

6.5 GOODS MOVEMENT

Goods movement is critical to the continued economic health of the area. Efficient goods movement allows local producers to transport their goods to market and bring needed raw materials and finished products into the area for the use of local businesses and individuals.

This chapter summarizes goods movement transportation methods by which freight, commodities, and information are transported into and out of Placer County.

REGIONAL GOODS MOVEMENT PLANNING

SACOG completed a Goods Movement Action Plan in September 2008 to better accommodate and facilitate the movement of goods and to help direct future funding decisions. The report details the Sacramento region goods movement network; documents planning issues; compares development patterns with transportation infrastructure; and identifies infrastructure and operational needs required for the reliable operation of the network. Much of the information detailed in this report is summarized in this chapter.

GOODS MOVEMENT TRANSPORTATION TYPES & PATTERNS

Goods movement covers all transportation methods by which freight, commodities, and information are transported into and out of Placer County. The most common methods to transport freight and commodities are rail, truck, air, bus, and pipelines, while information can be transported using fiber optic cable, cellular towers, telephone wire, radio waves, electrical wires, and other technologies.

There are three basic goods movement transportation patterns occurring in the Sacramento region.

Local Movements: the region produces and consumes goods as a function of population, resources, and economic activity. According to FHWA's Freight Analysis Framework, 29 – 37 percent of movements occur entirely within the Sacramento region. Stressing the importance of local markets. Goods transported within the region use all modes: an estimated 90.6 percent of freight tonnage is carried by truck, 2.9 percent by rail, 0.4 percent by ship, and 0.1 percent by air. The remainder is carried by pipeline. Regionally, the makeup of freight is about 35 percent gravel and non-metal mineral products, 20 percent gasoline and petroleum products, and 9 percent waste or scrap. Surface streets and roads provide access to most origins and destinations.

Through Movements: The highways and rail lines converging and radiating in the region make it a crossroads for goods movements between other regions. The through movements are primarily truck trips but also include substantial volumes of intermodal rail traffic. Freight coming into the region from somewhere else, comprise about 33 – 43 percent of total goods movement, while the through movement of goods comprise about 22 percent.

Regional Hub: Central location makes the Sacramento area as a regional hub, resulting in consolidation, distribution, and transloading movements. Exports from this region to other areas comprise about 16 – 20 percent of total goods movement volume. The only sizeable export out of the region is agricultural products.

Sacramento Region

Data for the overall flow of freight in the Sacramento region is derived from the Freight Analysis Framework produced by U.S. DOT – BTS. Table 6.5-1 below gives an estimate of all the tonnages hauled by mode. Trucking over shadows all modes; air cargo tends to be light weight and of high value. The Sacramento region is on balance a net consumer, with inbound flows exceeding outbound.

Table 6.5-1
Sacramento Area Freight Hauled By Mode

Mode	Tonnage (000)	Share
Air & Truck	140	0.1%
Other		
Intermodal*	2,227	1.6%
Pipeline	6,010	4.3%
Rail	4,106	2.9%
Truck	126,928	90.6%
Truck & Rail	95	0.1%
Water	619	0.4%
Total	140,125	100.0%

Notes:

*Other Intermodal includes parcel, courier and mail shipments.

Source:

1. SACOG Regional Goods Movement Study, July 2008.

EXISTING TRANSPORT

Rail Transport

Rail freight service in Placer County is provided by the Union Pacific Railroad, with Roseville as the site of a major Union Pacific rail yard. From Roseville, lines extend northeast across the Sierra, north through the Sacramento Valley, and southwest into Sacramento and on to the Bay Area and San Joaquin Valley. The route from Sacramento through Roseville and across the Sierra is a major transcontinental rail corridor. Existing rail services are shown in Chapter 6.3, Figures 6.3a and 6.3b.

