a parallel east-west roadway north of I-205, or 2) widening of Altamont Pass Road if consistent with Alameda County policy, and 3) Public Financing Plan adjustments.

<u>Mitigation Measure M4.12-3</u>: Table 9.1 of the Master Plan was adjusted to address freeway and rail improvements needed for buildout of the community.

<u>Mitigation Measure M4.12-4</u>: Table 9.2 of the Master Plan was adjusted to address arterial road improvements. Text was added to the Master Plan to address arterial improvements.

<u>Mitigation Measure M4.12-5</u>: This mitigation measure addressed internal roads. Amendments to the Master Plan were made to show improvements/widening of local roads within the community.

<u>Mitigation Measure M4.12-6</u>: This mitigation measure addressed shared parking opportunities. Only a portion of the recommended text changes were made to the Master Plan.

<u>Mitigation Measure M4.12-7</u>: The Master Plan was amended to address regional bicycle facilities and the project's fair share cost to implementing connections to such facilities.

<u>Mitigation Measure M4.12-8</u>: The Master Plan was amended to address safe rail crossings for vehicles, pedestrians, and bicyclists.

<u>Mitigation Measure M4.12-9:</u> The current plan shows closing of the rail crossings at Wicklund Road and Henderson Road. This would eliminate current limited weaving and merging sections. The new crossing would be located at Mountain House Parkway when it is extended to the north of Byron Road.<sup>5</sup>

#### **Discussion Regarding Neighborhoods I and J**

a) 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

<sup>&</sup>lt;sup>5</sup> The crossing of Byron Road is now proposed to be on Central Parkway.

increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

As discussed in the Setting section, the following three scenarios were evaluated:

- Existing Conditions;
- 2025 Cumulative plus Previously Approved Neighborhoods I and J Mountain House Buildout Conditions; and
- 2025 Cumulative plus Currently Proposed Neighborhoods I and J Mountain House Buildout Conditions.

This impact assessment addresses each of the scenarios except "Existing Conditions" which were discussed in the Setting section. The other two scenarios address the modification of Neighborhoods I and J as compared to the approved 2005 Tentative Maps for Neighborhoods I and J.

#### Funding for Transportation Mitigation Measures

The MHCSD has established the Mountain House Transportation Improvement Fee (MHTIF) to fund community road improvements and improvements on regional (gateway) roadways serving the community. In addition, development within the MHCSD boundaries will pay Transportation Impact Mitigation Fees (TIMF) as part of the Countywide program that funds regional transportation improvements. These fee programs have been established to provide a simple and equitable method for funding transportation improvements.

The MHTIF has been designed to fund all mitigation required within the Master Plan area. Each phase of development within the community will pay fees based on the number of dwelling units and commercial square footage created. Construction of phased improvements will be required such that traffic levels of service are maintained within the adopted standards (i.e., LOS D on regional gateways and LOS C on community roadways) throughout the development of the community.

The MHTIF anticipates funding for the community's share of traffic mitigation both within and outside of San Joaquin County. The Offset Program included within the MHTIF recognizes that trips from other counties will also affect roads within the MHTIF and provides a mechanism through which this shared responsibility can be satisfied. It permits funding of roadway improvements beyond the project's fair share within San Joaquin County as one way to satisfy the community's overall shared funding responsibility. This requires similar overfunding of improvements by Contra Costa and Alameda counties on improvements within their respective jurisdictions, thus eliminating the need for complicated funding agreements between the affected counties.

In summary, development within the MHCSD is expected to meet its transportation mitigation responsibilities through a combination of the following:

- Paying MHTIF fees for construction of improvements on regional gateways to the community and roadways within the community, or building roadway infrastructure within the community as required to maintain levels of service within the adopted standard; and
- Paying TIMF fees for construction of improvements elsewhere in the County.

#### Scenario 1: 2025 Cumulative plus Previously Approved Neighborhoods I and J Project plus Mountain House Buildout Conditions

This scenario considers the buildout of the cumulative 2025 land use including all the neighborhoods in the Mountain House Master Plan, the proposed Delta College and the addition of traffic from the previously-approved buildout of Neighborhoods I and J (July 2005).

