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TRAFFIC / PARKING IMPACT ANALYSIS

FOR THE

LOOMIS TOWN CENTER IMPLEMENTATION PLAN

Loomis, California

Prepared For:

Moore Iacofano Goltsman, Inc
800 Hearst Ave
Berkeley, CA 94710

Prepared By:

KDAnderson & Associates, Inc.
3853 Taylor Road, Suite G
Loomis, CA 95650
(916) 660-1555

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TRAFFIC / PARKING IMPACT ANALYSIS FOR THE LOOMIS TOWN CENTER IMPLEMENTATION PLAN

Loomis, California

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February 4, 2010

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TRAFFIC / PARKING IMPACT ANALYSIS FOR THE LOOMIS TOWN CENTER IMPLEMENTATION PLAN

Loomis, California

INTRODUCTION

This report summarizes **KDAnderson & Associates'** analysis of the impacts associated with implementing the **Loomis Town Center Implementation Plan**. The Implementation Plan study area includes Town owned properties between Taylor Road and the UPRR. The Implementation Plan identifies public uses that will occupy the Town's property, including parks, trails and parking. The plan area also includes Taylor Road and Horseshoe Bar Road, which together are the circulation backbone of the Downtown Loomis area. Under the Implementation Plan, these streets will be narrowed to slow through traffic while directing on-street parking to new off-street facilities. The Implementation Plan also identifies new facilities for pedestrians and bicyclists, including on-street bicycle lanes and separated pedestrian/bicycle trails.

EXISTING SETTING

Study Area Streets / Intersections

Streets. The text that follows describes the physical characteristics of the streets that serve the Implementation Plan area.

Interstate 80 is the primary east-west arterial across Placer County and Northern California. In the vicinity of the proposed project, Interstate 80 is a six lane controlled access freeway. Access to the freeway is available for the Town of Loomis at the Horseshoe Bar Road interchange and at the Penryn Road interchange to the east and the Sierra College Blvd interchange to the west.

The California Department of Transportation (Caltrans) provides annual reports of the volume of traffic on the state highway system. The most recent counts available from Caltrans for the year 2008 report an *Annual Average Daily Traffic (AADT)* volume of 95,000 west of the Sierra College Blvd interchange, 91,000 vehicles per day between Sierra College Blvd and Horseshoe Bar Road and 85,000 vehicles per day in the area from Horseshoe Bar Road to Penryn Road.

Taylor Road. Taylor Road is a major arterial street that runs parallel to Interstate 80 and links Loomis with the City of Rocklin to the west and with the communities of Penryn and Newcastle to the east. Taylor Road is generally a two-lane road through Loomis, but incremental half section widening has occurred as development has proceeded. In the Implementation Plan area Taylor Road has one travel lane in each direction, and left turn lanes exist at all intersections. On-street parking is permitted at several locations along Taylor Road through downtown Loomis. The speed limit on Taylor Road is 35 mph near Sierra College Blvd and drops to 25 mph at Circle Drive and this limit through the established Town Center area.

New traffic counts conducted in May 2009 for this study reveal that Taylor Road carried an *Average Daily Traffic (ADT)* volume of roughly 10,300 vehicles per day in the area between Sierra College Blvd and Horseshoe Bar Road, with the volume rising to 19,700 ADT between Horseshoe Bar Road and Webb Street and dropping to 16,330 ADT between Webb Street and King Road.

Traffic volumes reported on Taylor Road have been higher in the past. March 2007 traffic counts indicated that Taylor Road carried 21,710 ADT in the area from Horseshoe Bar Road to Webb Street and 17,580 ADT between Webb Street and King Road in the vicinity of the proposed project. These volumes indicate a drop of 7% to 10% over the last two years.

Horseshoe Bar Road. Horseshoe Bar Road is the primary gateway to Loomis from Interstate 80. This arterial street originates at an intersection on Taylor Road in downtown Loomis and continued east across the interchange on Interstate 80. Beyond Interstate 80 Horseshoe Bar Road continues for several miles into the rural area of Placer County near Folsom Lake. Horseshoe Bar Road is a two lane road with auxiliary left turn lanes at major intersections. On-street parking is permitted at a limited number of locations on Horseshoe Bar Road, and the speed limit is 25 mph. New traffic counts made for this study in May 2009 indicated that Horseshoe bar Road carried roughly 14,170 ADT in the area between Library Drive and Taylor Road, with 15,710 ADT counted between Doc Barnes Drive and the Interstate 80 ramps.

Sierra College Blvd. Sierra College Blvd is a major arterial street that links Loomis with the City of Lincoln to the north and with Interstate 80 and the City of Rocklin to the south. Today, Sierra College Blvd has one travel lane in each direction from Rocklin Road across Interstate 80 to its northern terminus at SR 193. Incremental widening has occurred to accommodate auxiliary turn lanes at the Taylor Road intersection and the two lane road was recently widened to a multi-lane facility in the area south of Granite Drive near the Interstate 80 interchange. Another improvement project to complete a 4 lane section on Sierra College Blvd south of Taylor Road is being pursued by the City of Rocklin and the South Placer Regional Transportation Agency (SPRTA). According to the City of Rocklin, this project will not alter the Taylor Road / Sierra College Blvd intersection. Year 2007 traffic counts revealed that Sierra College Blvd carries about, 15,724 ADT between Granite Drive and Brace Road and 10,585 ADT north of the Taylor Road intersection.

King Road. King Road is an east-west arterial road that provides regional access to Loomis and the rural areas of Placer County surrounding the Town. King Road originates at an intersection on Sierra College Blvd in western Loomis and continues easterly across Taylor Road, over Interstate 80 and ultimately to an intersection on Auburn Folsom Road near Folsom Lake. King Road is a two lane road with auxiliary turn lanes at major intersections. Traffic counts made in 2007 indicated that King Road carried 7,025 ADT between Taylor Road and Boyington Road.

Several local Town streets provide access to the properties in the Town Center area.

Webb Street. Webb Street is a local street that links King Road with Horseshoe Bar Road across the UPRR. Webb Street also extends south from Taylor Road to Laird Street and could be extended into the undeveloped area of Loomis in the future as development occurs. On-street parking is permitted on the south leg of Webb Street. The speed limit is 25 mph. New traffic counts made in May 2009 indicated that Webb Street carried 3,760 ADT north of Taylor Road, and the volume south of Taylor Road is estimated at 500 to 1,000 ADT.

Walnut Street. Walnut Street is a local street that lies one block west of Horseshoe Bar Road within the Town Center street "grid". Walnut Street extends from a stub north of Taylor Road through the established Town Center neighborhood to its current terminus near Interstate 80. The long term plan for Walnut Street contemplates its extension to Brace Road via Stone Road. On-street parking is permitted on Walnut Street, and the speed limits is 25 mph. May 2009 traffic counts indicated that Walnut Street carries 1,300 ADT between Taylor Road and Magnolia Street.

Oak Street. Oak Street is a local street that forms the western end of the Town Center street grid. Oak Street extends from an intersection on Taylor Road near the High Hand Nursery to its terminus on Walnut Street. Parking is permitted at various locations along Walnut Street, and the speed limit is 25 mph. New traffic counts made for this study in May 2009 indicated that Oak Street carried 675 ADT per day between Taylor Road and Magnolia Street.

Circle Drive. Circle Drive is a local street that provides access to the established residential area between Taylor Road and Interstate 80. Circle Drive extends from an intersection on Taylor Road to South Walnut Street via Becky Drive. On-street parking is permitted, and the speed limit is 25 mph. The daily traffic volume on Circle Drive is estimated at 500 ADT.

Shawn Way. Shawn Way is a local Street that provides access to a strip commercial area along Taylor Road and to the Tudor Way residential neighborhood. The speed limit on this road is 25 mph and the daily traffic volume is estimated at 900 ADT near Taylor Road.

Magnolia Street. Magnolia Street is a local street that runs parallel and south of Taylor Road through downtown Loomis. Magnolia Street extends from Oaks Street to Horseshoe bar Road and provides access to Loomis' Town Center public parking lot. On-street parking is permitted on Magnolia Street and the speed limit is 25 mph. The daily traffic volume on Magnolia Street is estimated at 500 to 1,000 ADT.

Doc Barnes Drive. Doc Barnes Drive is a local street that links Horseshoe Bar Road and Walnut Street in the area immediately west of the Horseshoe Bar Road / Interstate 80 westbound ramps intersection. The Town General Plan indicates that Doc Barnes Drive will eventually be extended northerly to King Road and link up with Boyington Road. In concert with a future westerly extension of Walnut Street, the Doc Barnes Drive extension will be part of an Interstate 80 frontage road that will extend from Brace Road to Penryn Road. The speed limit on Doc Barnes Drive is 25 mph, and the daily traffic volume on this street is estimated at 2,000 ADT.

Library Drive. Library Drive is a local street that provides access to Horseshoe Bar Road for Loomis Memorial Hall and the Loomis Library. Parking is permitted on Library Drive. While today this two lane road terminates at undeveloped property, it is expected that Library Drive will be extended as development occurs. The speed limit on Library Drive is 25 mph, and the daily traffic volume is estimated at 200 ADT.

Boyington Road. Boyington Road is a collector street that runs parallel to Interstate 80 in the area from the Penryn Road / Interstate 80 interchange to King Road. Boyington Road provides access to commercial uses along the freeway and also provides access to the rear parking lot at Del Oro High School.

Intersections. In urban areas the overall flow of traffic is often governed by the operation of key intersections. Information has been assembled regarding the operation of the following ten intersections that are located on the routes that serve the Implementation Plan area.

1. Taylor Road / Sierra College Blvd (signalized)
2. Taylor Road / Shawn Way (northbound stop)
3. Taylor Road / Circle Drive (northbound stop)
4. Taylor Road / Oak Street (northbound stop)
5. Taylor Road / Walnut Street (northbound – southbound stop)
6. Taylor Road / Horseshoe Bar Road (Signalized)
7. Taylor Road / Webb Street (northbound –southbound stop)
8. Taylor Road / King Road (signalized)
9. Horseshoe Bar Road / Library Drive (westbound stop)
10. Horseshoe Bar Road / Doc Barnes Road (eastbound stop)

The **Taylor Road / Sierra College Blvd intersection** is controlled by an actuated traffic signal. Left turn lanes and right turn lanes exist on each approach. Pedestrian indications and crosswalks are available on each leg of the intersection. Sierra College Blvd crosses the Union Pacific Railroad (UPRR) tracks that run parallel and north of Taylor Road. This crossing is equipped with crossing arms and warning signals and the gates are linked to the operation of the Taylor Road / Sierra College Blvd traffic signal.

The **Taylor Road / Shawn Way intersection** is a "tee" controlled by a stop sign on the Shawn Way approach. The south side of Taylor Road has been widened to its ultimate width in this area, and a continuous two-way left turn lane extends through this strip commercial area from west of Shawn Way to Circle Drive. There are no crosswalks at this intersection.

The **Taylor Road / Circle Drive intersection** is controlled by a stop sign on the Circle Drive approach. The south side of Taylor Road has been widened to its ultimate width in this area, and a continuous two-way left turn lane extends from west of Shawn Way to Circle Drive. There are no crosswalks at this "tee" intersection. Parking is permitted on the southwest corner of the intersection and vehicles laving this parking area back into the intersection. There are no crosswalks at this intersection.

The **Taylor Road / Oak Street intersection** is a "tee" controlled by a stop sign on the Walnut Street approach. There is a left turn lane on Taylor Road, but the Walnut Street approach is a single lane. A crosswalk has been striped across Taylor Road west of the intersection. There is no curb on the southwest corner of the intersection, and as a result, the limits of the travel lanes in this area are undefined. The Town has installed a speed monitoring sign on Taylor Road that reports the speed of eastbound motorists entering the intersection.

The **Taylor Road / Walnut Street intersection** is controlled by stop signs on both Walnut Street approaches. There are left turn lanes on both Taylor Road approaches. Crosswalks are striped across Taylor Road east of the intersection and across Walnut Street north of the intersection.

The **Taylor Road / Horseshoe Bar Road Intersection** in downtown Loomis is controlled by a traffic signal. Auxiliary left turn lanes exist on the Taylor Road approaches, and a right turn lane is available on westbound Horseshoe Bar Road. The traffic signal phasing permits right turns from Horseshoe Bar Road and westbound left turns on Taylor Road to proceed concurrently (i.e., "overlap"). Crosswalks exist on each leg of the intersection.

The **Taylor Road / Webb Street Intersection** has left turn lanes on the Taylor Road approaches, but the Webb Street approaches are single lanes. Traffic is controlled by stop signs on the Webb Street approaches. A crosswalk exists across Taylor Road west of the intersection and across Webb Street south of the intersection. A utility pole on the southwest corner of the intersection constrains truck turns. The intersection is signed to prohibit left turns from Webb Street onto eastbound Taylor Road in the morning peak hours. Webb Street crosses the UPRR approximately 250 feet north of the intersection, and this location is controlled by a gated crossing.