The Roseville yard is the largest yard west of the Mississippi. The yard was extensively rebuilt in 1997 – 1999. It is over six miles long, covers 780 acres, bridging Placer and Sacramento counties. There are about 1000 employees. Roughly 60 trains per day pass through the yard, and up to 2000 railcars are classified each day. It serves as a major classification facility as eastbound railcars and locomotives are organized for the substantial climb over the Sierra, and westbound railcars are redistributed for delivery to West Coast destinations. The Roseville yard also serves as the major northern California point for servicing, manufacturing, and repairing freight cars and locomotives, serving over 2000 units per month. The yard also serves as the operating hub for local switching assignments.

Freight train miles continue to increase, and are forecast to double by 2020 and double again by 2035. Currently, the Union Pacific runs 20 to 25 double-stacked trains daily from the Port of Oakland through the Donner Pass. The number of daily trains will increase to as many as 40 trains after completion of the Donner Pass tunnel improvement and double tracking project. Union Pacific continues to experience substantial increases in demand for freight delivery operations, and is concerned with the safety of at-grade railroad crossings. With the increased number of trains moving through the region, Union Pacific has made plans to improve many of these crossings.

Air Transport

Because it is more expensive, yet timelier than ground transport, air transportation is the preferred method of transport for high value, light weight goods, such as computer components. Air transportation may also be feasible for document transportation; however, with advanced technologies such as fax machines and modems, the demand for the transportation of documents will probably decrease.

Auburn Municipal Airport is classified as a general aviation airport. Accordingly, regularly scheduled air cargo information is not available. United Parcel Service (UPS) currently makes two flights per day out of the Lincoln Regional Airport. Air cargo is not an issue at Blue Canyon because runway proportions will not accommodate cargo planes.

Truck Transport

The majority of goods movement in Placer County is provided by truck transportation. Trucks are defined as heavy freight vehicles which meet the Service Transportation Assistance Act of 1982 (STAA) definitions as found in the California State Vehicle Code.

Interstate 80 is one of the most important truck routes in Northern California. It is the only east-west freeway crossing the Sierra Nevada and Cascades in the thousand miles between Bakersfield on the south and Portland on the north.

Depending on location, truck traffic on Interstate-80 varies from 5.18 percent to 18.95 percent of total traffic. In 2007, average daily truck volumes on I-80 was 6900, with 3 – 5 axle trucks

average 3824 trucks near Auburn, increasing to 5981 at Rocklin, and 5867 at Roseville / County line, tending to increase in volume in populated areas. Through truck trips represent about 88 percent of that total truck traffic. Future truck traffic is projected to increase significantly in the corridor, at about three percent annually, with the majority of this growth occurring in metropolitan areas. Mixing of auto traffic with truck traffic contributes to congestion on the roadway system and can pose safety and operational problems on the freeways, particularly during seasons of peak recreational travel. Truck climbing lanes have been identified by Caltrans as needed on several segments of I-80.

Under the California Vehicle Code, Section 35701, truck routes on local roads can be designated by the specific City or County. Placer County has not developed a system of truck routes for the unincorporated county; however, trucks are prohibited from using specific bridges and roadways. The City of Roseville has designated several truck routes within its boundaries, including STAA truck routes for extra long vehicles that exceed California length limits. The City of Lincoln has similarly designated two truck routes from SR65 to Lincoln Regional Airport, and one has been developed as a STAA truck route.

Pipelines and Transmission Lines

Placer County is served by a number of public and private entities whose purpose is to provide power, telecommunications, and natural gas and petroleum products throughout the incorporated and unincorporated areas of the county. These transmission facilities provide an element of infrastructure that is vital to economic development and growth within Placer County and beyond. They also provide critical energy and communication services to commercial and residential areas. Moreover, using pipelines and telecommunications provide efficient distribution of goods and services without impacting other infrastructure such as roads or rail.

Electrical Distribution

Local electrical service is provided to the residents, businesses and industries of Placer County through four entities: Pacific Gas & Electric (PG&E), Sacramento Municipal Utilities District (SMUD), Sierra Pacific Power Company (SPPC), and the City of Roseville Electric Department.

