FINAL

2005

LAKE COUNTY

REGIONAL TRANSPORTATION PLAN

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Prepared for:

Lake County/City Area Planning Council

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EXECUTIVE SUMMARY

OVERALL REGIONAL GOALS

It is the goal of the Lake County/City Area Planning Council to develop a safe, balanced, practical, and efficient regional transportation system that will:

Serve the needs of residents by improving their mobility

Support planned regional social and economic growth while conforming to the land use element of the general plans of the county and the two incorporated cities:

- Be in harmony with the region's unique and irreplaceable environmental features
- Improve access to and throughout the region
- Facilitate the provision of public services, such as mail, education, law enforcement, medical, fire protection, transit, and airline services.

THE REGIONAL TRANSPORTATION SYSTEM

The regional transportation system is comprised of five different modal elements—the State highway system, the local road system, non-motorized transportation, transit, and aviation.

Highway transportation remains the predominant modal choice in Lake County. The existing highway system primarily consists of two lane facilities in mountainous terrain. Level of service is constrained in rural areas by geometric considerations and in urbanized areas by traffic congestion.

The adopted highway system proposes expansion of the Principal Arterial Corridor, which in Lake County includes portions of Route 20, Route 29, and all of Route 53, to four-lane freeway/expressway facilities. Facility upgrades will be accompanied by intersection/interchange improvements in urban areas and by widening and passing lane construction in rural areas. Increased capacity provided by new facilities and major operational improvements will be needed to accommodate projected traffic volume increases, as well as making the region more economically viable.

The local roadway system within the Lake County region is made up of streets within the cities of Clearlake and Lakeport and roads within the unincorporated area of Lake County. Roads range from fully improved arterials and collectors to single-lane, dirt roads. Roads within the system are primarily two-lane roadways; however, some four-lane facilities exist in areas of higher traffic demand.

When considering the needs of the local road systems, one main concern arises—the need for maintenance and rehabilitation. Each local agency has established this as their primary focus. There are relatively few capital improvements needed on the local road system, however, there is an overwhelming backlog of deferred maintenance. (See discussion below under Unresolved Issues.)

The non-motorized transportation system within the region consists of bicycle and pedestrian facilities within the incorporated cities of Clearlake and Lakeport and the unincorporated areas of Lake County. Bicycle facilities include Class I, Class II and Class III bikeways. Pedestrian facilities, although very limited in the region, include both ADA (Americans with Disabilities Act) compliant and non-compliant sidewalks. All new facilities, however, are constructed to meet ADA requirements.

Although non-motorized transportation received a considerable boost from the availability of Proposition 116 funding, there are still significant needs in development of bicycle and pedestrian facilities. The primary focus within this mode should be to complete bikeways consistent with the Regional Bikeway Plan and to develop pedestrian facilities in areas of high pedestrian use or where safety is an issue.

The transit system in the region is provided through the Lake Transit Authority (LTA) which contracts with a private transportation operator to provide services. These services include dial-a-ride service within the Clearlake and Lakeport areas and six fixed/flex routes throughout the region. A seventh route provides weekday service across the county line into Mendocino County.

LTA began operating out of the new Lamkin-Sanchez Transit Operations and Maintenance Center in late 2004. With a new transit fleet now in service, future needs through 2011 include retirement of debt incurred for transit center costs, development of bus stops, and replacement of transit vehicles.

General aviation in Lake County is served primarily by County-owned Lampson Field. Services provided include runway and taxiway, fueling facilities, mechanical repairs, pilot training and flight lessons. Lampson Field does not currently provide commercial airline passenger service, but focuses on meeting the needs of charter, corporate, and cargo/courier flight operations.

Aviation in the region is expected to experience considerable growth over the next 20 years. It will be necessary to expand services and facilities at Lampson Field in order to accommodate this increased demand on the system.

UNRESOLVED ISSUES

The Needs Assessment section of each modal element of this RTP identifies many issues and areas of concern. Of these issues, many can be addressed through the Action Plans correlating to them. However, there are items which remain unresolved. Until solutions can be found to the following conundrums, they will continue to present obstacles and limitations to transportation in the region.

State Highway System Funding

The current condition of the State highway system within Lake County is inadequate to serve current and future needs of residents, visitors, and commerce of the region. Two lane rural highways with insufficient at-grade intersections bring about safety concerns, capacity

limitations, and increased travel time. The limits of the highway system not only make transportation throughout the region difficult, but hinder the economic viability of the local communities as well.