The **Taylor Road / King Road intersection** is a signalized intersection with auxiliary turn lanes on each approach. Crosswalks are marked on each leg of the intersection. Loomis Elementary School is located on the southeast corner of the intersection. King Road crosses the UPRR approximately 100 feet west of the intersection. This crossing is gated, and its operation is inter-connected with the traffic signal.

The **Taylor Road / Library Drive Intersection** is a "tee" intersection located on a curve on Horseshoe Bar Road. There are no auxiliary turn lanes at the intersection, and traffic is controlled by a stop sign on Library Drive. A crosswalk exists across Library Drive, and there is a mid-block crosswalk on Horseshoe Bar Road south of the intersection.

The **Horseshoe Bar Road / Doc Barnes Drive Intersection** is a "tee" intersection controlled by a stop sign on the Doc Barnes Drive approach. A short left turn lane exists on Taylor Road approaching the intersection. There are no crosswalks at this intersection. The long term plan for this location includes a traffic signal when the road is extended to King Road.

Non-Automotive Facilities

Downtown Loomis is served by facilities for pedestrians, bicycles and transit vehicles.

Bus Service. Public bus service is provided to the Loomis area by Placer County Transit. The *Taylor Road Shuttle* links Loomis, Penryn, Auburn and Sierra College in Rocklin. This route stops within Loomis at the Town Center multi-modal center and will stop on demand at the following marked locations:

North side of Taylor Road just west of Shawn Way intersection (*)
North side of Taylor Road between Oak Street and Walnut Street (*)
South side of Taylor Road at Horseshoe Bar Road
Intermodal Center at Horseshoe Bar Road (*)
North side of Taylor Road between Webb Street and King Road (*)
South side of Taylor Road at King Road

(*) An enclosed waiting area is available at each of these locations.

Bus service is provided on weekdays between 6:30 a.m. and 7:15 p.m. Monday –Friday with seven stops per day. Saturday service runs from 8:35 a.m. to 5:55 p.m. Loomis is also served by *Placer Commuter Express*, which runs during commute hours and links the community with downtown Sacramento. The area is also served by *Placer County Transit Dial-a-Ride* from 6:00 a.m. to 8:00 p.m.

Bicycle Facilities. The Town of Loomis recently prepared a 2009 update to its Bicycle Transportation Plan (BTP). That document catalogued existing bicycle facilities and identified plans for future improvements.

The BTP identified existing bicycle facilities in the Implementation Plan study area. The BTP indicated that Class II Bike paths exist continually along Taylor Road from the north to south Town limits, although bike lanes are not striped through the commercial area (i.e., Oak Street to Webb Street). The BTP indicates that class II bike lanes are available on Horseshoe Bar Road from Taylor Road to the I-80 interchange.

While this facility inventory is generally correct, it is important to note that in many locations the physical dimensions of bike lanes and parking that is permitted do not meet adopted standards, nor are bike lanes signed / marked.

Pedestrian Facilities. Because much of downtown Loomis was developed as a rural community prior to incorporation, sidewalks are old and intermittent. Sidewalks are provided today at the following locations:

- South side of Taylor Road where development has proceeded adjoining Shawn Way and Circle Drive
- North side of Taylor Road adjoining High Hand Nursery west of Oak Street
- Both sides of Taylor Road between Walnut Street and Horseshoe Bar Road
- South side of Taylor Road between Webb Street and King Road

- Both sides of Horseshoe Bar Road north of Taylor Road to Multi-modal center
- East side of Horseshoe Bar Road between Taylor Road and Laird Street
- West side of Walnut Street north of Taylor Road

However, much of the sidewalk system in Loomis is discontinuous and was constructed in a manner that fails to meet Americans with Disabilities Act (ADA) requirements for grades.

There is also an asphalt path along the east side of Horseshoe Bar Road between Taylor Road and the Raley Shopping Center and on portions of the south side of Taylor Road.

There are no sidewalks on other portions of Oak Street, Walnut Street or Magnolia Street.

Existing Traffic Volumes / Levels of Service

Traffic Volumes. Weekday a.m. and p.m. peak hour traffic counts were conducted in May 2009 when area schools ere in session. Figure 1 and 2 display these existing traffic volumes along with the daily traffic volumes discussed earlier.

Level of Service – Methodologies. To assess the quality of existing traffic operating conditions, operating Levels of Service were calculated at each study intersection. "Level of Service" (or "LOS") is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening traffic operating conditions, is assigned to an intersection.

Table 1 presents the characteristics associated with each LOS grade. As shown in Table 1, LOS "A", "B" and "C" are considered satisfactory to most motorists, while LOS "D" is marginally acceptable. LOS "E" and "F" are associated with increasingly long delays and congestion and are unacceptable to most motorists. The Town of Loomis has established LOS "C" as the minimum operational threshold beyond which mitigations are required when development occurs.

TABLE 1
LEVEL OF SERVICE DEFINITIONS

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Overall Level of Service for unsignalized intersections is weighted average of delays experienced by all motorists yielding the right of way, excluding through traffic.			
Sources: 2000 Highway Capacity Manual, Transportation Research Board (TRB) Special Report 209.			

The Loomis General Plan also contains Level of Service thresholds based on the daily traffic volume on individual roadway segments. Measured in terms of the Volume / Capacity ratio (V/C), unsatisfactory conditions occur when the v/c ratio exceeds 0.80.

Levels of Service were calculated for study intersections using the methodologies contained in the 2000 Highway Capacity Manual. In the case of intersections controlled by side street stop signs, the individual Level of Service for all movements that yield the right of way has been identified.

Levels of Service and V/C ratio for roadway segments were calculated using the capacity thresholds identified in the General Plan.

Existing Levels of Service at intersections. Current weekday a.m. and p.m. peak hour Levels of Service are summarized in Table 2. As shown, current Levels of Service meet the Town's minimum LOS C threshold, with two exceptions.

During the a.m. peak hour the **Taylor Road / King Road intersection operates at LOS D**. While this exceeds the minimum LOS C standard, this condition has been recognized in the General Plan as resulting from the combined effect of Del Oro High School and Loomis Elementary School traffic and is therefore considered to be acceptable in the a.m. peak hour.

In the p.m. peak hour, the motorists waiting to turn onto Taylor Road at the **Taylor Road / Webb Street intersection experience delays that are indicative of LOS D** conditions on the northbound approach. While this Level of Service technically exceeds the Town's LOS C minimum, only a handful of vehicles are involved and as a result this condition is not judged to be significant.

In addition, at the **Horseshoe Bar Road / Library Drive intersection**, the few motorists waiting to turn left onto Horseshoe Bar Road from Library Drive experience delays that are indicative of LOS D. While this Level of Service technically exceeds the Town's LOS C minimum, only a handful of vehicles are involved and as a result this condition is not judged to be significant.

TABLE 2
EXISTING INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour		Peak Hour Traffic Signal Warrants Met?
		Average Delay (sec)	LOS	Average Delay (sec)	LOS	
Taylor Road / Sierra College Blvd	Signal	29	C	32	C	Not applicable
Taylor Road / Shawn Way						
Westbound left turn	NB Stop	1	A	1	A	No
Northbound left+right turn		12	B	15	C	
Taylor Road / Circle Drive	NB Stop					
Westbound left turn		1	A	1	A	No
Northbound left+right turn		13	B	16	C	
Taylor Road / Oak Street	NB Stop					
Westbound left turn		1	A	1	A	No
Northbound left+right turn		13	B	18	C	
Taylor Road / Walnut Street						
Eastbound left turn	NB/SB Stop	1	A	1	A	No
Westbound left turn		1	A	1	A	
Northbound left+thru+right turn		14	B	16	C	
Southbound left+thru+right turn		11	B	13	B	
Taylor Road / Horseshoe Bar Rd	Signal	20	C	30	C	Not applicable
Taylor Rd / Webb Street						
EB left turn	NB/SB Stop	1	A	2	B	Volume: Yes (P.m.)
WB left turn		1	A	1	A	Delay: No
NB left+thru+right turn		18	C	16	C	
SB left+thru+right turn		34	D	22	C	
Taylor Rd / King Road	Signal	40	D	30	C	Not Applicable
Horseshoe Bar Rd/Library Dr						
SB left turn	WB Stop	1	A	1	A	No
WB left+right turn		**28**	**D**	18	C	
Horseshoe Bar Rd/Doc Barnes Dr	EB Stop					
NB left turn		1	A	1	A	No
EB left+right turn		15	B	17	C	

Status of Traffic Signal Warrants. Current traffic volumes at the unsignalized study intersection were compared with peak hour warrant requirements contained in the *California Manual on Uniform Traffic Control Devices (CMUTCD)* to determine whether traffic signals may already be justified. As was noted in Table 2, the Taylor Road / Webb Street intersection carries volumes that may satisfy peak hour volume warrants. However, because nearly all of the Webb Street traffic turns right, this location does not experiences delays that satisfy the peak hour warrant based on delay.

While satisfying peak hour warrants can be an indication that a traffic signal is needed, further analysis of additional warrants addressing conditions occurring throughout the day is required to determine whether a traffic signal should be installed. Other factors, such as the distance to adjoining signalized intersections are also considerations.

Levels of Service on Roadway Segments. Conditions on study area roads have also been evaluated within the context of current daily traffic volumes and Town of Loomis Level of Service thresholds, as shown in Table 3.

Major Streets. As shown, the daily traffic volume on the portion of Taylor Road and Horseshoe Bar Road through Loomis already exceeds the minimum standard employed by the Town of Loomis' General Plan (i.e., v/c ratio > 0.80). Current volumes are indicative of LOS E or F conditions on each road. The existing condition on Taylor Road between Horseshoe Bar Road and King Road has already been noted in the Town of Loomis General Plan as a current deficiency.

Conditions on Local Streets. It is technically possible to employ Town of Loomis standards to identify the volume / capacity ratio on the local streets addressed by this study. As noted in Table 3, current volumes use a relatively small percentage of the theoretical capacity of these roads. However, it is important to note that adjoining residents often perceive traffic impacts along residential streets at volume levels that are far below the actual capacity of the road. Noise, access difficulties, and pedestrian conflicts are typical complaints at relatively low volume levels. Many jurisdictions have adopted planning level thresholds for acceptable traffic volumes on residential streets. These thresholds are typically in the range of 2,000 to 3,000 vehicles per day. Comparison of observed volumes with these thresholds suggests that the current volumes on local streets surrounding the project are below typical maximum thresholds.

TABLE 3
CURRENT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment from	To	# of Lanes	General Plan Capacity (veh/day)	Average Daily Traffic	Daily Volume / Capacity Ratio	LOS
Taylor Road	Sierra College Blvd	Circle Drive	2+	15,000	10,204	0.68	B
	Circle Drive	Oak Street	2	15,000	10,303	0.69	B
	Oak Street	Horseshoe Bar Road	2	15,000	10,210	0.68	B
	Horseshoe Bar Road	Webb Street	2	15,000	19,697	1.31	**F**
	Webb Street	King Road	2	15,000	16,329	1.09	**F**
Horseshoe Bar Rd	Taylor Road	Library Drive	2	15,000	14,166	0.94	**E**
	Library Drive	Westbound I-80 ramps	2	15,000	15,706	1.05	**F**
Oak Street	Taylor Road	Magnolia Street	2	15,000	676	0.05	A
Walnut Street	Taylor Road	Magnolia Street	2	15,000	1,293	0.09	A
Webb Street	Taylor Road	Saunders Avenue	2	15,000	3,761	0.25	A
+ indicates presence of two way left turn lane							

Parking

The materials which follow are intended to categorize and quantify the available parking supply within the Implementation Plan area and to describe the use of these facilities. Information addressing these goals was developed through field review and through ac occupancy survey conducted during early July 2009, as well as observation of parking demands occurring during the Loomis Eggplant Festival, the largest special event held each year in Loomis.

How Much Parking Does Loomis Have? - Parking Supply Inventory. The parking supply serving the Implementation Plan area was identified through a field survey conducted in late May 2009 and supplemented in November 2009. For reference, the parking supply was divided into the following categories:

Legal On-street parking
Informal On-street parking
Public Off-street parking
Private off street parking

It is important to recognize that as a rural community Loomis has relatively few on-street parking spaces that fully satisfy adopted minimum standards for width (8 feet) and length (23 feet). In many areas, paved space must also be used for automobile travel (12 feet) and for bicycle lanes (5 feet). While many residents of this rural community are comfortable parking on the remaining space and adjoining shoulder, much of the area used for parking along Taylor Road, Magnolia Street, Park Street and Walnut Street is not legal.