The previously approved age-restricted communities within Neighborhoods I and J would primarily include lands designated for low and medium density housing development. These two neighborhoods would be located north of Byron Road and would be developed around one large golf course. Neighborhoods I and J would consist of 1,377 units and 1,029 units respectively.

The trip generation results are shown in Table 5.15-5. Trips from outside zones into Neighborhoods I and J zones were computed as *inbound* trips and the converse as *outbound* trips. The projected 2025 cumulative volumes with the previously approved Neighborhoods I and J traffic are shown in Figure 5.15-4.

Table 5.15-5
TRIP GENERATIONS FOR
APPROVED NEIGHBORHOODS I AND J

	Inbound	Outbound	Total			
AM	235	975	1,210			
Percent	20%	80%				
PM	1,185	469	1,654			
Percent	72%	28%	100%			

Source: TJKM, 2006.

<u>Assumed Roadway Improvements</u>. All on-site study roadways are assumed to be built to accommodate projected traffic. It is anticipated that Great Valley Parkway, Central Parkway, Mascot Boulevard and Main Street would be constructed to four lanes (two lanes per direction).

It is assumed that Mountain House Parkway from south of Mascot Boulevard to Von Sosten Road and Byron Road from south of Central Parkway to Henderson Road would be constructed to six lanes (three per direction).

Mountain House Parkway from south of Von Sosten Road to the freeway is assumed to be improved to an eight-lane section. The previously approved lane configurations for all the study intersections are shown in Figure 5.15-5. The previously approved improvements are consistent with the 1994 Master Plan EIR.

Table 5.15-7 is a summary of adopted transportation improvements differentiated as follows: improvements included as part of the current project, those initially



Figure 5.15-4

SOURCE: TJKM, 2006

#### 2025 CUMULATIVE PLUS APPROVED NEIGHBORHOODS I & J TURNING MOVEMENT VOLUMES





Figure 5.15-5
2025 BUILDOUT LANE CONFIGURATIONS

SOURCE: TJKM, 2006



				I. I.I	DMD	I. I
		Traffic	AM Pea Delay	ik Hour	PM Pea Delay	K Hour
	Intersections	Control	(s/veh)	LOS	(s/veh)	LOS
1	Great Valley Parkway/Central Parkway	Signalized	9.3	А	18.9	В
2	Great Valley Parkway/Entrance to Neighborhood I	Signalized	7.7	А	13.8	В
3*	Mountain House Parkway/Central Parkway	Signalized	18.7	В	15.1	В
4*	Mountain House Parkway/Bethany Rd extension	Signalized	13.3	В	23.3	С
5*	Mountain House Parkway/ Byron Road	Signalized	27.8	С	33.6	С
6*	Mountain House Parkway / Mascot Boulevard	Signalized	14.5	В	6.5	А
7*	Mountain House Parkway/ Grant Line Road	Signalized	49.9	D	35.4	D
8*	Mountain House Parkway/ I-205 Westbound Ramps	Signalized	8.9	А	7.1	А
9*	Mountain House Parkway / I-205 Eastbound Ramps	Signalized	3.4	А	8.6	А
10*	Grant Line Road/Central Parkway	Signalized	27	С	22.5	С
11*	Grant Line Road/Great Valley Parkway	Signalized	14.3	В	7.6	А
12	Great Valley Parkway/Mascot Blvd	Signalized	7.6	А	7.3	А
13	Great Valley Parkway/Main Street	Signalized	4.8	А	6.9	А
14	Great Valley Parkway/De Anza Blvd	Signalized	3.7	А	8.5	А
15	Great Valley Parkway/Kelso Rd	Signalized	10.9	В	30.1	С
16	Great Valley Parkway/Byron Rd	Signalized	36.2	D	38.8	D

Table 5.15-6 2025 CUMULATIVE PLUS PREVIOUSLY APPROVED NEIGHBORHOODS I AND J LEVEL OF SERVICE CONDITIONS

Notes: X = Intersection level of service. \* = Gateway roadways. s/veh = seconds per vehicle.

Source: TJKM, 2006.