It is critical to the future of regional and interregional transportation to develop the Principal Arterial Corridor to its full capacity as specified in the Route 20 Corridor Study (August 2000) and make necessary safety related improvements. However, completion of these much needed improvements will cost an estimated $250 million. The primary funding sources available for these projects are regional and interregional State Transportation Improvement Program (STIP) funds. In recent years, however, highway improvements have been stalled. There were no new funds available for the 2004 STIP, and preliminary indications are that the 2006 STIP cycle will be bleak as well. Regional STIP funds must be used not only for State highway projects, but for local road improvements and bicycle and pedestrian facilities as well. Over the last several years (starting with the 1998 STIP cycle), the Lake County/City Area Planning Council received roughly $17.9 million in regional STIP funds, and of that, programmed or reserved $10.8 million for improvements along the Principal Arterial Corridor. Unfortunately, this is a meager amount compared to that needed to complete the corridor improvements. However, as traffic volumes along the corridor are anticipated to increase by 40% to 80% over the next 20 years, it is clear that the corridor will not continue to function at an acceptable level of service.

It is currently anticipated that the region will receive approximately $62 million in STIP funds over the next 20 years. This, however, is heavily dependent on the State economy. If California continues to experience economic hardships, it is unlikely that this much funding will be available. Even if this entire amount *were* dedicated to corridor improvements, it still would only be enough to fund one-quarter of the desired projects. The LC/CAPC has reserved funding for improvements to the State highway system in the hopes that Caltrans would fund the remaining portion with Interregional Improvement Program (IIP) funds. Although the Route 20 Corridor is a focus route, Caltrans' initial priority has been north/south routes. Therefore, very little IIP funding has been made available to fund these east/west improvements.

While funding remains inadequate, the demand on the State highway system increases at a steady pace. Recreational and seasonal traffic, as well as goods movement (in the form of truck traffic) steadily increases, widening the gap between financial resources and highway improvement needs. An adequate, and permanent, source of funding must be found for the State highway system.

Rehabilitation and Maintenance Funding

The Lake County region has in excess of a $174,000,000 backlog of deferred maintenance on its roadway system. Deferred maintenance comes at the price of costlier rehabilitation needs in the future. Periodic pavement treatment is relatively inexpensive. However, if roads are not maintained in a timely manner, the road bed underneath may deteriorate, leading to a need for full-scale rehabilitation costing as much as five times higher per lane mile.

Currently, the primary funding source for rehabilitation on local roads is the State Transportation Improvement Program (STIP). The primary purpose of the STIP is to fund *capital*

improvements. However, for lack of a better funding source, rehabilitation activities have been an allowed use of STIP funds since the 1998 STIP Augmentation. In recent years, the California Transportation Commission has discussed making rehabilitation efforts once again ineligible for STIP funding. Rehabilitation currently has no permanent source of State or Federal funding. If rehabilitation becomes ineligible for STIP funding, this activity will have to be funded primarily with local funds, which will severely limit the already minimal local rehabilitation efforts.

It is critical to the future of the roadway systems in the region to find an adequate and permanent funding source for maintenance and rehabilitation. Possible funding options to explore are sponsoring a ballot measure to implement a "self help" tax and working closely with the State and other regional agencies in an effort to develop a better funding source for these needs. The self-help measure passed by Lakeport in November 2004 will begin to reduce the backlog in Lakeport but will have little effect on the huge county-wide backlog.

Highway 29 South of Middletown

State Route 29 (SR 29) provides a vital link between southern Lake County and Napa County. The number of people that commute from this area of Lake County to employment in Napa and Sonoma Counties is growing rapidly. The portion of the highway within Lake County is sufficient for the time being, although as demands increase, the condition will quickly become inadequate. However, once over the Napa County line, Route 29 becomes a winding, difficult to maneuver highway traversing steep terrain. While this portion of Route 29 is currently a low priority to the region, it is an issue that will be of increasing concern in the future.