Legal On Street Parking. The legal on-street parking supply was identified as the number of parking spaces available within the following study area limits:

Taylor Road from Sierra College Blvd to King Road
Shawn Way from Taylor Road to Tudor Way
Oak Street from Oak Street to Magnolia Street
Walnut Street north of Taylor Road and between Taylor Road and Magnolia Street
Horseshoe Bar Road from Laird Street to the multi-modal terminal
Webb Street from Laird Street to the UPRR

Nearly all of the on-street parking spaces have no time limits. A few spaces located on Taylor Road adjoining the Post Office have a time limit of 10 minutes. The limits of few on-street parking spaces are marked.

Based on consideration of the width needed for travel lanes, bike lanes and parking, the on-street parking supply on Taylor Road and Horseshoe bar Road totals 104 spaces, as noted in Table 4

TABLE 4
LEGAL ON STREET PARKING SUPPLY

Location from	To	Side of Street	Existing Spaces
Taylor Road			
Sierra College Blvd	Shawn Drive	South	14
Shawn Drive	Circle Drive	South	8
High Hand Nursery frontage	Oak Street	North	14
Circle Drive	Oak Street	South	17
Oak Street	Walnut Street	North	3
		South	5
Walnut Street	Horseshoe Bar Road	North	11
		South	12
Horseshoe Bar Road	Webb Street	North	0
		South	0
Webb Street	Loomis Elementary	North	0
		South	0
Loomis Elementary	King Road	North	0
		South	6
Total			***90***
Horseshoe Bar Road			
Taylor Road	Library Drive	West	7
		East	5
Library Drive	Doc Barnes Drive	West	0
		East	2
Total			***14***

Informal On-Street Parking. Loomis residents often park in area where the combination of pavement and unpaved shoulder provide enough room to park. There are few if any locations in Loomis that are marked "No Parking". An exact tally of the number of "informal; spaces" is difficult unless a vehicle is actually parked in the area.

Legal Public Off-Street Parking. The paved public off street parking supply included the following two areas:

- Town's parking lot behind the Post Office at Magnolia Street / Walnut Street (48 spaces)
- Multi-modal lot at Taylor Road / Horseshoe Bar Road (67 spaces)

Loomis' public parking lots have no designated time limits.

Informal Off-Street Parking. Most of the Town's property within the Implementation Plan area along Taylor Road between the UPRR and existing buildings is not paved. Potions of this area are used on a day to day basis by abutting businesses, and these areas are also used for special events. Because these areas are not paved an exact number of available parking spaces has not been determined.

Private Parking. There are a wide variety of parking areas owned and maintained by private parties. These areas range from paved and marked parking lots to paved areas abutting Taylor Road to overflow areas used primarily for special events. Important private parking facilities include:

Parking at businesses on the south side of Taylor Road from Lorenzo's restaurant to Circle Drive (more than 240 spaces)
Parking for High Hand Nursery (75 spaces with recent expansion)
Parking at businesses on the north side of Taylor Road between Oak Street and Horseshoe Bar Road (43 spaces)
Parking on south side of Taylor Road behind Post Office (26 spaces)
Regular parking for Jim Boy's restaurant (28 spaces plus overflow)
Regular parking for Blue Goose businesses (20 spaces)
Parking for business along the south side of Taylor Road between Horseshoe Bar Road and Loomis Elementary School (128 spaces)

In total, there are roughly 670 marked parking spaces in private areas.

Parking Utilization Survey

The use of the available parking supply was identified based on field surveys. These surveys were first conducted in early July 2009, while the area near High Hand Conservatory was re-assessed in November 2009 after additional paved parking had been developed near that business.

Weekday utilization was observed at two times on a Wednesday in order to capture the effects of parking demands of Town Center eateries (i.e., 12:15 to 1:00 p.m.) and to identify the demands occurring during the rest of the day (i.e., 2:00 p.m.). Supply / occupancy data was collected for 58 distinct locations and the results are summarized in Table 5. The survey record is included in the Appendix.

TABLE 5
PARKING SUPPLY / OCCUPANCY SURVEY RESULTS

Type	Number of Spaces	Parking Demands					
		Wednesday July 1, 2009 (12:15 to 1:00 pm)		Wednesday July 1, 2009 (2:00 to 2:30 p.m.)		Saturday* July 4, 2009 (12:15 to 1:00 p.m.)	
		Occupied	%	Occupied	%	Occupied	%
On-street - Legal	104	65	32%	50	25%	11	5%
On Street - Informal	100±						
Town's Designated Public Lots (2)	115	39	34%	28	24%	5	4%
Overflow on Town Property	unknown	48	-	32	-	5	-
Private	668	300	45%	254	38%	120	18%
* many downtown businesses were closed for the 4th of July							

As noted in Table 5, the overall demand for parking in Loomis is well within the limits of the available parking supply. Because not every space may be available due to poor parking practices or uneven turnover, parking supplies are assumed to be "fully utilized" when occupancy rates reach 85% to 90%.

Overall, the current parking ratios throughout Loomis fall well below the 85% -90% occupancy level. However, there are a few locations where the demand for parking results in occupancy rates that approach or exceed 85%. These locations include:

The **High Hand Nursery parking lots** and the on-street parking supply along **Taylor Road adjoining High Hand Nursery**). Before their on-site supply was expanded, the parking demands associated with High Hand nursery's restaurant at noon regularly exceeded the supply as well as adjoining on-street parking, and parking demands spilled over onto the south side of Taylor Road. With the recent expansion of the High Hand parking lot there has been relatively little demand for parking on the south side of Taylor Road.

Walnut Street north of Taylor Road. The spaces adjoining Christiansen's are regularly full.

The **private lot on the south side of Taylor Rd / Webb Street**. The two restaurants in this retail center create parking demands that approach or exceed the on-site parking supply and spillover onto the west side of Webb Street near the old Hardware Emporium building.

MEASURES OF SIGNIFANCE

Town Of Loomis General Plan

The Town of Loomis General Plan (2001) contains the following issues goals and policies:

Level of Service

Issue: Growth in traffic volumes from development approved within, and adjacent to, the Town will cause increased congestion and need for roadway improvements, depending upon the chosen service level standard.

Goal: To strive for service levels that reflect a balance between mobility, cost-effectiveness, and financial resources.

Level of Service Policy. In order to minimize congestion, maintain Level of Service C on all roads and intersections within the Town of Loomis. Level of Service D may be allowed in conjunction with development approved within the Town as an exception to this standard, at the intersections of King Road / Taylor Road, Horseshoe Bar Road / Taylor Road , Horseshoe Bar Road . Interstate 80 ramps, Sierra College Blvd / Brace Road and Webb Street / Taylor Road when:

1. the deficiency is substantially caused by "through" traffic which neither begins or ends in Loomis, and is primarily generated by non-residents, or
2. the deficiency will be temporary (i.e., less than three years), and a fully funded plan is in place to provide the improvements needed to remedy the sub-standard condition.

Mitigation of impacts from unincorporated area projects. Notwithstanding any other General Plan policy or provisions, in the event that significant adverse impacts will result from the construction of large developments on the Town's perimeter, the Town shall make every reasonable effort to have the developers adequately mitigate the adverse impacts

Roadway Improvement Standards

Issue: Many roadway improvements will be needed during the life of the General Plan and design standards are needed to ensure consistency and quality.

Goal: To develop standards that protect public safety and provide mobility for all forms of transportation.

Roadway improvement policy: Roadway improvements within the Town of Loomis shall conform to the roadway classification system and improvement standards specified in the current version of the *Town of Loomis Design & Improvement Standards* after their adoption.

Policy on character of roadway improvements: The design of Town Center roadway and streetscape improvements will continue to maintain the "small town downtown" character.

Implementation measure: The Town will develop and adopt road and street improvement and design standards as funding permits.

Bicycle Facilities

Issue: Bicycle facilities are limited in Loomis. Provisions to increase bicycle use will provide recreational and mobility benefits to residents and reduce vehicular traffic.

Goal: To implement additional bicycle facilities that result in increased bicycle usage.

Bicycle Facility Policies

1. The Town shall promote bicycle travel, as appropriate, and shall pursue all available sources of funding for the development and improvement of bicycle facilities.

2. Bicycle facilities shall be provided in compliance with the *Placer County Bikeways Implementation Plan* (Placer County Transportation Commission, 1988) or subsequent amended versions of that document, as well as on other appropriate routes at the discretion of the Town Council.

Transit Service

Issue: Transit service is limited within the Town, providing little incentive for its use and limited options for transit-dependent persons.

Goal: To devote resources for the promotion of transit service that are appropriate for its size and financial resources using comparable cities as a benchmark.

Transit Service Policies

1. The Town will promote and support a safe, efficient, and coordinated public transit system that meets residents' needs, reduces congestion, improves the environment, and helps provide a viable non-automotive means of transportation in and through the Town of Loomis.

2. The Town should work with Placer County Transit and other transit providers to plan and implement public transportation services within the Town that are timely, cost-effective, and responsive to growth patterns and transit demand.

a. Transit routes should conform to plans established by Placer County Transit, and should generally coincide with major destinations for employment and shopping, the location of major institutions, concentrations of multifamily housing, and other land uses likely to attract public transit ridership.

b. Bus routes should follow major roads with service to residential neighborhoods via collector streets.

c. Bus stops should be located in conformance with the applicable policies of Placer County Transit.

3. The Town should consider the transit needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding transit services and in compliance with the Americans with Disabilities Act (ADA).

4. The Town should support efforts to provide demand-responsive service ("paratransit") and other transportation services for those unable to use conventional transit.

Neighborhood Environment

Issue: Increased development within, and adjacent to the Town, creates possibility for traffic intrusion into residential neighborhoods.

Goal: To take actions to minimize cut-thru traffic and manage speeds on residential streets.

Neighborhood Environment Policies:

1. The Town shall create and maintain a street system which protects residential neighborhoods from unnecessary levels of traffic, while providing for logical traffic circulation.

2. The Town shall design streets and approve development in such a manner as to prevent and eliminate high traffic flows and parking problems within residential neighborhoods.

3. The Town shall promote the development of a circulation system that preserves the historic nature and character of neighborhoods and districts, and reinforces neighborhood identity and integrity.

4. New local streets shall be designed to promote the interconnection of residential neighborhoods while simultaneously discouraging through-traffic within residential neighborhoods.

5. The Town of Loomis shall establish and maintain a procedure through which local residents can receive assistance in managing and reducing traffic flows through their residential neighborhoods. Such assistance could be technical, the provision of equipment (such as signs) and the labor needed to install such equipment, or the provision of enhanced police traffic enforcement in neighborhoods. The Town could also participate in modifying the existing street system to reduce or eliminate through traffic intrusion into residential neighborhoods. Such modifications could include installation of speed humps, traffic diverters, traffic circles, or a variety of other techniques. Based on the identified need and available financing, priorities will be established and an appropriate level of resources (including staff time, equipment, and physical improvements) will be committed by the Town.

6. If recommended by the Town Engineer after review, and if determined to be feasible, the Town should pursue the construction of a pedestrian bridge over Sierra College Boulevard to address safety impacts. The precise location of the crossing would be determined after further review.

Roadway System Funding

Issue: Transportation improvements are expensive and the Town has very limited financial resources.

Goal: To leverage the Town's resources with outside funding sources (developer fees, state funds, federal funds, etc.).

Roadway System Funding Policies

1. The Town shall aggressively pursue state and federal funding to implement the primary
elements of the Town's Circulation Plan.

2. The Town shall require proposed new development projects to analyze their contribution to increased vehicle, pedestrian, and bicycle traffic and to implement the roadway improvements necessary to address their impact.

3. The Town shall assess fees on new development sufficient to cover the fair share portion of development's cumulative impacts on the local and regional transportation system. The cost of all on-site roadways within new development projects is the responsibility of the developer.

4. Prior to acceptance of new local streets by the Town, provisions shall be made for the ongoing maintenance of those facilities. Such provisions could include the establishment of a maintenance district covering the specific roadways identified, or assumption of all maintenance responsibilities by the pertinent homeowners association or other approved organization.

Roadway Maintenance

Issue: Financial constraints can lead to improper maintenance, which reduces the quality and longevity of facilities.

Goal: To create a pavement management system that provides timely and accurate information about how to use maintenance resources.

Roadway Maintenance Policies

1. The Town shall assure that the transportation system continues to provide safe, efficient, and convenient access to its residents.

2. The Town shall provide dependable and adequate resources to maintain and repair the existing system of roads and bridges, according to priorities established on an annual basis.

3. The Town shall work with the Placer County Transportation Planning Agency (PCTPA) to ensure that the PCTPA's Regional Transportation Plan is coordinated with the Town's Capital Improvement Plan. This coordination will allow access to Federal and State funds, where possible, for road maintenance and improvement.