PG&E is a San Francisco based private company that is publicly regulated by the California Public Utilities Commission. They provide electricity and natural gas to the majority of Northern California. PG&E provides electrical service throughout the majority of Placer County, with the exception of the City of Roseville, remote areas east and west of the Sierra Crest, and in the greater Tahoe Area. They generate power within the county through a number of hydroelectric facilities regulated by the Federal Energy Regulatory Commission.

SMUD is a publicly owned energy utility managed by the elected SMUD board, SMUD currently provides electrical service to a five square mile area in the Dry Creek/West Placer Community.

In Placer County, SPPC provides electrical service to the Tahoe Basin and the Truckee River Corridor, including Squaw Valley, Alpine Meadows and Martis Valley. The majority of their electrical energy is generated in Valmy, Nevada, at a coal-fired power plant. No gas for domestic heating or industrial use is provided by SPPC. SPPC has plans to expand existing transmission facilities to accommodate the anticipated growth within the region.

The City of Roseville Electric Department is owned and managed by the City of Roseville. The Department serves customers in the area that approximately coincides with the City's boundaries. The Department buys electricity from the Northern California Power Agency and the Western Area Power Administration.

In addition, both the Nevada Irrigation District (NID) and the Placer County Water Agency (PCWA) both operate hydropower plants.

Water Purveyors

In Placer County, the main water purveyors are the Nevada Irrigation District (NID) and the Placer County Water Agency (PCWA). Their water supply is derived from a variety of sources including the Yuba, Bear and American rivers. Water transfers are conveyed via a myriad of canals, pipelines and flumes to downstream users and treatment plants. PCWA alone is responsible for 165 miles of these facilities.

Petroleum Distribution

There is a petroleum oil transmission pipeline located adjacent to the Union Pacific Railroad right-of-way near Interstate 80 and Highway 65. The oil is moved from Sacramento to Reno and from Sacramento to Chico. A terminal for storage and distribution transfers to Reno and Chico is located in Rocklin.

Telecommunication Facilities

Telephone service is provided to Placer County through a number of independent telephone companies. MCI and Sprint have fiber-optic cable for long distance transmission located within the Union Pacific Railroad right-of-way, which bisects the County east to west. Several cellular phone companies provide cellular service to Placer County.

Natural Gas

The single largest provider of natural gas throughout Placer County is PG&E. The main transmission facility for their gas distribution system is located along the State Route 65 and Interstate 80 corridors. PG&E's service area for gas distribution is smaller than their service area for electrical distribution. Gas is generally available to residents and industries from Auburn, then south and westward.

Between Auburn and the Tahoe Basin, gas is provided to individual landowners in the form of propane. Propane storage and distribution facilities are located throughout the area, including Colfax and Weimar.

The Tahoe Basin Southwest Gas Company provides natural gas to the communities bordering Lake Tahoe. They distribute gas from a 6” transmission line, which is located along State Highways 89, 28, and 267. Within the Tahoe City area, natural gas is distributed by the Tahoe City Public Utilities District.

The gas lines, natural gas lines, and transmission lines are shown in Figures 6.5a and 6.5b.