	Roadway	Improvements	Initially Identified in 1994 MEIR	Required by MHTIF/ County TIMF	Required Under Adopted 2025 Buildout Conditions	Part of Current Project
1.	Mountain House Parkway (south of Mascot Boulevard to Von Sosten Road)	Widen to six lanes Trigger: Approximately 14,000 units of Mountain House Responsibility: Mountain House Community Developers	$\checkmark$	$\checkmark$	~	$\checkmark$
2.	Byron Road from south of Central Parkway to Mountain House Parkway	Widen to four lanes Trigger: Approximately 7,000 to 8,000 units of Mountain House Responsibility: Mountain House Community Developers	*	~	~	~
3.	Byron Road from south of Central Parkway to Henderson Road	Widen to six lanes Trigger: Approximately 14,000 units of Mountain House Responsibility: Mountain House Community Developers	~	~	~	~
4.	Mountain House Parkway from south of Von Sosten Road to the I-205 freeway	Widen to six lanes Trigger: Approximately 9,000 units of Mountain House Responsibility: Mountain House Community Developers	~	~	~	~
5.	Mountain House Parkway from south of Von Sosten Road to the I-205 freeway	Widen to eight lanes Trigger: Approximately 12,000 units Mountain House Responsibility: Mountain House Community Developers	$\checkmark$	$\checkmark$	~	$\checkmark$
6.	Widening of I-205	<ul> <li>Mitigation Measure M4.12-2 (1994 MEIR)</li> <li>(1) Contribute fair share of I-205 widening from four lanes to six lanes (funded), and from six lanes to eight lanes between I-580 and I-5, either as high-occupancy vehicle (HOV) lanes or mixed flow lanes.</li> <li>(2) As an alternative, the project sponsor shall contribute a fair share to safety and operational improvements and/or to the widening of Altamont Pass Road west of Grant Line Road to four lanes (as HOV or truck lanes), if determined to be consistent with Alameda County policy.</li> <li>(3) Contribute fair share to the development of a parallel east-west roadway system north of I-205, extending between Mountain House and the City of Lathrop, including the necessary multi-jurisdictional alternative/feasibility studies.</li> <li><i>Trigger: As warranted</i></li> <li><i>Responsibility: Defined by MHTIF/County TIMF/Offset Program per terms of Mountain House Master Plan Development Agreement</i></li> </ul>	✓	✓	V	✓

 Table 5.15-7

 2025 CUMULATIVE MOUNTAIN HOUSE BUILDOUT TRANSPORTATION IMPROVEMENTS

#### Table 5.15-7 (continued)

	Roadway	Improvements	Initially Identified in 1994 MEIR	Required by MHTIF/ County TIMF	Required Under Adopted 2025 Buildout Conditions	Part of Current Project
7.	Project Study Report (PSR) for Grant Line Road/I-580 interchange improvements	<ul> <li>Mitigation Measure M4.12-3 (1994 MEIR)</li> <li>(1) Conduct Grant Line Road PSR.</li> <li>(2) Provide for ramp metering with HOV bypass lanes.</li> <li>Trigger: As warranted.</li> <li>Responsibility: Beyond fair share of project as defined in MHTIF/County TIMF/Offset Program per terms of Mountain House Master Plan Development Agreement</li> </ul>	✓	✓	V	✓
8.	Several roadways in other jurisdictions	Mitigation Measure M4.12-4 (1994 MEIR) Fair share participation in traffic studies and improvement measures to include Eleventh Street and Grant Line Road (east of Patterson Road) (City of Tracy), Altamont Pass Road (Alameda County), and Byron Highway (Alameda and Contra Costa counties). Where roadway widening for additional capacity is not feasible or acceptable, safety and operational improvements should be considered in order to better accommodate increased traffic. <i>Trigger: As warranted by Mountain House Community Services District (MHCSD)</i> <i>Responsibility: Defined by MHTIF/County TIMF/Offset Program per terms of Mountain House Master Plan Development Agreement</i>	✓	V	V	~
9.	Connection to off-site bicycle facilities	Mitigation Measure M4.12-7 (1994 MEIR) Contribute fair share in the planning and implementation of off-site bicycle facilities on and connecting with regional bike routes designated on the County Regional Bicycle Plan within five miles of the project, including those along Grant Line Road, Patterson Pass Road, Byron Road, Schulte Road, and the Edmund G. Brown Aqueduct. <i>Trigger: As warranted by MHCSD</i> <i>Responsibility: Defined by MHTIF/County</i> <i>TIMF/Offset Program per terms of Mountain</i> <i>House Master Plan Development Agreement</i>	~	✓	~	~