The Environmental Impact Report prepared for the Town of Loomis General Plan also clarifies LOS thresholds by noting that an increase in the v/c ratio of 5% on roadway segments is a significant impact.

PROJECT IMPACTS

Project Description

Streets. The conceptual plans suggest the following changes to the physical characteristics of the streets that serve the Implementation Plan area.

Taylor Road. Under the Implementation Plan, Taylor Road will remain a two lane street with one travel lane in each direction. Left turn lanes will be available at most major intersections. On-street parking will continue to be permitted at several locations but the a portion of the space now devoted to on-street parking will instead be used for treatments that narrow the effective width of the street in order to slow the speed of traffic. Complete pedestrian and bicycle facilities will traverse the Implementation Plan area on both sides of the street. Short left turn pockets and landscaped medians are proposed at many locations in lieu of the striped two-way left turn lane that exists today.

Horseshoe Bar Road. Horseshoe Bar Road is the primary gateway to Loomis from Interstate 80. This arterial street originates at an intersection on Taylor Road in downtown Loomis and continued east across the interchange on Interstate 80. Under the Implementation Plan the portion of Horseshoe Bar Road between Interstate 80 and the planned Doc Barnes Extension will be an arterial street with the capacity to accommodate expected growth. The portion of the road between Doc Barnes and Taylor Road will be two lanes but will be narrowed to reduce speeds, on-street parking will be eliminated and pedestrian - bicycle facilities will be provided.

King Road. King Road is an east-west arterial road that provides regional access to Loomis and the rural areas of Placer County surrounding the Town. King Road does not change under the Implementation Plan.

Webb Street. Webb Street is a local street that links King Road with Horseshoe Bar Road across the UPRR. Webb Street also extends south from Taylor Road to Laird Street and could be extended into the undeveloped area of Loomis in the future as development occurs. While improvements to the Horseshoe Bar Road / Webb Street intersection may occur, the plan does not change the character of Webb Street itself.

Walnut Street. Walnut Street is a local street that lies one block west of Horseshoe Bar Road within the downtown street "grid". Walnut Street extends from a stub north of Taylor Road through the established downtown neighborhood to its current terminus near Interstate 80. The long term plan for Walnut Street contemplates its extension to Brace Road via Stone Road. The Implementation Plan envisions Walnut Street being an important access to the new facilities created on Town property, but the overall character of the street will not change.

Oak Street. Oak Street is a local street that forms the western end of the downtown street grid. Oak Street extends from an intersection on Taylor Road near the High Hand Nursery to its terminus on Walnut Street. While changes to the Taylor Road / oaks Street intersection will occur, the character of the street itself is unchanged.

Circle Drive, Shawn Way. Circle Drive and Shawn Way are local streets that provide access to commercial areas along Taylor Road and to the Tudor Way residential neighborhood. Theses streets do not change.

Doc Barnes Drive. Doc Barnes Drive is a local street that links Horseshoe Bar Road and Walnut Street in the area immediately west of the Horseshoe Bar Road / Interstate 80 westbound ramps intersection. The Town General Plan indicates that Doc Barnes Drive will eventually be extended north-easterly to King Road at the Boyington Road intersection. In concert with a future westerly extension of Walnut Street to Brace Road, the Doc Barnes Drive extension will be part of an Interstate 80 frontage road that will extend from Brace Road to Penryn Road. The Implementation Plan accommodates the Doc Barnes Drive Extension.

Library Drive. Library Drive is a local street that provides access to Horseshoe Bar Road for Loomis Memorial Hall and the Loomis Library. While today this two lane road terminates at undeveloped property, it is expected that Library Drive will be extended as development occurs. The plan accommodates this future use.

New Vehicular Access. A 24 foot wide paved roadway will be created in Town property to provide access to new park and parking areas and to provide access to the rear of existing Taylor Road businesses. The route will originate on the east near the Railroad Depot and continue westerly through a new parking aisle along the back of Christensen's to an intersection with Walnut Street. The road will continue to a new one-way link to Taylor Road in the area between Star Liquor and Earth Central. From that point the road will extend through two new parking areas to its terminus at the rear of High Hand nursery. The road will not continue to the High Hand parking lot, and the road will not serve as a "bypass" of Taylor Road.

Intersections. In urban areas the overall flow of traffic is often governed by the operation of key intersections. Information regarding changes to major intersections in the Implementation Plan area follows.

11. Taylor Road / Sierra College Blvd (signalized)
12. Taylor Road / Shawn Way (northbound stop)
13. Taylor Road / Circle Drive (northbound stop)
14. Taylor Road / Oak Street (northbound stop)
15. Taylor Road / Walnut Street (northbound – southbound stop)
16. Taylor Road / Horseshoe Bar Road (signalized)
17. Taylor Road / Webb Street (signalized)
18. Taylor Road / King Road (signalized)
19. Horseshoe Bar Road / Library Drive (westbound stop)
20. Horseshoe Bar Road / Doc Barnes Road (eastbound stop)

Today the **Taylor Road / Sierra College Blvd intersection** is controlled by a traffic signal. With one exception, the overall geometry of the intersection that exists today will remain in terms of the types of lanes that will be available. On the westbound Taylor Road approach, the three existing lanes will be re-striped to provide two left turn lanes and a combined thru+right turn lane. The City of Rocklin is pursuing a SPRTA funded project to add a through lane in each direction on Sierra College Blvd, and the Implementation Plan accommodates that project.

The **Taylor Road / Shawn Way intersection** will continue to be a "tee" intersection controlled by a stop sign on the Shawn Way approach. However, the continuous two-way left turn lane on Taylor Rod will be replaced by a dedicated westbound left turn lane and raised landscaped median. The intersection, along with all others to the east, will be narrowed with landscaped "bulb-outs" to slow traffic and reduce the speed of traffic on Taylor Road.

The **Taylor Road / Circle Drive intersection** will still be controlled by a stop sign on the Circle Drive approach. The continuous two-way left turn lane on Taylor Road will be replaced by a dedicated left turn lane and landscaped median.

The **Taylor Road / Oak Street intersection** will remain a "tee" controlled by a stop sign on the Walnut Street approach. While full access will be permitted, the existing westbound left turn lane will be eliminated to accommodate new pedestrian facilities and parking on Taylor Road near High Hand Fruit Shed. A crosswalk will remain across Taylor Road near this intersection.

The **Taylor Road / Walnut Street intersection** will still be controlled by stop signs on both of the Walnut Street approaches. There will be short left turn lanes on both Taylor Road approaches to this intersection. The crosswalk striped across Taylor Road east of the intersection will remain.

The **Taylor Road / Horseshoe Bar Road Intersection** will still be controlled by a traffic signal. The plan maintains the separate left turn lanes that exist on the Taylor Road approaches as well as the right turn lane that is available on northbound Horseshoe Bar Road. The intersection will still be wide enough to accommodate trucks. Bulb outs will be added to reduce the crossing distance for pedestrians, and the no parking area on eastbound Taylor Road approaching the intersection will be removed.

The Town of Loomis traffic mitigation fee program identifies a traffic signal at **Taylor Road / Webb Street Intersection,** in lieu of the current control by stop signs on the Webb Street approaches. Crosswalks will be provided across Taylor Road on both sides of the street and the intersection will be "bulb-ed" to shorten pedestrian crossing distances. Today the intersection is signed to prohibit left turns from Webb Street onto eastbound Taylor Road in the morning peak hours before school (i.e., 7:00 to 9:00 a.m.)

If the intersection was not signalized, in the long term it is likely that this turn prohibition would need to be expanded to other hours. While not a part of the Implementation Plan, it may be necessary to eliminate eastbound left turns from Taylor Road onto Webb Street due to the short distance between this intersection and Horseshoe Bar Road.

The **Taylor Road / King Road intersection** will remain a signalized intersection with auxiliary turn lanes on each approach. Geometrically, one change will be made. The short westbound "thru+right turn" lane on Taylor Road will be re-striped as a "right turn only" lane in order to allow a reduced width on Taylor Road west of the intersection. The conceptual plan will continue to accommodate the paths of trucks traveling between Taylor Road and the Swetzer Road industrial area.

The **Horseshoe Bar Road / Library Drive Intersection** is a "tee" intersection located on a curve on Horseshoe Bar Road. A left turn lane will be added to Horseshoe Bar Road at this intersection, and in the near term traffic will still be controlled by a stop sign on Library Drive, although the intersection could be signalized in the future if needed. Crosswalks will be available across Library Drive across Horseshoe bar Road.

While today the **Horseshoe Bar Road / Doc Barnes Drive Intersection** is a "tee" intersection controlled by a stop sign on the Doc Barnes Drive approach, a major signalized intersection is planned in the future and included in the Town's fee program. Auxiliary turn lanes will be needed to accommodate traffic diverted from Taylor Road to the Doc Barnes Extension, as well as anticipated development in the Loomis Town Center project.

The **Horseshoe Bar Road / Westbound I-80 intersection** will remain as it exists today. However, the plan recognizes the need to extend the existing southbound tight turn lane on Horseshoe Bar Road back to the Doc Barnes Drive intersection.

New Bicycle Facilities. The Implementation Plan will change the nature of bicycle facilities in some locations and will result in facilities that are consistent with the intentions of the Complete Streets Act (2008).

A mixed ***bicycle –pedestrian path*** will be the main feature of the plan in many locations. The path will be 10 feet wide to accommodate both modes and will be paved. The path will be separated from automobile traffic by a landscaped swale.

The bicycle-pedestrian path will extend on both sides of Taylor Road from Sierra College Blvd to the High Hand Nursery and from Horseshoe Bar Road to King Road. Bicycle–pedestrian paths will also be created on Horseshoe Bar Road from Laird Street to Doc Barnes Drive. ADA requirements mandate the size and configuration of pedestrian facilities. Meeting ADA requirements on both sides of Taylor Road requires adjustment to on-street parking.

Within the existing downtown area, striped **Class II bicycle lanes** will be provided on Taylor Road in both directions from High Hand Nursery to Horseshoe Bar Road, and for a little less than 300 feet in front of the Blue Goose Fruit Shed.

New Pedestrian Facilities / Sidewalks. The bicycle-pedestrian path noted above will replace existing sidewalks or create new pedestrian opportunities on the west and east ends of the plan area. ADA accessible sidewalks will be created in the remainder of the Taylor Road corridor.

Because these streets fall outside of the plan area, there are no sidewalks proposed on Oak Street, Walnut Street or Magnolia Street outside of those streets' intersections with Taylor Road. This choice is also consistent with the rural character of Loomis and the low traffic volumes on these roads.

The plan incorporates numerous pedestrian trails through the Town property. Sidewalks will extend west from the Railroad Depot to provide access to the new features being created. From that point meandering trails will then continue beyond Walnut Street to the High hand Nursery parking lot. Eventually that trail could be extended to the west beyond the W&W lumber yard.

ADA requirements mandate the size and configuration of pedestrian facilities. Meeting ADA requirements on both sides of Taylor Road requires adjustment to on-street parking.

Parking Facilities. The Implementation plan includes changes to on-street parking on Taylor Road and Horseshoe Bar Road, creates new public parking lots on Town owned property and makes some changes to the configuration of access to private parking areas along both streets.

On-Street Parking. The proposed concept trades a portion of the Town's on-street parking supply for narrower streets, ADA compliance, safer bicycle facilities and reduced pedestrian crossing distances. These changes will affect the Town's parking supply, as noted in Table 6.

The plan will eliminate a few parking spaces in some areas and add spaces in others. The plan will eliminate the "informal" parking along Taylor Road in front of High Hand and reduce the number of spaces that are available across the street. The plan includes new parking on Town property to replace these spaces. Under the Implementation Program there will be a total of 57 on-street parking spaces on Taylor Road. All on-street parking will be eliminated on Horseshoe Bar Road.

TABLE 6
CHANGES TO TOWN CENTER ON STREET PARKING SUPPLY

Location from	To	Side of street	Parking Spaces	
			Existing	Proposed
Taylor Road				
High Hand Nursery frontage	Oak Street	North	14	5
Circle Drive	Oak Street	South	17	6
Oak Street	Walnut Street	North	3	10
		South	5	9
Walnut Street	Horseshoe Bar Road	North	11	10
		South	12	12
Horseshoe Bar Road	Webb Street	North	0	0
		South	0	5
Webb Street	Loomis Elementary	North	0	0
		South	0	0
Loomis Elementary	King Road	North	0	0
		South	0	0
Total			***62***	***57***
Horseshoe Bar Road				
Taylor Road	Library Drive	West	7	0
		East	5	0
Library Drive	Doc Barnes Drive	West	0	0
		East	2	0
Total			***14***	***0***

Off-Street Parking on Town Property. The Implementation plan includes new paved parking areas on Town property, and the plan preserves the opportunity for special event parking in the area east of the Blue Goose. The total off-street supply that is proposed is noted in Table 7.