Figure 6.5a
Gas Lines and Transmission Lines – Western County

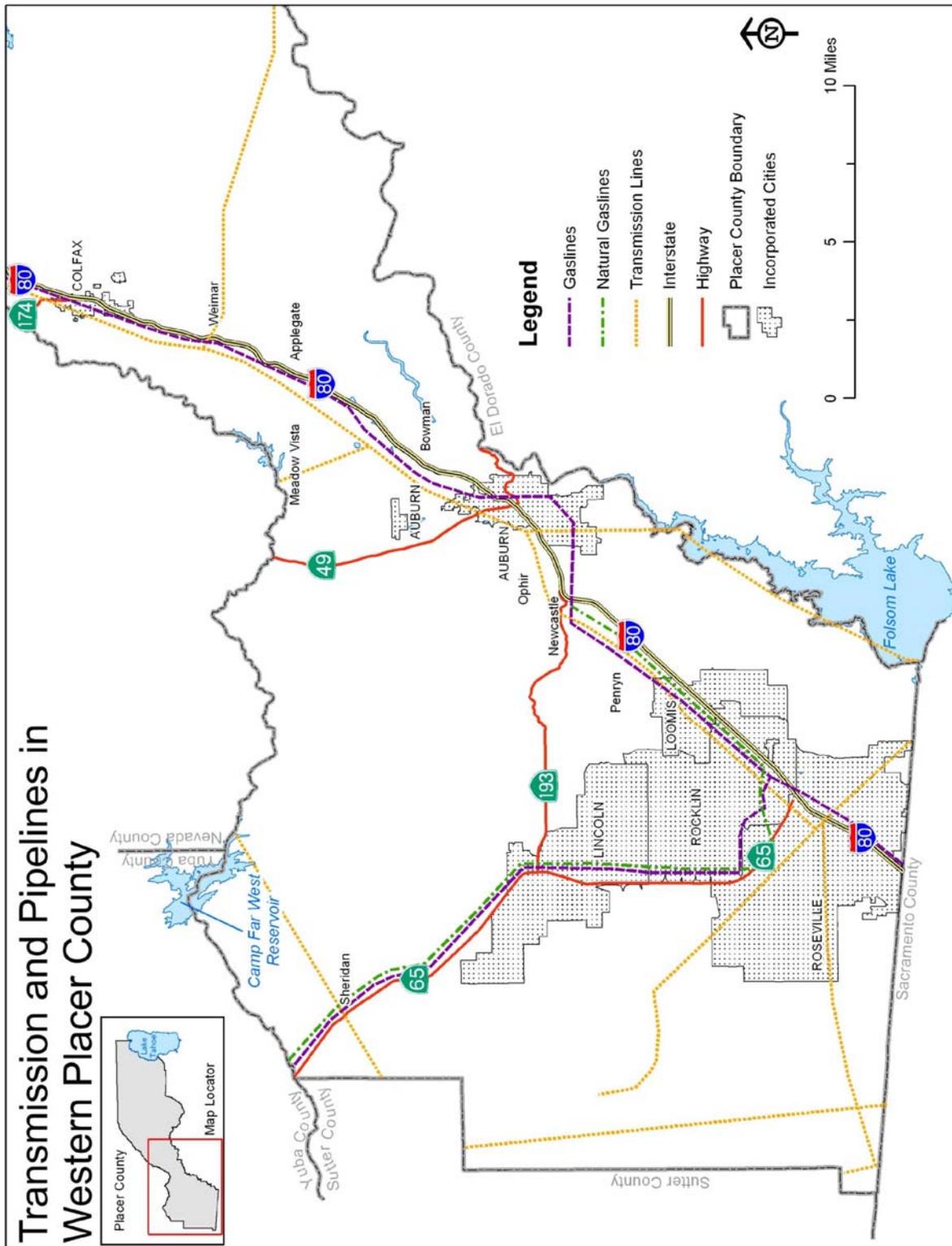
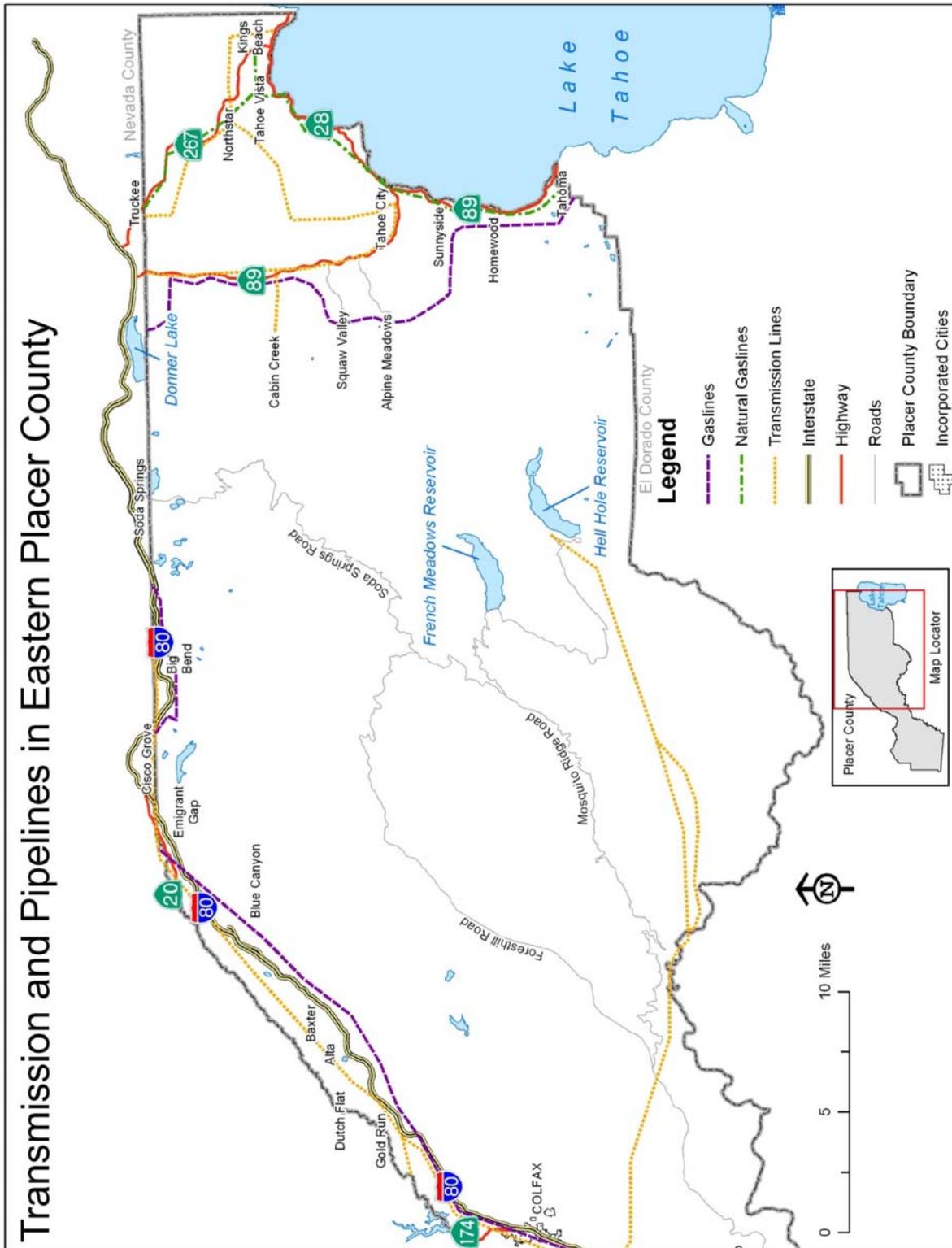