Note: These roadway improvement triggers are part of the prior conditions of approval for Neighborhoods E and G. The exact timing of the improvements will be supplemented by the results of the Annual Traffic Monitoring program. The Mountain House Master Plan required that Mountain House development mitigate its fair share of transportation impacts through participation in i) payment of a Mountain House Transportation Improvement Fee (MHTIF), and ii) participation in the County's Transportation Impact Mitigation Fee (TIMF) program which includes a fee component for regional roadway improvements, alternative modes of travel and Council of Government (COG) fee. "Fair share" means the community's obligation to participate in the planning, construction and/or funding for an infrastructure facility improvement that will be shared by other jurisdictions, to the extent of the community's proportional impact. The community's obligation shall be as presented in the adopted MHTIF/County TIMF/Offset Program and Master Plan Development Agreement. All the above improvements may be triggered by any of the developments in Mountain House.

Source: TJKM, 2006.

identified in the 1994 MEIR, and those required for 2025 cumulative buildout conditions based on the July 2005 analysis which includes the previously approved Neighborhoods I and J project. The following roadways would be widened to six lanes: Mountain House Parkway from south of Mascot Boulevard to Von Sosten Road and Byron Road from south of Central Parkway to Henderson Road. Other measures include widening other portions of Mountain House Parkway to eight lanes, widening I-205, contributing to a new east-west corridor parallel to I-205, and contributing to additional road improvements and off-site bicycle facilities. All improvements are similar to what was identified in the 1994 MEIR.

As shown in Table 5.15-7, cumulative 2025 conditions would require a number of improvements that were identified in the 1994 MEIR and that would be required for ultimate buildout of the new community under Scenario 1.

<u>Level of Service Analysis</u>. The level of service analysis was performed based on the previously adopted and approved lane configurations as shown in Figure 5.15-5. The results of the analysis are shown in Table 5.15-6. The results show that, under Scenario 1, all intersections for gateway roadways would operate at LOS D or better and the remaining study intersections would operate at LOS C or better.

Based on previously adopted mitigation measures, it is anticipated that Great Valley Parkway, Central Parkway, Mascot Boulevard, and Main Street ultimately would be constructed to four lanes. All study intersections would operate at LOS D or better for gateway intersections and LOS C or better for others

#### Scenario 2: 2025 Cumulative Mountain House Buildout Plus Neighborhoods I and J Revised Tentative Map Application Project Conditions

This scenario considers the buildout of the cumulative 2025 land uses including all the neighborhoods in the Mountain House Master Plan and the addition of traffic from the proposed Neighborhoods I and J revised Tentative Map traffic.

The purpose of this analysis is to determine the traffic impacts due to the proposed land use and circulation changes as proposed in the Neighborhoods I and J Revised Tentative Map application.

The proposed age-restricted communities within Neighborhoods I and J would primarily include lands designated for low, medium and medium-high density housing development. The two neighborhoods would be located north of Byron Road and would be developed around one large golf course. The proposed Neighborhoods I and J Revised Tentative Map project would consist of 2,406 units. The proposed project maintains the unit count approved with the Tentative Map on July 7, 2005 (also 2,406 units), but rearranges land uses in a manner intended to enhance the circulation and living experience. The project shifts some density from Residential Low Density and Residential Medium Density to the Residential Medium-High Density zoning designation.

<u>Assumed Roadway and Circulation Improvements</u>. Compared to the 2005 approved Tentative Map, the primary changes proposed by the Revised Tentative Map that relate to roads and circulation are:

- Creation of a new unloaded collector street linking Neighborhoods I and J that is bifurcated by the Great Valley Parkway arterial road. This new collector road would bridge Great Valley Parkway and eliminate an intersection at this location.
- The development of a park system that creates a single continuous public connection between the North Community Park (on the east side of Central Parkway) and Old River Regional Park. This park/trail system abuts the unloaded collector road right-of-way, minimizing street crossings. This predominantly linear feature also provides access to small parks and focal points along its alignment.