Today most of the Town property outside of the High Hand parking lot is unimproved, and on a regular basis some motorists choose to park in the areas behind Star Liquors and behind Nelthorpe. The Implementation Program accommodates those demands with paved parking spaces and provides new paved spaces behind the High Hand sheds and near the Blue Goose.

As noted, the paved parking supply totals 190 spaces. This compares to 75 paved spaces that exist today (includes High Hand parking lot).

TABLE 7
CHANGES TO OFF-STREET PARKING

Description	Location	Number of Paved Spaces	
		Existing	Proposed
Taylor Road			
High Hand Nursery		55	55
Behind High Hand and Earth Central	Behind nursery West of Walnut Ave	0	38
Behind Christensen's and Nelthorpe	East of Walnut Avenue and West of Railroad Depot	0	44
West of Blue Goose	East of Webb Street	0	39
Front of Blue Goose	Along Taylor Road	20	12
	Total	***75***	***190***

Transit Service. Public bus service will continue to be provided to the Loomis area by Placer County Transit via the *Taylor Road Shuttle* that links Loomis, Penryn, Auburn and Sierra College in Rocklin. Under the Implementation Plan transit stops will be available but the nature of improvement at some stops will be limited.

There will be two stops where busses can pull out of the travel way. Near King Road a formal bus stop will be created on westbound Taylor Road. This stop will allow busses to load passengers out of the travel way without blocking through traffic. Similarly, there will be a westbound bus stop near Shawn Way. The existing bus stop in the multi-modal parking lot will remain.

The plan does not designate other bus stops. Busses will be able to stop on westbound Taylor Road in the vicinity of the existing stop at Star Liquors, but nor formal pull-out is planned. Busses will stop in the bike lane. There are no dedicated bus-pullouts in the eastbound direction. Near King Road, an eastbound stop will be placed within the area devoted to the eastbound right turn lane.

Overview of Analysis Approach

The impacts of implementing the Town Center Implementation Plan have been evaluated from the following perspectives.

From the standpoint of the Town's Level of Service Policies:

The effects of Increased Vehicular Trip Generation associated with the day to day operation of new land uses envisioned on Town property.

The effects of reduced Taylor Road and Horseshoe Bar Road street widths on local and regional travel patterns.

The effects of changes to the Downtown Parking Supply on regular weekday Parking utilization and parking during special events

The effect of changes to transit stops on Placer County Transit policies and use.

Characteristics of Land Uses on Town Property

The Town Center Implementation Plan identifies various land uses that will be developed on Town property. These uses range from recreational facilities that accommodate particular activities, to flexible space that accommodate a variety of activities, to parking for new uses and adjoining businesses, and to new pedestrian and bicycle trails.

Trip Generation. The amount of vehicular traffic associated with new land uses can be estimated based on trip generation rates derived from observation of similar uses. Data published by the Institute of Transportation Engineers (ITE) is typically considered, and trip generation rates identified in their publication *Trip Generation, 8th Edition* are noted in Table 8.

As noted, parks in urban areas generate relatively little automobile traffic on weekdays. "Passive" city parks generate a handful of new automobile trips and cater primarily to persons who are already in the area as residents or visitors to other attractions. Higher trip generation forecasts can be expected from those facilities that offer specific activities for visitors, such as amusement parks and zoos.

In this case, the features included in the Downtown Loomis Implementation Plan area have been conservatively assumed to generate new automobile trips at a rate that is similar to that associated with a Regional Park. This, the roughly 6 acres controlled by the Town might be expected to generate 28 daily trips daily trips on a typical weekday.

TABLE 8
TRIP GENERATION FORECASTS

Land Use	Unit	Weekday Trips per unit	Quantity	Daily Trip Ends
City Park	acre	1.60		
County Park	acre	2.30		
Regional Park	acre	4.60	6 acres	28
Multi-Purpose Recreational Facility	acre	90.40		
Amusement Park	acre	75.80		
Zoo	acre	23.90		
Recreational Community Center	Building ksf	22.90		

To put this forecast in perspective, a single family residence is assumed to generate roughly 10 daily trip ends. Thus the weekday traffic associated with the uses on Town property is roughly equivalent to the trips accompanying two to three single family homes.

Special events held on the Town property would certainly generate additional traffic, primarily on weekends. However, while the new facilities provided by the Implementation plan may increase the frequency of special events, the traffic impacts of events held in these areas would be no worse than those already occurring in downtown Loomis.

Relocation of Existing Local Traffic to new Parking lots. Eliminating some on-street parking along Taylor Road and relocating employees and business patron vehicles to new parking lots on Town property will have a minor effect on local travel patterns. While motorists using the new parking lots will add traffic to Walnut Street and the north end of Horseshoe Bar Road, their trips would not be "new" to the regional circulation system.

The amount of local traffic generated by the new parking lots can be estimated based on typical turnover rates in urban parking lots. A "worst case" assumption is that the new parking was fully utilized and that each space turned over on average once every 2 hours over the nine hours when downtown business are typically open (i.e., 9:00 a.m. to 6:00 p.m.). This assumption would yield 1,215 daily trips (½ inbound and ½ outbound) made to and from the 135 new parking spaces on Town Property. This estimate would exclude the traffic already being generated by patrons of High Hand Nursery and the Blue Goose Shed who are parking on Town property. Approximately 10% of the daily traffic, or 120 trips could be expected during peak hours. This analysis assumes peak hour traffic is split 80 inbound and 40 outbound in the a.m. peak hour, with this directionality reversed in the p.m. peak hour.

Effect on Regional Travel. Taylor Road and Horseshoe Bar Road carry traffic that does not originate in the Town of Loomis as well as trips generated by Loomis businesses and residents. Changes to the character of these roads, especially in terms of travel speeds, could cause current and future road users to consider using alternative travel routes. If the time needed to travel through Loomis increases, it is possible that some through traffic will be diverted to other routes.

The Town of Loomis regional travel demand forecasting model was used to identify the extent of possible diversion due to changes in the character of Taylor Road and Horseshoe Bar Road. Current traffic model assumptions regarding travel speed were identified, and alternative assumptions regarding the new street sections were made. In this case it was conservatively assumed that the "free-flow" speed on Taylor Road from Circle Drive to King Road would be reduced by 5 mph as a result of the new plan. Because the model currently is calibrated to a relatively low speed on Horseshoe Bar Road, no change to that facility was made.

To evaluate the effect of this change on current travel patterns, the baseline (year 2005) traffic model was adjusted to reduce the free-flow travel speed on Taylor Road, and resulting daily and hourly traffic volumes were identified. The net change between original baseline and modified baseline year traffic volumes was then identified and applied to the observed 2009 daily and peak hour traffic volumes.

Existing Plus Project Traffic Volumes

Figure 3 identifies daily and peak hour traffic volumes on study area roads and at key intersections assuming implementation of the Downtown Implementation Plan.

Resulting Levels of Service at intersections and on roadway segments are identified in Tables 9 and 10.

TABLE 9
EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour				PM Peak Hour				Peak Hour Traffic Signal Warrants Met?
		Existing		Ex Plus Project		Existing		Ex Plus Project		
		Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS	
Taylor Road / Sierra College Blvd	Signal	29	C	27	C	32	C	30	C	Not applicable
Taylor Road / Shawn Way										
Westbound left turn	NB Stop	1	A	1	1	1	A	1	A	No
Northbound left+right turn		12	B	10	B	15	C	14	B	
Taylor Road / Circle Drive	NB Stop									
Westbound left turn		1	A	1	A	1	A	1	A	No
Northbound left+right turn		13	B	11	B	16	C	13	B	
Taylor Road / Oak Street	NB Stop									
Westbound left turn		1	A	1	A	1	A	2	A	No
Northbound left+right turn		13	B	11	B	18	C	16	C	
Taylor Road / Walnut Street										
Eastbound left turn	NB/SB Stop	1	A	1		1	A	2	A	No
Westbound left turn		1	A	1		1	A	1	A	
Northbound left+thru+right turn		14	B	12	B	16	C	15	B	
Southbound left+thru+right turn		11	B	16	C	13	B	21	C	
Taylor Road / Horseshoe Bar Rd	Signal	20	C	19	B	30	C	26	C	Not applicable
	coordinated			27	C			33	C	

TABLE 9 (cont'd)
EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour				PM Peak Hour				Peak Hour Traffic Signal Warrants Met?
		Existing		Ex Plus Project		Existing		Ex Plus Project		
		Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS	
Taylor Rd / Webb Street										
EB left turn	NB/SB Stop	1	A	1	A	2	B	2	A	Volume: Yes
WB left turn		1	A	1	A	1	A	1	A	(P.m.)
NB left+thru+right turn		18	C	17	C	16	C	21	C	Delay: No
SB left+thru+right turn		**34**	**D**	**29**	**D**	22	C	17	C	
	Signal			11	B			12	B	
Taylor Rd / King Road	Signal	40	D	43	D	30	C	31	C	Not Applicable
Horseshoe Bar Rd/Library Dr										
SB left turn	WB Stop	1	A	1	A	1	A	1	A	No
WB left+right turn		**28**	**D**	24	C	18	C	19	C	
Horseshoe Bar Rd/Doc Barnes Dr	EB Stop									
NB left turn		1	A	1	A	1	A	1	A	No
EB left+right turn		15	B	17	C	17	C	19	C	
	Signal			4	A			5	A	

TABLE 10
EXISTING PLUS PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment from	To	# of Lanes	Existing			Ex Plus Project			
				Average Daily Traffic	Vol / Cap	LOS	Average Daily Traffic Total	Change	Vol / Cap	LOS
Taylor Road	Sierra College Blvd	Circle Drive	2+	10,205	0.68	B	9,425	-780	0.63	B
	Circle Drive	Oak Street	2	10,305	0.69	B	9,375	-930	0.63	B
	Oak Street	Horseshoe Bar Road	2	10,210	0.68	B	9,280	-930	0.62	B
	Horseshoe Bar Road	Webb Street	2	19,695	**1.31**	**F**	19,175	-520	**1.28**	**F**
	Webb Street	King Road	2	16,330	**1.09**	**F**	16,060	-270	**1.07**	**F**
Horseshoe Bar Rd	Taylor Road	Library Drive	2	14,165	**0.94**	**E**	14,445	+280	**0.96**	**E**
	Library Drive	Westbound I-80 ramps	2	15,705	**1.05**	**F**	16,025	+320	**1.07**	**F**
Oak Street	Taylor Road	Magnolia Street	2	675	0.05	A	725	+50	0.05	A
Walnut Street	Taylor Road	Magnolia Street	2	1,295	0.09	A	1,345	+50	0.09	A
Webb Street	Taylor Road	Saunders Avenue	2	3,760	0.25	A	3,550	-210	0.24	A

+ indicates presence of two way left turn lane

General Plan Capacity is 15,000 ADT @ LOS F

Impacts of Implementation Plan on Circulation and Traffic Flow

The Implementation Plan will slow the speed of traffic on Taylor Road and Horseshoe Bar Road by narrowing travel lanes and placing new landscaped areas in close proximity to moving traffic. While the current configuration of Taylor Road between Oak Street and Horseshoe Bar Road already acts to retard traffic flow, under the plan traffic calming effects will be extended beyond this core area to King Road and eventually to Sierra College Blvd.

As a practical matter, the amount of traffic that can be moved through Downtown Loomis on Taylor Road will not change since the overall capacity of the corridor is governed by the flow of traffic through the signalized Horseshoe Bar Road and King Road intersections. At these two locations the plan makes minor changes which do reduce intersection capacity somewhat. At the Horseshoe Bar Road intersection, eliminating the "no parking / bus stop" on the eastbound approach to the intersection effectively reduces the width of the remaining travel lane. At King Road, the westbound thru+right turn" lane will be changed to a right turn only lane.

As noted in Table 9, the Implementation Plan does change traffic volumes at many intersections but does not result in any locations operating at a Level of Service that exceeds current Town of Loomis standards.

As shown, traffic signals that are eventually planned for the Taylor Road / Webb Street and Horseshoe Bar Road / Doc Barnes intersection would work with a satisfactory Level of Service under short term conditions. However, even with coordination, adding the Webb Street signal will increase the length of delays at the Horseshoe Bar Road intersection, and during peak hours the queues between intersections may be too long for the available left turn lanes. There is no real purpose to the Doc Barnes signal until the Extension is constructed and the Loomis Village project proceeds. Thus, these signals are not recommended for immediate installation.