While the need for improvement to SR 29 will be rapidly escalating over the next several years, funding those improvements may be difficult to nearly impossible. Caltrans concentrates its programming on its high priority "focus routes" (State Route 20 Principal Arterial Corridor is one such route). As this stretch of Route 29 is not a focus route, it is highly unlikely to receive any IIP funding. Therefore, improvements to this stretch of highway would have to be fully funded with local Regional Improvement Program (RIP) money. Currently, Lake County's regional funding priority is developing the Route 20 Corridor, leaving insufficient money to fund other work on Minor Arterial segments of SR 29. As the Route 29 segment in question traverses only a portion of the Napa County hinterland, it is not difficult to understand that Napa County's improvement priorities are likely to lie elsewhere.

To sum up this dilemma, the bulk of the jobs are in Sonoma County, the affordable housing is in Lake County, and the major roadway impediment between the two areas is in Napa County. Regional funding flexibility provided through Senate Bill 45 is ill equipped to deal with this particular problem. There is the need for partnership among all the involved counties to tackle this emerging safety and operational problem.

SYSTEM OPTIONS AND ALTERNATIVES

State Highway System/Local Road System

Various funding strategies have been discussed relative to using RIP funds for Principal Arterial Corridor improvements. Providing funding for all, one, or certain combinations of project segments was examined. Issues that were considered include environmental phasing, commitment of State funds through the ITIP, needs of local roadway systems, and timeframe for completion of improvements. It was determined that segments which have already received funding would remain a top priority when programming corridor improvements.

One option the region considered was devoting the entire amount of available STIP funding toward the local road system, leaving none available for State highways. The funding priority of the LC/CAPC has been, for the last several years, improvements to the Principal Arterial Corridor. However, needs of local roads, lack of commitment from the State to contribute IIP funds, timeframe for completion of State highway improvements, as well as recent changes in Council membership led to reconsideration of priorities. It was determined that, although STIP funds may be considered for projects on the local road systems, a substantial amount of available funds will be reserved for corridor improvements. Descriptions of the State and local functional classification systems are included as Attachment A.

Non-Motorized Transportation

The pedestrian and bikeway network remains underdeveloped in Lake County. Funding for non-motorized improvements has historically been limited, but improved in the 1990's with funding provided through the State's Proposition 116 program and the Federal Transportation Enhancement Activities (TEA) Program. Proposition 116 funds were targeted to pedestrian access near schools as well as a few key bikeways. Initial TEA funding (unavailable under ISTEA) was targeted to bikeway projects serving school areas as well as commuter use. Additional enhancement funding (now known as TE funding under TEA-21) has been made available for bicycle and pedestrian projects that are programmed in the STIP. Limited funding available from the Local Transportation Fund (LTF) has been targeted toward providing matching funds for ongoing non-motorized funding programs. It is expected that non-motorized improvements will remain targeted toward school route improvements, transit stop access, and bikeway commuter routes, and within North Shore communities along Route 20.

Transit

In 1996, a commitment was made to county-wide public transit with the formation of the Lake Transit Authority (LTA). Consolidation of transit services under an authority has led to a number of service improvements. Fixed route service now links Lakeport and Clearlake as well as other smaller communities. Fixed route service is also provided in Clearlake and Lower Lake. Although now truly a general public transit service, flex service is provided to serve the special needs of seniors and the disabled. Dial-a-ride service remains available in Clearlake but is used predominately by seniors and the disabled. It is unlikely that the character of the current service will change appreciably in the future due to funding constraints. Future needs include transit stop development, debt retirement, and scheduled vehicle replacement.

Aviation

Aviation in the Lake County region is served by both Lampson Field Airport and Gravelly Valley Airstrip. Gravelly Valley is a rural airfield owned, operated and maintained by the U.S. Forest Service. Recently, the Forest Service considered closing this airstrip. Primary reasons for closure were lack of need for the facility and availability of funding to maintain operation. Certain environmental issues were also contributing factors. The option of securing a private operator for the airstrip was considered. However, the Forest Service has secured funds for continued operation of the airstrip, and it remains open at this time.

EXPECTATIONS OF THIS PLAN

The Lake County/City Area Planning Council (APC) and its member jurisdictions have identified hundreds of millions of dollars of capital improvement and rehabilitation needs for the transportation system in Lake County. State highway improvements and local streets and roads reconstruction and rehabilitation are responsible for the vast majority of the funding needs. Revenues expected from current funding sources will only partially address forecast State highway improvement needs and minimally address the rapid deterioration of local streets, roads and bridges. Other transportation modes remain heavily dependent on grant funding sources for significant improvements.