<u>Trip Generation</u>. Trip generation for Neighborhoods I and J was estimated and distributed onto the nearby street network based on the traffic model.

According to the ITE Trip Generation Report, the trips per dwelling unit are less as the density of the housing increases. The trip generation results are shown in Table 5.15-8. Compared to the previously approved project, it is estimated that the Revised Tentative Map project would generate approximately 72 and 102 fewer trips, respectively, during the AM and PM peak hours. The result of the trip distribution

#### Table 5.15-8 TRIP GENERATIONS FOR REVISED TENTATIVE MAP NEIGHBORHOODS I AND J

	Inbound	Outbound	Total
AM	221	917	1,138
Percent	20%	80%	
PM	1,113	439	1,552
Percent	72%	28%	100%

Source: TJKM, 2006.

is shown in Figure 5.15-6. The projected 2025-plus-proposed-project peak-hour volumes are shown in Figure 15.5-7.

Level of Service Analysis. The level of service analysis was performed based on the lane configurations previously adopted in the 2005 study and as shown in Figure 15.5-8. The results of the analysis are shown in Table 15.5-9. Similar to the approved Neighborhoods I and J scenario, all intersections for gateway roadways would operate at LOS D or better and the remaining study intersections would operate at LOS C or better. The differences in intersection delays due to the traffic impact from the proposed and approved Neighborhoods I and J are shown in Table 15.5-10. Nearly half of the study intersections showed minor increases in delays (five seconds or less) while the rest showed minor reductions in delays. The changes in delays are not significant.

The traffic impacts are not significant. The previously adopted mitigation measures associated with the approved Neighborhoods I and J traffic with the 2025 cumulative buildout traffic would be able to accommodate the projected traffic.



FIGURE 15.5-6 TRIP DISTRIBUTION

<u>Proposed Circulation</u>. As mentioned earlier, the proposed project includes a new unloaded collector street linking Neighborhoods I and J that is proposed to span the Great Valley Parkway arterial road, as shown in Figure 5.15-9. This new collector road would bridge Great Valley Parkway and exit onto Great Valley Parkway near the recreation facility as shown in Figure 5.15-9.

A gated entry station is proposed at the north end of the Recreation Facility as shown in Figure 5.15-9. The applicant has stated that this station will be gated. I It is more likely that most of the projected traffic will be distributed over a few hours since it is an active adult community. Therefore, based on experience at other active adult communities it is likely that traffic control at the gate would be adequate. There may be some queuing if the traffic arrives in a platoon of 10 or 12 cars. This queue could be accommodated on-site. A long two-lane entry throat would be provided for queuing of anticipated vehicles. To increase traffic flow through the gated area and to minimize back-ups of vehicles, the entry would be equipped electronically to control vehicle access into the neighborhood. Resident vehicles would be equipped with transmitter type electronic passes rather than cards requiring roadside readers. All other non-resident vehicles would have to stop at the guardhouse for entry approval.

In addition to the gate at the north end, there are two other gated entrances: one to the south on Great Valley Parkway going to the east into Neighborhood J and another at the east side of Neighborhood J on Central Parkway. Existing homes at the Old River site to the north of Neighborhood I would have access primarily through Central Parkway and a future loop road in Neighborhood K.