As noted in Table 10, the Implementation Plan will reduce the daily traffic volume on Taylor Road and increase the volume on Horseshoe Bar Road. The project's impact to Taylor Road and to other Loomis streets is not significant under Town standards. On Horseshoe Bar Road, the Implementation Plan will increase the daily traffic volume at locations where the current volume already results in LOS E or LOS F. However, the incremental change in volume / capacity ration (i.e., v/c) is less than the 0.05 threshold, this impact is not significant.

Locally, the implementation of raised medians in lieu of the current two-way left turn lane will make it slightly more inconvenient for motorists to access Taylor Road from private driveways and from unsignalized intersections. At locations where private access is limited to right-turn-only be raised medians, motorists may have to use other local streets to drive "around the block" since u-turn will not be possible. However, this additional travel is not by itself a significant impact.

Impacts to Bus Service

The Implementation Plan will help the Town of Loomis serve transit patrons in a manner that is consistent with the character of the proposed design. At several locations busses will be expected to

pause in through travel lanes, rather than in dedicated pull-outs. However, because these busses block through traffic, busses will not be delayed when they elect to leave the stop. The impact of the Implementation Plan on transit service is not significant. Alternatively, pus managers may elect to make greater use of the stop in the multi-modal center, rather than stopping at locations along Taylor Road near Horseshoe Bar Road as is not the case.

This concept may delay through traffic on Taylor Road slightly, although this is consistent with the Town's desire for traffic calming. As bus headways are an hour apart, the effect of overall traffic flow will not be significant.

Impacts to Bicycle Facilities

The existing bicycle system is comprised for Class II (on-street lanes) facilities on Taylor Road and Horseshoe Bar Road. While theses facilities are designated in the Town's Draft Bicycle Transportation Plan, portions of the current lanes do not meet minimum design standards. The Draft Bicycle Transportation Plan also notes that in the future a continuous Class I (separated bicycle path) facility is to be constructed between Taylor Road and the railroad from King Road to Sierra College Blvd.

The Implementation plan is not consistent with the Town's Bicycle Transportation Plan, and development of the Implementation Plan as proposed would interfere with creation of the elements of the Bicycle Transportation Plan. This is a significant impact under the Loomis General Plan. Mitigating this impact would either require modifying the Draft Bicycle Transportation Plan to be consistent with the Implementation Plan or, alternatively, modifying the Town Center Implementation Plan to accommodate the specific features noted in the Bicycle Transportation Plan.

Impacts to Pedestrian Facilities / Sidewalks

Because much of downtown Loomis was developed as a rural community prior to incorporation, sidewalks are intermittent and many are in poor condition. The bicycle-pedestrian path planned under the Implementation Plan will replace existing deficient sidewalks and/or create new pedestrian opportunities on the west and east ends of the Town Center area. ADA accessible sidewalks will be created in the remainder of the Taylor Road corridor. The plan incorporates numerous pedestrian trails through the Town property. Sidewalks will extend west from the Railroad Depot to provide access to the new features being created. From that point meandering trails will then continue beyond Walnut Street to the High hand Nursery parking. ADA requirements mandate the size and configuration of pedestrian facilities. Meeting ADA requirements on both sides of Taylor Road requires adjustment to on-street parking.

The proposed trails and sidewalks are consistent with the current Loomis General Plan and with the Draft Loomis Trails Master Plan. Thus the impacts of implementing this portion of the Implementation Plan are positive, and no mitigation is required.

Impacts to Parking

Effects of Changes to On-Street Parking on Regular Midweek Parking Conditions. As noted in the project description, the number of parking spaces that will be available on Taylor Road (57) after the Implementation Plan proceeds will be similar to but slightly few than the number of legal spaces that exist today (62). The available spaces have been compared to the parking demands observed on a regular weekday, as noted in Table 11. As shown, on a weekday there were 40 vehicles parked on Taylor Road. Assuming that on-street parking is considered to be "fully utilized" when occupancies reach 90%, the new on-street supply will accommodate 51 cars, or all of the 40 vehicles observed in this area. This would indicate that no motorists would be "displaced" from Taylor Road under the Implementation plan. Furthermore, as noted in the discussion of off-street parking which follows, new parking spaces will be created in Town property to accommodate downtown employees and business patrons.

No on-street parking will remain on Horseshoe Bar Road. However, these spaces were not used on the weekday.

TABLE 11
COMPARISON OF DOWNTOWN ON-STREET PARKING SUPPLY AND DEMAND

Location From	To	Side of Street	Proposed Spaces	Occupied Spaces Wednesday Noon
Taylor Road				
High Hand Nursery frontage	Oak Street	North	5	18*
Circle Drive	Oak Street	South	8	1*
Oak Street	Walnut Street	North	10	2
		South	7	3
Walnut Street	Horseshoe Bar Road	North	10	4
		South	12	6
Horseshoe Bar Road	Webb Street	North	0	0
		South	5	0
Webb Street	Loomis Elementary	North	0	0
		South	0	6
Loomis Elementary	King Road	North	0	0
		South	0	0
Total			***57***	***40***
Horseshoe Bar Road				
Taylor Road	Library Drive	West	0	0
		East	0	0
Library Drive	Doc Barnes Drive	West	0	1
		East	0	0
Total			***0***	***1***
Weekday demand observed in July 2009, except for locations observed 12/2/09 as noted *				

A key issue to be considered when eliminating on-street parking is the "acceptable" walking distance between the new parking supply and businesses on Taylor Road. Many business owners perceive that their customers need to be able to park on the same block as the front door of their business and that off-site parking that is difficult to find will not be used. While this may be true for a few businesses, when customers are provided with a safe and attractive walking experience, including accessible walkways and crosswalks, both the real and perceived walking distances will be reduced. The new plan creates new mid-block crosswalks on Taylor Road, as well as a new walkway that would connect Taylor Road business with the Town property. A new public connection is also planned between Earth Central and Star Liquors. The plan also includes landscape improvements to increase the attractiveness of the walkways.

The walking distances from Taylor Road businesses to the middle of new parking areas will be about 2 minutes or less, which is normally judged by land use planners to be acceptable in urban areas.

Residences on Horseshoe Bar Road could be affected by the plan in that on-street parking is eliminated. Guest parking for these residences that today occurs on Horseshoe Bar Road would move to other local streets such as Library Drive, Laird Street and Magnolia Street.

Effects of Off-Street Parking on Town Property. The Implementation plan includes new paved parking areas on Town property, and the plan preserves the opportunity for special event parking in the area east of the Blue Goose.

The regular weekday demands observed in these areas totals 91 spaces. Adding the "net loss" of 5 on street spaces on Taylor Road, the current weekday demand is 96 spaces. As noted in Table 12, the new parking supply greatly exceeds the current off-street usage.

TABLE 12
CHANGES TO OFF-STREET PARKING AND DEMAND / SUPPLY COMPARISON

Description	Location	Parking Spaces		
		Paved Spaces		Occupied Spaces
		Existing	Proposed	Wednesday Noon
Taylor Road				
High Hand Nursery		55	55	43*
Behind High Hand and Earth Central	Behind nursery and west of Walnut Ave	0	38	27
Behind Christensen's and Nelthorpe	East of Walnut Avenue and west of Railroad Depot	0	44	16
West of Blue Goose	East of Webb Street	0	39	0
Front of Blue Goose	Along Taylor Road	20	14	5
East of Blue Goose	North of Taylor Road	(U)	(U)	0
	Total	***75 (+48)***	***190 (+48)***	***91***

Demand observed in July 2009, except for locations observed 12/2/09 as noted *
(U) is unpaved area available during the Festival

Effects of Parking Demands of New and Revitalized Land Uses. The Implementation Program envisions development of facilities that will attract persons to the downtown Loomis area. Persons using the new parks / trails could drive to the downtown. Existing businesses could see more customers, and vacant buildings could be occupied. This new activity would also create the need for more parking for patrons and employees.

The new recreational facilities planned in the Town property will have their own parking demands. Based on typical planning guidelines for these uses, the new activity areas could create the need for 30 parking spaces.

Overall Effects of Implementation Program on Weekday on Regular Weekday Parking. The overall effect of the planned parking areas on weekdays is noted in Table 13. As noted a total of 190 paved off-street spaces will be available. The regular weekday use in off-street areas today totals 91 vehicles. Another 30 spaces are needed by the new recreational uses in the Implementation Program, and 5 spaces are lost on Taylor Road. The weekday total demand is 126 spaces, leaving roughly 64 additional available spaces. Thus, while some Town Center employees and patrons who today may be able to park directly in front of their building may not longer be able to do so, based on the overall positive increase in the Town Center parking supply parking, the impact of the Implementation Plan on parking is not significant under CEQA.

The number of available spaces can be compared to the total number of spaces in the Town's lot at Magnolia St / Walnut St (i.e., 48 spaces) or to the existing parking space count in the multi-modal parking lot (i.e., 67 spaces).

TABLE 13
PROJECTED WEEKDAY USE OF NEW PARKING FACILITIES

Total Supply		190 spaces
Parking Demands		
	Observed Existing Regular Weekday Use	91 spaces
	Parking Spaces lost on Taylor Road	5 spaces
	Spaces Required for Recreational Uses	30 spaces
	Subtotal	126 spaces
	Space available for additional downtown shoppers / employees	***64 spaces***

Other Use for Parking. As noted earlier, the "surplus" spaces could be used to accommodate new customers and employees. Many communities use this opportunity to provide parking for new "in-fill" business that would otherwise have difficulty providing adequate on-site parking. Many local jurisdictions form "parking districts" to create common parking facilities that can be funded by in – lieu parking fees.

This approach could be very useful in Loomis. For example, a parking district could provide all or part of the parking demand associated with conversion of existing structures for higher uses. A small building converted to retail space would not have to devote all of its lot to on-site parking.

Overall Effects of Implementation Program on Parking During Special Events. The Eggplant Festival is annually the most notable special event in Loomis, although other smaller events occur throughout the year. The festival draws large crowds, and the associated parking demands are accommodated by a combination of legal parking spaces, "informal" on-street parking throughout the Downtown, temporary parking in vacant lots, parking on Town property, and satellite parking at area schools. This year, roughly 1,200 cars were observed parked at various locations at noon, including 111 vehicles were parked along Taylor Road in informal and legal parking spaces.

Since Taylor Road will be narrowed under the Implementation Plan to create pedestrian walkways and bikeways, informal parking areas will be eliminated, and the number of vehicles that can be accommodated on-street during the Festival will be reduced. A portion of the observed demand can park in the on-street spaces planed under the Implementation Plan, but approximately 55 vehicles that were observed on Taylor Road will have to park elsewhere. Similarly 15 vehicles parked on Horseshoe Bar Road during the festival, and these vehicles would have to park elsewhere. New parking spaces on Town property will make up for part of this deficiency.

Town property within this study area is used for parking during the Eggplant Festival. During the festival there were 250 vehicles parked on Town property, including cars parked in the paved High Hand lot and in the overflow area east of the Blue Goose.

The new parking supply isn't intended to accommodate the entire parking demand of the Eggplant Festival. The off-street parking supply on Town property will increase to 190 spaces and another 48 vehicles can continue to be accommodated in the overflow area east of the Blue Goose, for a total of 238 spaces. This is roughly the same as number of parked cars observed during the festival in these areas, but twelve vehicles could be displaced. Roughly 70 cars that will no longer be able to park on Taylor Road and Horseshoe Bar Road during the festival and these vehicles will need to park elsewhere. Thus the total "deficiency" resulting from the Implementation Plan could be 80 to 85 vehicles.

The need to provide additional paved parking on Town property for an event occurring once a year is certainly questionable. The 80 to 85 vehicle deficiency represents less than 10% of the Festival's 1,200 vehicle total parking demand, although the lost on-street spaces are among the most central to the Festival. It is reasonable to expect that this deficiency can be accommodated in areas beyond the limits of current parking use where people are not yet parking during the Festival. Private parking lots further west on Taylor Road west of the High Hand are generally empty during the Festival. With approval to use these lots, signing to direct Festival guests to unused western parking areas will be in order, and expanding the Festival's current horse drawn shuttle service to conveniently connect western parking areas with the Downtown makes sense. Using these areas would help those western downtown businesses that are not readily incorporated into the festival, and is a better option than dedicating more of the Town's property to pavement.

Future Parking District

The Town may consider implementing a parking district for the Town Center Area. Developing a parking district could help ameliorate the need, especially if business owners have different peak demand times. While the new parking created as part of the Implementation Program could be used for this purpose, additional information will need to be developed by the Town in order to finalize a parking district. Parking code requirements will need to be affirmed, and the share of individual and cumulative parking code requirements that can be satisfied by a district will need to be quantified. These decisions might be based on the proximity of specific parcels to the common parking supply, and will need to recognize the total amount of demand for new parking that might be realized in downtown Loomis. In addition, the extent to which on-site parking should be made available for use by others, particularly during special events, will need to be considered in order to maximize the usefulness of the overall parking supply.