Figure 6.5b
Gas Lines and Transmission Lines – Eastern County



GOODS MOVEMENT NEEDS ASSESSMENT

Trucking Issues

Jurisdictions ranked large trucks use of local roads to bypass I-80 and SR65 traffic congestion as a significant transportation issue. When these trucks use local roads for their travel route, it creates problems with street deterioration and congestion. Jurisdictions also reported safety problems with ingress / egress to businesses for deliveries; as well as pavement shoulder damage due to parked trucks. Caltrans has identified a lack of sufficient private truck parking in both urban and rural areas of the Sacramento region as an important goods movement issue.

Alternately, auto drivers consider large trucks as obstacles when driving. Auto drivers also perceive them as nuisances because of a truck's overall size, slow acceleration and maneuverability.

Traffic Congestion

Whether products are shipped by rail, ship, air, or truck, regional highways and local roads are very likely to be used for some part of the trip. Caltrans data indicates that truck movements in the region more than doubled over the last twenty years. Freight movement by truck suffers from traffic congestion on the roadway system, which delays deliveries and therefore may cause some economic loss to shippers. Mixing of auto traffic with truck traffic contributes to the congestion, and can pose safety and operational problems on the freeways, particularly places where freeways join and where lanes are dropped. Congestion also significantly increases emissions from diesel trucks.