Figure 5.15-7

SOURCE: TJKM, 2006

#### 2025 CUMULATIVE PLUS PROPOSED NEIGHBORHOODS I & J TURNING MOVEMENT VOLUMES





Figure 5.15-8

### 2025 BUILDOUT PLUS PROPOSED NEIGHBORHOODS I & J LANE CONFIGURATIONS

SOURCE: TJKM, 2006



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			AM Peak Hour		PM Peak Hour	
	Intersections	Traffic Control	Delay (s/veh)	LOS	Delay (s/veh)	LOS
1	Great Valley Parkway/Central Parkway	Signalized	10.0	В	15.2	В
2	Great Valley Parkway/Entrance to Neighborhood I	Signalized	8.4	А	16.0	В
3*	Mountain House Parkway/Central Parkway	Signalized	18.3	В	15.5	В
4*	Mountain House Parkway/Bethany Road extension	Signalized	12.4	В	28.0	С
5*	Mountain House Parkway/ Byron Road	Signalized	32.6	С	35.5	D
6*	Mountain House Parkway / Mascot Boulevard	Signalized	14.1	В	7.2	А
7*	Mountain House Parkway/ Grant Line Road	Signalized	49.7	D	38.6	D
8*	Mountain House Parkway/ I-205 Westbound Ramps	Signalized	9.4	А	8.1	А
9*	Mountain House Parkway / I-205 Eastbound Ramps	Signalized	3.3	А	9.2	А
10*	Grant Line Road/Central Parkway	Signalized	27.0	С	22.2	С
11*	Grant Line Road/Great Valley Parkway	Signalized	14.2	В	7.5	А
12	Great Valley Parkway/Mascot Boulevard	Signalized	7.7	А	7.2	А
13	Great Valley Parkway/Main Street	Signalized	4.7	А	6.9	А
14	Great Valley Parkway/De Anza Boulevard	Signalized	3.6	А	8.4	А
15	Great Valley Parkway/Kelso Road	Signalized	11.0	В	26.1	С
16	Great Valley Parkway/Byron Road	Signalized	27.6	С	32.5	С

#### Table 5.15-9 2025 CUMULATIVE PLUS PROPOSED NEIGHBORHOODS I AND J TENTATIVE MAP REVISION LEVEL OF SERVICE CONDITIONS

Notes: X = Intersection level of service. \* = Gateway roadways. s/veh = seconds per vehicle. Source: TJKM, 2006.

# Table 5.15-102025 CUMULATIVE DIFFERENCE ININTERSECTION DELAYS PROPOSED MINUSAPPROVED NEIGHBORHOODS I AND J TENTATIVE MAP REVISION

Intersed	tions	AM Peak Hour Delay (sec)	PM Peak Hour Delay (sec)
1	Great Valley Parkway/Central Parkway	0.7	-3.7
2	Great Valley Parkway/Entrance to Neighborhood I	0.7	2.2
3	Mountain House Parkway/Central Parkway	-0.4	0.4
4	Mountain House Parkway/Bethany Road extension	-0.9	4.7
5	Mountain House Parkway/ Byron Road	4.8	1.9
6	Mountain House Parkway / Mascot Boulevard	-0.4	0.7
7	Mountain House Parkway/ Grant Line Road	-0.2	3.2
8	Mountain House Parkway/ I-205 Westbound Ramps	0.5	1
9	Mountain House Parkway / I-205 Eastbound Ramps	-0.1	0.6
10	Grant Line Road/Central Parkway	0	-0.3
11	Grant Line Road/Great Valley Parkway	-0.1	-0.1
12	Great Valley Parkway/Mascot Boulevard	0.1	-0.1
13	Great Valley Parkway/Main Street	-0.1	0
14	Great Valley Parkway/De Anza Boulevard	-0.1	-0.1
15	Great Valley Parkway/Kelso Road	0.1	-4.0
16	Great Valley Parkway/Byron Road	-7.7	-6.3



FIGURE 5.15-9 ILLUSTRATION OF PROPOSED COLLECTOR ROAD SPANNING GREAT VALLEY PARKWAY

Due to the spreading of traffic for the active adult community, it is likely that stop control at the exit on Great Valley Parkway would be adequate for the first few years. Traffic monitoring would be conducted to determine if a signal is warranted or triggered at the intersection on Great Valley Parkway.

b) Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency on designated roads or highways?

With construction of all programmed transportation improvements and the project's fair share contribution to the costs of off-site improvements, the proposed project impacts would be less than significant. No additional mitigation measures would be needed beyond those identified in the 1994 MEIR or previously approved with the Neighborhoods I and J Tentative Map.