State Highway System

In an earlier policy decision, the Area Planning Council voted to reserve 2002 RTIP funding for future capital needs in Segment 2 of the Principal Arterial Corridor (Route 29, PM 27.8/31.6). Direction at this time is to pursue completion of a useable segment of this corridor. This project remains under development and will not be ready for construction until at least 2007/08. Although the Area Planning Council will have $9.3 million to devote to this project, more funding will be needed. Unless State Interregional Transportation Improvement Program (ITIP) funding becomes available in 2006, completion will be delayed from 2011 to at least 2013. Projects under development in Segment 1 are expected to tie into the Segment 2 project, but also must await additional State funding before construction can begin. Even if APC policy continues to emphasize improvements in Segments 1 and 2, it is unlikely that funding will be available to construct both segments within the time frame of this plan.

Local Streets and Roads

Each jurisdiction in the Region has a Capital Improvement Plan which identifies street, roadway and bridge improvements needed due to operational or safety concerns. But the overwhelming concern is the continuing deterioration of the existing system. The Senate Resolution 8 survey in 1999 identified a $174 million maintenance backlog for jurisdictions in Lake County. Although funding has been provided for local rehabilitation projects in the 1998, 2000, and 2002 RTIPs, it remains deficient. An emphasis on maintenance and rehabilitation, as well as potential funding sources to mitigate this crisis, shall remain the focus for the time frame of this plan. Lakeport's 2004 measure to dedicate much of a one-half cent sales tax increase to street maintenance and improvement will begin to have some effect on local street deterioration over the next 5 years.

Non-Motorized Transportation

Similar to most rural counties, the pedestrian and bikeway system in Lake County is underdeveloped. Improvements will be pursued through expanded State (Bicycle Transportation Account and Safe Routes to Schools), Federal (TE) and other sources. Since most local transportation funding will be devoted to street and road maintenance and rehabilitation, non-motorized transportation improvements within the time frame of this plan will be largely dependent on grant funding.

Transit

Since 1996, the Lake Transit Authority has provided fixed-route, paratransit and dial-a-ride services to Lake County residents. Lake Transit Authority has recently received over $2.5 million from the one-time Rural Transit System Grant Program authorized by SB 787. These grants funded the construction of the maintenance/administration facility as well as replacement of the fleet as recommended in the Fleet and Facility Need Assessment Financing Plan. The emphasis during the timeframe of this plan will be on identifying and constructing improved bus stops, debt retirement, and vehicle replacement.

Aviation System

Although there are two airports in the Region, Lampson Field accounts for almost all operations. The 1993 Lampson Field Master Plan identifies an array of capital projects that are needed at this facility. There are $2.8 million in planning and construction projects identified in the short range alone. Water service, wastewater, sewer service, terminal building construction, and hangar construction projects await the identification of funding sources. Availability of State and Federal funding sources will be the determinant of what can be accomplished for aviation within the time frame of this plan.

FINANCING

In order to develop an overview of the financial needs described in this document, short range projects, along with costs, from each Action Plan are summarized in Table E-1. Unfortunately, cost estimates have not been prepared for all of the projects contained within the Action Plans. Projects without known costs or estimates are not shown in this table. Therefore, this is only a partial representation of the financial needs of the region.

Table E-1
Summary of Modal Action Plans
(Projects with Cost Estimates Only)

Agency	Project	Cost Estimate (all figures rounded)
State Highway System		
Caltrans/APC	Route 29, P.M. 23.8 to 27.4 (Segment 1). 4-lane freeway/ expressway	**$39 million** ($3.5 million of IIP funds programmed in 1998 STIP)
Caltrans/APC	Route 29, P.M. 27.4 to 31.6 (Segment 2). 4-lane freeway/ expressway	**$28 million** ($2.8 million RIP funds programmed in 1998 STIP. $7.3 mil. RIP reserved from 1998 STIP)

Local Roads		
Lake County	Capital Improvement Projects	**$9 million**
Lake County	Street Rehabilitation Projects	**$22 million** ($7.1 mil currently programmed)
Clearlake	Safety Improvements	**$9 million**
Clearlake	Street Rehabilitation Projects	**$5 million**
Lakeport	Safety Related Projects	**$100,000**
Non-Motorized Transportation		
City of Clearlake/ Lake County	Lake/Dam Road Bikeway	**$200,000**
City of Clearlake	Austin Road Bikeway	**$300,000**
Lake County	South Main Street Bikeway	**$1 million**
City of Lakeport	Lakeshore Blvd Ped Walkway, Phase I	**$50,000**
City of Lakeport	Lakeshore Blvd Ped Walkway, Phase II	**$200,000**
Aviation		
Lampson Field – Lake County	Capital Improvements	**$4.9 million**
Total		**$118.75 million**

A summary of State and Federal funds expected to be available to the region over the next five years is shown in Table E-2. These are **very rough** estimates, based on current funding levels, and are subject to fluctuations in State and Federal economies.