CUMULATIVE IMPACTS

Introduction

While recent traffic growth trends have suggested a decrease in traffic volumes on study area streets, in the long term it is likely that the conditions observed today will change as the result of new development in Loomis and throughout the Sacramento Metropolitan Region, and the construction of new roads.

The Town of Loomis recently commissioned the creation of a regional travel demand forecasting model, and that analysis tool became available in June 2009. The Loomis model is intended to be consistent with a similar model developed for the City of Rocklin, and both models reflect development anticipated throughout Sacramento, Placer, Yuba and Yolo Counties by the year 2030.

Locally, the Loomis traffic model assumes development permitted under the Town's General Plan, as well as circulation system components anticipated by the Town. Noteworthy commercial development is assumed on the Loomis Town Center site north of Raley's Shopping Center, on the old Turtle Island site south of Interstate 80 and along Sierra College Blvd. The Loomis model assumes that the Doc Barnes Drive extension will be completed to King Road, but this model does not assume that the South Walnut Street extension will not be constructed by the year 2030. Regionally, the Town's traffic model assumes major improvements in Rocklin (i.e., Dominguez Road I-80 Overcrossing and Clover Valley Road extension to Park Drive) as well as the Placer Parkway connecting State Route 99 and State Route 65.

No Project Year 2030 Traffic Volumes and Levels of Service

Conditions on Roadway Segments. Table 14 compares current daily traffic volumes on study area streets with year 2030 forecasts created by the Loomis traffic model. Resulting Levels of Service are also identified. This is the "No Project" condition for this analysis

As indicated, the volume of traffic on Taylor Road through the study area is expected to increase appreciably. Based on the General Plan's capacities, the LOS F conditions now occurring east of Horseshoe Bar Road will also occur in the area between Sierra College Blvd and Horseshoe Bar Road. These forecasts and Level of Service conclusions are generally consistent with the findings of the current Loomis General Plan EIR which noted that a 4 lane section would theoretically be needed to deliver the Town's minimum Levels of Service. This expectation has lead to the Town's standard requirement that new development widen its Taylor Road frontage to the width needed to eventually accommodate 4 lanes.

The volume of traffic forecast for Horseshoe Bar Road will reflect the creation of the Doc Barnes Drive extension to King Road. While the volume occurring between Doc Barnes Drive and Taylor Road will be the same or less than that occurring today, the volume between Doc Barnes Drive and the freeway ramps will increase. The long term plan for the area of Horseshoe Bar Road near the freeway has included widening the road to 4 lanes in conjunction with reconstruction / widening of the Interstate 80 / Horseshoe Bar Road interchange. New development in Loomis (i.e., Raley's) has made frontage improvements that are consistent with that plan, and the Town's traffic mitigation fee program includes contribution towards the cost of modifying the interchange.

TABLE 14
YEAR 2030 NO PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment From	To	# of Lanes	General Plan Capacity (veh/day)	Existing			Year 2030		
					Average Daily Traffic	V / C Ratio	LOS	Average Daily Traffic	V / C ratio	LOS
Taylor Road	Sierra College Blvd	Circle Drive	2+	15,000	10,205	0.68	B	20,590	**1.40**	**F**
	Circle Drive	Oak Street	2	15,000	10,305	0.69	B	17,840	**1.19**	**F**
	Oak Street	Horseshoe Bar Road	2	15,000	10,210	0.68	B	16,085	**1.07**	**F**
	Horseshoe Bar Road	Webb Street	2	15,000	19,695	**1.31**	**F**	22,650	**1.51**	**F**
	Webb Street	King Road	2	15,000	16,330	**1.09**	**F**	14,925	**1.00**	**F**
Horseshoe Bar Rd	Taylor Road	Library Drive	2	15,000	14,165	**0.94**	**E**	14,090	**0.94**	**E**
	Library Drive	Doc Barnes Drive	2	15,000	-	-	-	10,175	0.68	B
	Doc Barnes Drive	Westbound I-80 ramps	4	30,000	15,705	**1.05**	**F**	19,240	0.64	B
Oak Street	Taylor Road	Magnolia Street	2	15,000	675	0.05	A	700	0.05	A
Walnut Street	Taylor Road	Magnolia Street	2	15,000	1,295	0.09	A	2,000	0.13	A
Webb Street	Taylor Road	Saunders Avenue	2	15,000	3,760	0.25	A	7,140	0.48	A
	Taylor Road	Laird Street	2	15,000	1,000	0.07	A	2,015	0.13	A
Library Drive	Taylor Road	Doc Barnes Drive extension	2	15,000	200	0.01	A	4,125	0.28	A
Doc Barnes Dr	Walnut Street	Taylor Road	2	15,000	2,000	0.13	A	3,720	0.25	A
	Taylor Road	Library Drive extension	2	15,000	0	0.00	-	6,960	0.46	A

Outside of Taylor Road and Horseshoe Bar Road, the volume of traffic on most other Loomis roads is expected to increase modestly. The volume on Webb Street is expected to double as motorists continue to use the Webb Street route to King Road.

Intersection Levels of Service. The volume of traffic occurring without the Downtown Implementation Plan at study area intersections in the future has been estimated based on peak hour segment forecasts derived from the Town of Loomis traffic model. These forecasts were used to create localized growth factors by adding the incremental change in volume occurring on each segment to current traffic counts in order to create "adjusted" year 2030 volumes. Current peak hour turning movement volumes were adjusted to future volumes using methods described in the Transportation Research Board's (TRB's) NCHRP Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*.

Figure 4 presents background year 2030 traffic volumes for the "No Project" condition, while Table 15 summarizes year 2030 Levels of Service if the Implementation Plan is not pursued.

These calculations assume improvements are made to some study area intersection under adopted fee programs. Major improvements are planned to the Taylor Road / Sierra College Blvd intersection. At this location the South Placer Regional Transportation Agency (SPRTA) fee program is expected to widen Sierra College Blvd to a 6 lane section, and a second westbound left turn lane will be created on westbound Taylor Road.

As noted earlier, the Town's fee program includes traffic signals at the Taylor Road / Walnut Street, Taylor Road / Webb Street and Horseshoe Bar Road / Doc Barnes Drive intersections.

TABLE 15
YEAR 2030 NO PROJECT INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour		Peak Hour Traffic Signal Warrants Met?
		Average Delay (sec)	LOS	Average Delay (sec)	LOS	
Taylor Road / Sierra College Blvd	Signal	**46**	**D**	**48**	**D**	Not applicable
Taylor Road / Shawn Way						
Westbound left turn	NB Stop	1	A	1	A	No
Northbound left+right turn		17	C	18	C	
Taylor Road / Circle Drive	NB Stop					
Westbound left turn		1	A	1	A	No
Northbound left+right turn		14	C	17	C	
Taylor Road / Oak Street	NB Stop					
Westbound left turn		1	A	1	A	No
Northbound left+right turn		**27**	**D**	**37**	**E**	
Taylor Road / Walnut Street						
Eastbound left turn	NB/SB Stop	1	A	1	A	No
Westbound left turn		1	A	1	A	
Northbound left+thru+right turn		**42**	**D**	**38**	**D**	
Southbound left+thru+right turn		16	C	13	B	
	Signal	7	A	11	B	
Taylor Road / Horseshoe Bar Rd	Signal	33	C	**61**	**E**	Not applicable
Taylor Rd / Webb Street	Signal	20	B	17	B	
Eastbound left turn	NB/SB Stop	5	A	2	A	**Yes**
Westbound left turn		1	A	1	A	
Northbound left+thru+right turn		**370**	**F**	**74**	**F**	
Southbound left+thru+right turn		**284**	**F**	**>999**	**F**	
Taylor Rd / King Road	Signal	45	D	**36**	**D**	Not Applicable
Horseshoe Bar Rd/Library Dr						
Southbound left turn	WB Stop	3	A	4	A	No
Westbound left+right turn		**213**	**F**	**45**	**E**	
Horseshoe Bar Rd/Doc Barnes Dr	Signal	29	C	24	C	

Bold indicates conditions in excess of Town standards

As indicated the long term Levels of Service at the three existing signalized intersections may exceed the Town's minimum LOS C threshold at some times during the day. The Loomis General Plan recognizes that morning conditions at the **Taylor Road / King Road intersection** are greatly influenced by the traffic headed to Del Oro High School and Loomis Elementary School, and LOS D is accepted at that location at that time. However, if no improvements are made, this intersection will operate at LOS D in the evening.

Even with the diversion of traffic to the new Doc Barnes Drive Extension, the p.m. peak hour Levels of Service at **Taylor Road / Horseshoe Bar Road** is projected to be LOS D in the a.m in the p.m. This exceeds the Town's minimum LOS C standard. These peak hour Levels of Service would be accompanied by long queues of traffic on eastbound Taylor Road which would regularly extend through the Oak Street and Webb Street signals.

The Level of Service at the **Taylor Road / Webb Street intersection** is projected to be within the Town's LOS C minimum. However, as noted above, queueing between the Horseshoe bar Road and Webb Street will make operating these signals very difficult, and the option of retaining stop sign controls should be investigated by the Town.

At **Taylor Road / Sierra College Road,** the expected improvements would eventually yield LOS D conditions in the a.m. and p.m. if the volumes suggested by the Loomis Year 2030 traffic model are realized. Both conditions are in excess of the Town's LOS C minimum.

Levels of Service at un-signalized intersections on Taylor Road are influenced by the expected increase in mainline traffic and in some cased by the presence of a two-way left turn lane. While the traffic volume on Taylor Road will increase, the Level of Service for motorists at the Shawn Way and Circle Drive intersections will remain in the LOS C range since left turning motorists will still be able to make a two-step left turn using the two-way left turn lane. This opportunity does not exist in downtown Loomis, and motorists attempting to cross Taylor Road can expect long delays and LOS D or worse conditions during peak hours at the Oak Street intersection. Under the "No project" condition, it will be necessary to prohibit left turns and through traffic across Taylor Road at the Webb Street intersection.

Year 2030 peak hour traffic conditions at intersections on Horseshoe Bar Road will also reflect the presence of the Doc Barnes Extension to King Road. The Level of Service is expected to exceed the LOS C minimum at both the **Horseshoe Bar Road / Library Drive intersection.** However, with a signal the intersection will operate at LOS C.

Year 2030 Plus Project Traffic Volumes and Levels of Service.

Traffic Volume Forecasts. The Town of Loomis traffic model was re-run after incorporating the characteristics of the proposed Downtown Implementation Plan project. Intersection turning movements were developed from model results using the methods described in the Transportation Research Board's (TRB's) NCHRP Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. Local traffic accompanying the new parking facilities was added. Figure 5 identifies resulting daily and peak hour traffic volumes.

Effects on Roadway Segments. As indicated in Table 16, on many streets implementation of the Downtown Implementation Plan with its associated reduced travel speeds could result in lower traffic volumes in the Year 2030. As noted, the daily traffic volumes on Taylor Road are projected to decrease by 1000 to 1,500 ADT through the Downtown Implementation Plan area as a result of the proposed plan. Diverted traffic will be spread to a variety of roads throughout the Loomis Basin, and because many alternative routes are available, the traffic volume increases on individual roadway segments are only in the range of 200 to 500 ADT. While resulting traffic volumes in Loomis will generally be lower than under the No Project condition, the Level of Service on individual roadway segments is not projected to change. Regionally, the effects of implementing the Downtown Implementation Plan are not appreciable, as the change in traffic volume on routes such as Interstate 80 and Sierra College Blvd are relatively minor and do not change in operating Level of Service results.

The significance of these traffic changes has been considered at the locations where conditions in excess of adopted minimum LOS standards are expected. While the LOS on *Taylor Road* will continue to exceed the minimum standard, because the plan will reduce the volume on Taylor Road its impact is not significant.

The two lane portion of *Horseshoe Bar Road between Library Drive and Taylor Road* is forecast to operate at LOS E with and without the Implementation Plan. Because the project reduces the volume in this area, its impact is not significant.

The Level of Service on *Sierra College Blvd* will exceed the minimum with and without the project. The Implementation Plan will increase the daily traffic volume on Sierra College Blvd north of Taylor Road, but the incremental change in v/c is less than 0.01 in this area. Because the change is less than the threshold employed to determined significance (i.e., 0.05) the plan's significance in this area. South of Taylor Road, the impact of the implementation plan is not significant because the project will reduce the daily traffic volume slightly.

The volume of traffic forecast on *Interstate 80* will result in Levels of Service in excess of minimum standards with and without the Implementation Plan. Development of the project will increase the volume of traffic on Interstate 80 slightly as traffic is diverted from Taylor Road. However, the incremental increase in traffic resulting from the Implementation Plan is very small and the change in v/c ration is less than 0.01. Thus, under the Town's standards, the impact of the implementation plan is less than significant.