Regional air freight is handled either at Sacramento International Airport (just off I-5 near SR 70/99) or at Mather Airport (near Highway 50 in Rancho Cordova). Maritime freight is handled at ports in Sacramento, Stockton, and Oakland. Interstate 80 provides direct and indirect access to these airports and ports, and as such, is a vital link for goods movement not only for the region but for the entire west coast. Traffic congestion on I-80 affects the timely flow of goods and increases in truck traffic on I-80 during commute hours exacerbates peak period traffic congestion.

California's Statewide Integrated Traffic Records System (SWITRS) data provides detailed locations of truck-involved collisions. Freeway segments within Placer County with historically high accident rates are:

- I-80 between Antelope Road and Riverside Avenue/Auburn Boulevard;
- I-80 between Douglas Boulevard and Atlantic Avenue;
- I-80 between SR 174 and Magra Road; and

- I-80 between Drum Forebay Road and Blue Canyon Road.

SACOG completed a future goods movement “hot spots” analysis examining 2035 traffic congestion. The analysis highlighted roadway segments with unacceptable levels of service at key points in the regional truck system near future industrial growth sites. In Placer County, major growth areas of industrial development include Lincoln, the Rocklin / Roseville area, and Auburn. Highway truck traffic is expected to grow substantially in these areas. Growth will be driven by regional and local trips, with long-distance trucking a relatively minor part. Key year 2035 congestion locations include:

- Lincoln Bypass: congestion projected on SR65 north and south of the bypass due to new development;
- SR 65: connection to I-80 in Roseville and Rocklin;
- SR 65: access to the Roseville industrial area; and
- Baseline Road: access to the Roseville industrial area.

Truck Routes

Legacy highway and street systems are almost inevitably ill-suited for future traffic patterns, including truck routes. The current truck routes in the county and region are the result of State and local actions that have not always been coordinated. Missing links in the highway network result in more trucks on surface arterials. A regional perspective on truck routes would eliminate some of these coordination problems, as would standard signage.

Transportation of Hazardous Waste

Currently, transportation of hazardous waste is regulated by both federal and state agencies. Regulators have not placed restrictions on roadways available for the transportation of hazardous waste. However, the public remains concerned about the safety hazards to local residents should a spill or leakage of toxic materials being transported through the area occurs.

Rail-Motor Vehicle Conflicts

Railroads and train operations bring with them both advantages and disadvantages to the communities they serve. Placer County is faced with increased conflicts between the train operations and other transportation methods, such as automobiles and pedestrians, due to increased travel demands resulting from urban expansion.

To eliminate train conflicts between the railroad, roadways, and the community, grade separations are normally built. However, the significant expense and environmental impacts of

these major construction projects complicate the use of this alternative. Research should examine the ability of land use policy, transportation planning, public policy, and cooperation between the community and railroad to determine if the negative impacts may be mitigated through other means.

Pipelines and Transmission Lines

Distribution and transmission lines and related facilities should be protected from incompatible land uses and activities. Improvements needed to accommodate growth may include adding new distribution feeders, upgrading existing substation and transmission line equipment, expanding existing substations to their ultimate buildout capacity, and building new substations and interconnecting transmission lines.

GOODS MOVEMENT ACTION PLAN

Short Range

1. Identify obstacles that prevent or impede goods movement. (*PCTPA, jurisdictions, industry*).
2. Encourage industry to maximize use of rail and air for the transportation of goods. (*PCTPA, jurisdictions*)
3. Support the development of grade separation projects where necessary. (*PCTPA, jurisdictions, Caltrans*)
4. Support the designation of hazardous waste routes by federal and state regulators. (*PCTPA, jurisdictions*)
5. Designate a subregional or countywide backbone truck route system. (*PCTPA, jurisdictions, Caltrans*)
6. Maintain a balanced freight transportation system to provide for the safe and efficient movement of goods. (*PCTPA, jurisdictions, Caltrans*)
7. Support local development of truck parking strategies. (*PCTPA, jurisdiction, industry*)
8. Specially designate roads that connect key agricultural producers with processing facilities and the regional road network. (*PCTPA, jurisdictions, agricultural industry*)
9. Act as a resource to local jurisdictions for interrelationship of industrial and wholesale land use and transportation planning. (*PCTPA*)