As already provided by adopted Mitigation Measure M4.12-1, Countywide Transportation Systems Management (TSM) and Transportation Demand Management (TDM) programs should be designed and implemented soon to promote and facilitate the use of non-auto modes of travel in the County (see further discussion of TDM under Item (g) below.

Currently, a TDM coordinator operates on-site at the MHCSD office. An annual Transportation Monitoring Program has been conducted for the past four years. The current report includes traffic counts and level of service analysis on all community gateways and other affected County roads. The report also includes analysis of the adequacy of the near-term trigger points and reports on the progress toward implementation of the required transportation improvements.

As stated in the 1994 MEIR, traffic congestion on I-205 and I-580 would remain an unavoidable adverse impact. The construction improvement on Mountain House Parkway/I-205 is currently underway and it is expected to be completed by 2007. The widening of I-205 from four to six lanes is underway and should be completed in a few years. The interchange improvement includes a six-lane overpass and loop on-ramp from the southbound to eastbound on I-205. This will be a substantial improvement to the existing condition.

The Grant Line Road/I-580 interchange is located in the Alameda County jurisdiction. According to the County and MHCSD adopted Improvement Programs, the MHTIF will fund the improvements to Grant Line Road between the Alameda County line and the road's intersection with I-580.

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?

The Neighborhoods I and J Revised Tentative Map project and the buildout of the Mountain House community would not have an impact on air traffic patterns.

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

The project would not substantially increase hazards due to design features or incompatible uses. The Master Plan for the Mountain House community stresses design guidelines that require an extensive network of pedestrian and bicycle facilities. The Lammersville Elementary School District is currently a part of a "Safe Walk to School" program with the County Office of Education. This program will promote safe walking and biking to school. No further mitigation measures would be necessary.

e) Result in inadequate emergency access?

The traffic in Neighborhoods I and J and the remainder of Mountain House would have access to multiple routes in the event of an emergency. Based on the proposed Tentative Maps, all neighborhoods would be connected to several major arterial and collector streets. Per discussion with the County, an EVA (or secondary access) would be required at the long cul-de-sac to Old River home sites. Consequently, adequate emergency access would be available. No further mitigation measures would be necessary.

f) Result in inadequate parking capacity?

The project would comply with County's Development Title regarding parking supply as well as the development of shared parking opportunities within the community.

*g)* Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The proposed project supports the integrated land use and circulation plan concept in the Master Plan, as follows.

#### **Bicycle and Pedestrian Facilities**

As originally envisioned in the Master Plan, Class I, II, and III bike routes are proposed throughout Mountain House. The proposed bike routes provide direct connectivity within Mountain House and externally to off-site locations.

Sidewalks are proposed on all residential streets. In addition, direct pedestrian access connections would be provided at strategic locations. These pedestrian access points would promote a walkable environment by providing a more direct connection to major streets and collectors.

#### **Transportation Demand Management**

Transportation Demand Management (TDM), also known as Mobility Management, is a general term for various strategies that increase transportation system efficiency. There are many different TDM strategies with a variety of transportation impacts. Although most individual TDM strategies only affect a small portion of total travel, the cumulative impacts of a comprehensive TDM program can be significant. A set of TDM measures has been adopted as documented in *Mountain House Community – TDM Program and Transit Plan,* dated April 3, 1997. Table 5.15-11 is a summary table of TDM measures and action items of the plan. To date, the measures shown in Table 5.15-11 that have been implemented include bike storage, bus stops, taxi, and or dial-a-ride service. The site plan for a park-and-ride lot is under review.

As already noted in the Setting section, the San Joaquin Regional Transit District (SJRTD) provides public transit services in the Stockton metropolitan area, as well as intercity and interregional commuter services. The SJRTD provides bus services between the San Joaquin County region and other Bay Area cities and Sacramento. The SJRTD operates nearly 20 bus trips per day between San Joaquin County (Stockton, Tracy, Lodi, Escalon, Ripon, and Manteca) and the South Bay, East Bay, Sacramento, and Napa regions. According to the draft MHCSD TDM Program, the MHCSD should work with SJRTD to commence service to the Mountain House Parkway/Central Parkway park-and-ride lot once more then 1,000 homes have been occupied.