TABLE 16
YEAR 2030 PLUS PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment From	To	# of Lanes	Year 2030 No Project			Year 2030			
				Average Daily Traffic	V / C Ratio	LOS	Average Daily Traffic		V / C ratio	LOS
							Total	Change		
Taylor Road	Brace Road	Sierra College Blvd	2	**18,455**	**1.23**	**F**	-300	**18,155**	**1.21**	**F**
	Sierra College Blvd	Circle Drive	2+	**20,590**	**1.40**	**F**	-790	**19,800**	**1.32**	**F**
	Circle Drive	Oak Street	2	**17,840**	**1.19**	**F**	-1,150	**16,690**	**1.11**	**F**
	Oak Street	Horseshoe Bar Road	2	**16,085**	**1.07**	**F**	-1,190	**14,895**	**0.99**	**F**
	Horseshoe Bar Road	Webb Street	2	**22,650**	**1.51**	**F**	-1,065	**21,585**	**1.44**	**F**
	Webb Street	King Road	2	**14,925**	**1.00**	**F**	-1,535	**13,390**	**0.89**	**E**
	King Road	Rippey Road	2	10,320	0.69	B	-130	10,190	0.68	B
Horseshoe Bar Rd	Taylor Road	Library Drive	2	**14,090**	**0.94**	**E**	-490	**13,600**	**0.91**	**E**
	Library Drive	Doc Barnes Drive	2	10,175	0.68	-	-195	9,980	0.67	B
	Doc Barnes Dr	Westbound I-80 ramps	4	19,240	0.64	B	120	19,360	0.65	B
	Westbound I-80 ramps	Eastbound I-80 ramps	4	17,755	0.59	A	-35	17,720	0.59	A
	Eastbound I-80 ramps	Turtle Island Access	4	16,325	0.54	A	-65	16,260	0.54	A
King Road	Swetzer Road	Taylor Road	2	10,745	0.72	C	-600	10,145	0.68	B
	Taylor Road	Boyington Road	2	7,200	0.48	A	-440	6,760	0.45	A
Sierra College Blvd	Bankhead Road	Taylor Road	4	**40,355**	**0.90**	**E**	45	**40,400**	**0.90**	**E**
	Taylor Road	Brace Road	4	**48,415**	**1.08**	**F**	-210	**48,205**	**1.07**	**F**
Oak Street	Taylor Road	Magnolia Street	2	700	0.05	A	50	750	0.06	A
Walnut Street	Taylor Road	Magnolia Street	2	2,000	0.13	A	100	2,100	0.13	A

TABLE 16
YEAR 2030 PLUS PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment From	To	# of Lanes	Year 2030 No Project			Year 2030			
				Average Daily Traffic	V / C Ratio	LOS	Average Daily Traffic Total	Change	V / C ratio	LOS
Webb Street	Taylor Road	Saunders Avenue	2	7,140	0.48	A	475	7,615	0.51	A
	Taylor Road	Laird Street	2	2,015	0.13	A	-15	2,000	0.13	A
Library Drive	Taylor Road	Doc Barnes Drive extension	2	4,125	0.28	A	-115	4,010	0.28	A
Doc Barnes Dr	Walnut Street	Taylor Road	2	3,720	0.25	A	45	3,765	0.25	A
	Taylor Road	Library Drive extension	2	6,960	0.46	A	270	7,230	0.46	A
Westbound Interstate 80	Rocklin Road	Sierra College Blvd	3	**67,900**	**1.13**	**F**	50	**67,950**	**1.13**	**F**
	Sierra College Blvd	Horseshoe Bar Road	3	**67,145**	**1.12**	**F**	215	**67,360**	**1.12**	**F**
	Horseshoe Bar Road	Penryn Road	3	**60,125**	**1.00**	**F**	70	**60,195**	**1.00**	**F**
Eastbound Interstate 80	Rocklin Road	Sierra College Blvd	3	**70,230**	**1.17**	**F**	160	**70,390**	**1.17**	**F**
	Sierra College Blvd	Horseshoe Bar Road	3	**67,385**	**1.12**	**F**	270	**67,655**	**1.13**	**F**
	Horseshoe Bar Road	Penryn Road	3	**62,135**	**1.04**	**F**	250	**62,385**	**1.04**	**F**

Capacity of 4 lane Sierra College Blvd is 45,000 ADT. Capacity of other 2 lanes streets is 15,000 ADT. Capacity of three lane Interstate 80 is 60,000 ADT

Values in excess of adopted standard are shown in **bold**

Intersection Levels of Service. Table 17 compares Year 2030 peak hour Levels of Service with and without implementation of the Downtown Implementation Plan. These calculations account for the changes to local intersection geometry included under the Implementation Plan.

While the Implementation Plan will reduce total traffic at many locations, the redistribution of traffic will alter turning movements at many intersections. The effects of these changes are reflected in the resulting Levels of Service.

The *Taylor Road / Sierra College Blvd intersection* is projected to exceed the Town's minimum LOS C standard with and without the Implementation plan. While the project will reduce the length of delays in the a.m. peak hour, delays will be slightly longer in the p.m. peak hour.

At the *Taylor Road / Walnut Street intersection* the northbound Walnut Street approach is projected to operate at LOS E and LOS D with and without the Implementation Plan. However, the additional traffic from the plan will result in LOS F conditions on the southbound approach during the p.m. peak hour.

During the p.m., peak hour the *Taylor Road / Horseshoe Bar Road intersection* is projected to operate with Level of Service which exceeds the minimum LOS C standard with and without the Implementation Plan.

Mitigating this impact would require altering the Implementation Plan. The current plan narrows eastbound Taylor Road as it approaches the Horseshoe Bar Road intersection and eliminates the red-curbed "no parking" zone near the intersection. That parking limitation effectively widens the approach to the intersection and increases the intersection capacity. Modifying the plan to retain the current width on this approach would result in conditions that would not be significantly different from the No project condition.

Interestingly, greater improvement at the Horseshoe Bar Road intersection could be achieved by eliminating the planned Webb Street signal. Operating these closely spaced signals adds about 10 seconds of delay to the p.m. peak hour conditions at Horseshoe bar Road / Taylor Road intersection.

The Level of Service for a signalized *Taylor Road / Webb Street intersection* meets the Town's minimum standard with and without the Implementation Plan. However, as noted previously, the back-to-back left turn queues occurring between the two intersections will be a large problem. Alternatives to simply signalizing this intersection will need to be considered. One option would be to prohibit eastbound left turns from Taylor Road onto Webb Street. However, this change would reduce access to the properties on Webb Street, including the new parking lot included in the Implementation plan. It would also divert appreciable traffic to the King Road / Taylor Road intersection and increase delays at that location.

However, simply retaining stop signs is not necessarily the answer. Expanding current turn prohibitions will result in acceptable condition on northbound Webb Street, but southbound traffic would still operate at LOS F.

With and without the Implementation Plan the *King Road / Taylor Road intersection* is projected to operate at LOS D in the a.m. and p.m. peak hour. These conditions are accepted in the a.m. but exceed the Towns minimum LOS standard in the p.m.). In this case, the Implementation Plan reduces delays during the p.m. peak hour

Traffic waiting to turn onto Horseshoe Bar Road at the Taylor Road / Library Drive intersection is projected to experience delays that are indicative of LOS F in the morning peak hour and LOS E in the p.m. peak hour. A traffic signal would be warranted, and would deliver LOS C. a traffic signal is not included at this location in the Implementation plan, nor is it included in the current Town of Loomis impact fee program.

A traffic signal at the *Horseshoe Bar Road / Doc Barnes Drive intersection* will yield LOS C.

TABLE 17
YEAR 2030 NO PROJECT INTERSECTION LEVEL OF SERVICE

Intersection	Control	Year 2030 AM Peak Hour				Year 2030 PM Peak Hour				Peak Hour Traffic Signal Warrants Met?
		No Project		Plus Project		No Project		Plus Project		
		Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	
Taylor Road / Sierra College Blvd	Signal	**46**	**D**	**43**	**D**	**48**	**D**	**49**	**D**	Not applicable
Taylor Road / Shawn Way										
Westbound left turn	NB Stop	1	A	1	A	1	A	1	A	No
Northbound left+right turn		17	C	14	B	18	C	24	C	
Taylor Road / Circle Drive	NB Stop									
Westbound left turn		1	A	1	A	1	A	1	A	No
Northbound left+right turn		14	B	15	C	17	C	15	C	
Taylor Road / Oak Street	NB Stop									
Westbound left turn		1	A	1	A	1	A	2	A	No
Northbound left+right turn		**27**	**D**	**27**	**D**	**37**	**E**	**33**	**D**	
Taylor Road / Walnut Street										
Eastbound left turn	NB/SB Stop	1	A	1	A	1	A	2	A	No
Westbound left turn		1	A	1	A	1	A	1	A	
Northbound left+thru+right turn		**42**	**E**	**41**	**E**	**38**	**D**	**29**	**D**	
Southbound left+thru+right turn		16	C	**35**	**D**	13	B	**79**	**F**	
	Signal	7	A	9	A	11	B	11	B	
Taylor Road / Horseshoe Bar Rd	Signal	33	C	**40**	**D**	**61**	**E**	**72**	**E**	Not applicable
	Mitigated								**D**	
Taylor Road / Webb Street	Signal	20	B	19	B	17	B	15	B	
	Stop signs with turn prohibition			6	A			9	A	
				1	A					
				17	C					
				234	**F**					

KDA

TABLE 17
YEAR 2030 NO PROJECT INTERSECTION LEVEL OF SERVICE

Intersection	Control	Year 2030 AM Peak Hour				Year 2030 PM Peak Hour				Peak Hour Traffic Signal Warrants Met?
		No Project		Plus Project		No Project		Plus Project		
		Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	Ave Delay (sec)	LOS	
Taylor Rd / King Road	Signal	45	D	50	D	**39**	**D**	**36**	**D**	Not Applicable
	Mitigated									
Horseshoe Bar Rd/Library Dr										
Southbound left turn	WB Stop	3	A	2	A	4	A	2	A	Yes
Westbound left+right turn		**213**	**F**	**250**	**F**	**45**	**E**	**42**	**E**	
	Signal									
Horseshoe Bar Road / Doc Barnes Drive	Signal	29	C	26	C	23	C	21	C	

Bold indicates conditions in excess of Town standards.

Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT)

As noted earlier, implementation of the Downtown Implementation Plan will result in slight changes to local and regional travel patterns as motorists reconsider the quickest route between their origin and destination. The time spent on alternative routes is a product of the physical distance traveled and the speed along that route. The quickest route may be one involving high speed travel over a longer route, or conversely, low speed travel over s short distance. The cumulative effect of theses choices can be expressed in terms of the total Vehicle Miles Traveled (VMT) and the total Vehicle Hours Traveled (VHT).

Both VMT and VHT area byproducts of the Town of Loomis regional travel demand forecasting model. However, it is important to note that the values expressed by the model included the combined effects of travel throughout the limits of the model itself. Thus total regional VMT/VHT reflect travel throughout the Sacramento Metropolitan area, including activity on roads in Sacramento, Yolo, Placer Yuba, Sutter and El Dorado Counties.

Table 18 compares VMT and VHT generated in the year 2030 with and without implementation of the Loomis Downtown Implementation Plan. As noted, on a regional basis total Vehicle Miles Traveled is projected to decrease very slightly as a result of the choices made by motorists in the Loomis area. Total VMT may drop by 201 miles each day. This represents a decrease of 4/1,000 of 1% in total VMT. This decrease generally occurs because some motorists move away from Taylor Road to shorter but slower routes.

Conversely, with the change in travel speed on Taylor Road and the choices made by Loomis area travelers, the amount of time spent traveling, (i.e., VHT) will increase slightly. The total time spent traveling in the region will increase by 31 hours, or an increase of roughly 2/100 of1%. As noted above this decrease occurs because some motorists move away from Taylor Road to shorter but slower routes.

TABLE 18
YEAR 2030 VMT AND VHT

Parameter	Unit	Year 2030			
			Plus Project		
		No Project	Total	Incremental change	% Change
Total Vehicle Miles Traveled	Miles	5,136,756	5,136,551	-201	0.004% reduction
Total Vehicle Hours Traveled	Hours	147,674	147,705	31	0.021% increase

From the standpoint of Traffic impacts, there is no adopted standard for VMT or VHT. Thus, while these factors may be evaluated elsewhere from the standpoint of their effects on air quality, from the standpoint of traffic impacts this change is not significant.

APPENDIX

Level of Service Calculation worksheets

(Available at Town of Loomis)