Long Range

1. Continue to implement the actions outlined in the short-range action plan. (*PCTPA, Caltrans, jurisdictions, industry*)
2. Continue to support accelerating truck and rail modernization, with cleaner technologies, in order to reduce current and long-term impacts of the goods movement system on public health and air quality. (*PCTPA, SACOG, APCDs, jurisdiction and industry*)
3. Coordinate goods movement plans and projects. (*PCTPA, Caltrans, jurisdictions, SACOG*)

GOODS MOVEMENT PROJECTS

There are no projects included in the 2035 RTP that are specifically identified as “goods movement” projects. There are many projects identified in SACOG’s Good Movement Action Plan, which are considered supportive of goods movement. These projects are identified in Table 6.5-2 below, and are specifically listed in the Regional Roadways, Passenger Rail and Aviation chapters.

The key projects shown below will improve the movement of goods through Placer County and support development of industrial areas inside the county.

- Interstate-80 Capacity improvements
- Lincoln Bypass
- Sierra College Boulevard improvements/widening
- Reconstruction of Sierra College Boulevard interchange
- Track capacity improvements for rail projects
- Placer Parkway
- Improvements to Atkinson from Main to PFE Road
- I-80 / SR65 interchange
- SR65 improvements
- Airport CIP projects

In addition to the key projects, investment in localized street and road improvements can have a cumulative effect in alleviating bottlenecks in the transportation system and facilitate goods movement.

GOODS MOVEMENT PROJECTS

Table 6.5-2

Goods Movement Projects List

Lead Agency	SACOG Project ID	SACOG MTP	SACOG MTIP	Project Title	Project Description	Year Complete	Status	Current Year (2010) \$	Expenditure Year \$
Caltrans District 3	CAL18797	'07-00	11-00	I-80 HOV Lanes & Aux Lanes - Phase 3	Phase 3 of the Operational Improvement Project: On I-80, Construct east & west bound extensions of the HOV (High Occupancy Vehicle) lanes & auxiliary lanes from Miners' Ravine to SR 65, 1 mile east of the 65/80 Separation. Includes widening of Miners' Rav	2012	Programmed	\$33,848,000	\$36,609,997
Caltrans District 3	CAL17240	'07-00	11-00	SR65 Lincoln Bypass	Placer County, SR 65: Construct a 4-lane expressway on a new alignment from Industrial Avenue to north of North Ingram Slough & continue north with 2 lanes to Sheridan. Also design & construct a Park & Ride facility at SR 65 Bypass & Industrial Avenue.	2014	Programmed	\$291,783,000	\$341,344,840
Capitol Corridor Joint Powers Authority	CAL18320	'07-00	11-00	Roseville Third Track	Design & construct third track to improve capacity on the UP mainline between Elvas Tower in Sac County & Roseville Station in Placer County. Extend freight lead track. Construct track and signal improvements. Relocate Roseville rail station to address conflicting train movements that affect capacity.	2012	Programmed	\$7,280,000	\$7,874,048
City of Lincoln Dept of Public Works	PLA18710	'07-00	11-00	Industrial Boulevard	Industrial Boulevard, from Route 65 to 12 Bridges Drive: Widen from 2 to 4 lanes.	2012	Programmed	\$948,000	\$1,025,357
Caltrans District 3	CAL18826	'07-00	11-00	I-80 Rehabilitate Bridge Decks Near Roseville	Placer County, I-80 near Roseville at various locations from Auburn/Riverside Overcrossing to Weimar Cross Road - Rehabilitate bridge decks (PM 0.3/29.3).	2013	Programmed	\$16,184,000	\$18,204,799
Caltrans District 3	CAL18809	07-00		Roseville Third Main Track/Sacramento Layover Facility	Dedicated third mainline track and Sacramento area satellite maintenance facility and other associated improvements, which will permit service capacity increases for Capitol Corridor in Placer County, including possible relocation of the Roseville rail station.	2014	Planned	\$250,800,000	\$293,400,527
Caltrans District 3	CAL18798	07-00		Auburn to Donner Summit Track Improvements Phases 1 & 2	Upgrade Donner Pass Summit (UP Line) double track: including addition of crossovers, notching of tunnels, reactivation & replacement of second mainline track between Auburn & Reno, Nevada	2015	Programmed & Planned	\$86,000,000	\$104,632,150
Caltrans District 3	CAL18828	'07-00	11-00	I-80 Vertical Clearance Improvements	Placer County, I-80 in & near Loomis at various locations from Brace Road to Magra Road - Improve vertical clearance (PM 8.1/37.8).	2015	Programmed	\$36,045,000	\$43,854,254
City of Lincoln Dept of Public Works	PLA18720	'07-00	11-00	Industrial Boulevard	Industrial Boulevard, from 12 Bridges Drive to Athens Boulevard: Widen from 2 to 4 lanes.	2015	Programmed	\$1,876,246	\$2,282,740
City of Roseville Dept of Public Works	PLA19810	'07-00	11-00	Atkinson Street/PFE Road Widening	In Roseville, Atkinson Street/PFE Road: widen from two to four lanes from Foothills Boulevard to just south of Dry Creek.	2015	Programmed	\$7,000,000	\$8,516,570
Placer County Dept of Public Works	PLA15270	'07-00	11-00	North Antelope Road	North Antelope Road: Widen from 2 to 4 lanes from Sacramento County line to PFE Road.	2017	Programmed	\$2,026,600	\$2,666,867
Placer County Dept of Public Works	PLA18490	'07-00	11-00	PFE Road Widening	PFE Road, from Watt Avenue to Walerga Road: Widen from 2 to 4 lanes & realign.	2018	Programmed	\$13,085,000	\$17,907,726