Due to projected traffic levels, it is important that, once more than 1,000 homes are occupied, Mountain House be a stop on any future interregional bus services that the SJRTD operates in the I-205 and I-580 corridors. This complies with Mitigation Measure 4.12-1 of the MEIR. As of November 2006, approximately 1,750 homes at Mountain House were occupied. Table 5.15-12 below summarizes some of the transit service triggers. Market forces will influence the land use buildout patterns in the 12 neighborhoods and will determine the level of transit demand. However, a local transit plan with a good headway that serves all major employment centers will go a long way to promote transit use.

#### **Sources of Information**

- California Department of Transportation (Caltrans), 2005. 2005 Traffic Volumes on the California State Highway System, Sacramento, CA.
- Institute of Transportation Engineers (ITE), 2003. Trip Generation Handbook.
- San Joaquin County, 2000. Mountain House Neighborhood "F" Project, Initial Study and Mitigated Negative Declaration. July.
- San Joaquin County, 1994. *Final EIR, Mountain House Master Plan and Specific Plan I.* September.
- San Joaquin County, 1994. *Mountain House New Community Master Plan, Mountain House New Community Specific Plan I.* Adopted November 10.
- San Joaquin County Council of Governments (COG), 1996, San Joaquin County Congestion Management Plan.
- The Hoyt Company, 1997. Mountain House New Community TDM Program and Transit Plan. April 3.

Table 5.15-11
SUMMARY OF MOUNTAIN HOUSE
TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

TDM Measures	Action Items and Trigger Points
TDM coordinator	A TDM coordinator operates on-site at the MHCSD office.
Annual TDM meeting	First meeting to be held when a minimum of 1,000 residents and /or 500 employees are on-site.
Community telecenter	To be developed when 2,500 homes are occupied.
Bicycle storage	To meet County Development Title requirement (5 spaces per building complex, plus one bicycle storage space for every 15 car parking spaces).
Shower and clothing locker facilities	To be added in all developments with 50,000 net rentable square feet or more.
Bus stops	Located every <sup>1</sup> / <sub>4</sub> - to <sup>1</sup> / <sub>2</sub> -mile depending on the land use density, the best location for the land use they are serving, etc.
Altamont Pass platform	Mountain House was required to make a "fair share" contribution to this facility once 4,100 homes were built. The facility has been built.
Three joint-use park- and-ride lots	To be provided throughout the community in the village centers.

Note: MHCSD = Mountain House Community Services District. Source: Mountain House New Community, TDM Program and Transit Plan, April 3, 1997.

Transit Measures	Action Items and Trigger Points
Express bus service to jobs in Tracy	Prior to 44,000 residents in Mountain House, service frequency should be at least 30 minutes in the peak periods.
External bike racks	All transit vehicles to provide bike racks.
San Joaquin Regional Transit District service	When more than 1,000 homes have been occupied.
Taxi service	To be provided as an option once the first 25 residential units are occupied.
Fixed route intracity service	This is transit service that would serve the 12 neighborhoods and the Town Center. Fixed route service should be considered once there is extensive demand for demand-responsive service (taxi). Service frequency for intracity service should be determined by the length of the peak period as the project builds out. Frequency will likely be at least 30 minutes in the peak period and every 60 minutes in the off-peak periods. If the demand warrants increased frequency, then 15- to 20-minute frequencies should be considered at that time. Independent operator should be solicited.

Table 5.15-12
SUMMARY OF MOUNTAIN HOUSE TRANSIT MEASURES

Source: Mountain House New Community, TDM Program and Transit Plan, April 3, 1997.

- TJKM Transportation Consultants, 2000. Neighborhoods E, F, and G Traffic Studies. February 9.
- TJKM Transportation Consultants, 2002. *Demand Forecasting Methodology for Mountain House Project Study*, Pleasanton, CA. May.

Transportation Research Board, 2000. *Highway Capacity Manual*. Special Report 209, Third Edition, National Research Council, Washington, D.C., updated October.

Urban Land Institute, 2005. Shared Parking.

Victoria Transport Policy Institute, 2004. TDM Encyclopedia. June 4.