Lead Agency	SACOG Project ID	SACOG MTP	SACOG MTIP	Project Title	Project Description	Year Complete	Status	Current Year (2010) \$	Expenditure Year \$	
Placer County, City of Roseville, Sutter County	PLA25299	07-00	11-00	Placer Parkway - Phase 1	Phase 1 of the Placer Parkway project, including Tier 2 environmental work, preliminary engineering, & construction to Located a roadway within the selected 500' wide approved Alternative 5 alignment corridor connecting SR. 65 (Whitney Ranch Pkwy) to Foothills Boulevard (replaces PLA25337 - Placer Ranch Parkway - \$145 million). Additional Tier 2 work may be completed in increments by Local jurisdictions for subsequent phases of the Placer Parkway project.	2018	Programmed	\$70,000,000	\$95,799,834	
Caltrans District 3	CAL18799	07-00		UP Over/Under Crossing	Build over/undercrossing at Union Pacific crossing of Sierra College Boulevard	2020	Planned	\$30,000,000	\$44,407,329	
City of Roseville Dept of Public Works	PLA15890	'07-00		Sunrise Avenue	Widen: 6 lanes from Sacramento County line to Madden Lane.	2020	Planned	\$5,000,000	\$7,401,221	
Town of Loomis Dept of Public Works	PLA25276	'07-00		Sunrise-Loomis Subdivision	Local Road. Storm Drainage Upgrade: In Loomis, upgrade the local Road. Network storm Drainage facilities in the Sunrise-Loomis subdivision. Ancillary Road. work may be included. Federal permitting may also be required as part of this project.	2020	Planned	\$500,000	\$740,122	
South Placer Regional Transportation Authority / Placer County	PLA20721	'07-00	'09-00	Placer Parkway Project	New 4 lane connector (ultimate 6 lanes freeway) in 500'- to 1,000'- wide corridor connecting SR 70/99 (between Riego Road & Sankey Road) to SR 65 (Whitney Ranch Parkway). (Note: as the project proceeds, Parkway segments will be administered by different I	2035	Programmed	\$660,000,000	\$1,759,451,979	
								2010-2015	\$731,764,246	\$857,745,282
								2016-2024	\$120,611,600	\$168,923,099
								2025-2035	\$660,000,000	\$1,759,451,979
								Total	\$1,512,375,846	\$2,786,120,359