Table E-2
Estimates of Expected Funding
2005 through 2009 Based on Current Funding Levels

Funding Source	Estimated Funding Over Next 5 Years ($ in millions and rounded)
State Transportation Improvement Program	$6.0
Proposition 42	$4.6
Gas Tax	$11.0
Regional Surface Transportation Program	$3.2
LTF (Bike & Ped portion)	$0.1
LTF (LTA portion)	$5.0
STA	$1.2
Federal Transit Administration 5311	$1.1
LTA Fares Revenue	$1.7
California Aid to Airports Program	$0.05
Transportation Enhancements TE	$0
Total	**$38.05 million**

There are other possible sources of funding, such as Highway Bridge Replacement and Rehabilitation Program, Hazard Elimination Safety Program, State Bicycle Transportation Account, Safe Routes to Schools, Federal Transit Administration Sections 5309, 5310, and 5313 grants, and the Airport Improvement Program. However, these programs are not regular funding sources and cannot be relied upon as a steady source of funds.

As can be seen by comparing the two tables, the amount of expected funding is highly insufficient to meet the needs of the region. Funding opportunities may be limited even further if the State economy continues to be hit by hard times. It is also important to remember that cost estimates shown for projects in Table E-1 are in today's figures. The longer these projects are

delayed, the more they will cost due to inflation and more extensive construction and environmental requirements. The region should explore alternate funding sources at the local level to avoid adding to the backlog of deferred maintenance and improvement projects. Options to be considered include countywide benefit assessment fees for maintenance, developer impact fees, and local option sales taxes. It is also critical to work closely with the State to insure continuance of these existing funding sources.

INTERAGENCY/INTERREGIONAL COORDINATION AND PUBLIC INVOLVEMENT

Interagency Coordination

In preparing this Regional Transportation Plan, the Lake County/City Area Planning Council (LC/CAPC) staff worked in coordination with staff from the Public Works Departments of Lake County, the City of Clearlake, and City of Lakeport. Input was also received from Lake County Public Works Department (owner and operator of Lampson Field) and the U.S. Forest Service (owner and operator of Gravelly Valley Airstrip) in preparation of the Aviation System Element, and from Lake Transit Authority in preparation of the Transit System Element. Information received from these agencies was used in all sections of specific modal elements, but particularly in developing the Action Plans.

In addition to direct input from these agencies, other documents were used in preparing the RTP which were developed jointly with these agencies and Caltrans. These documents include the Lake Countywide Roadway Needs Study (December 2000), the Route 20 Corridor Study (August 2000), and the 2002 Lake County Regional Bikeway Plan (September 2002) (see References for a complete list of sources).

The Technical Advisory Committee (TAC) to the LC/CAPC is comprised of staff from Public Works and Community Development Departments of Lake County, the City of Clearlake and City of Lakeport, as well as Caltrans and the California Highway Patrol. The TAC has reviewed the draft Plan and will review this Final Plan prior to approval, thereby providing these agencies additional opportunity for input.

Interregional Coordination

Inter-regional coordination involves development of working relationships beyond the border of the region. To some extent, inter-regional coordination has been occurring for many years due to active participation in the following groups and organizations:

- Regional Transportation Planning Agencies (RTPA) Group: This group meets prior to California Transportation Commission meetings (approximately 10 times per year) to discuss the CTC agenda, formulate responses to CTC policies, and network on issues of common concern. Attendance provides APC staff opportunities for inter-regional coordination with staff of other regional transportation agencies, Caltrans, and the Federal Highway Administration. APC staff regularly attends RTPA meetings.

- Rural Counties Task Force (RCTF): This group has been sponsored by the California Transportation Commission since 1987 to provide a forum for the State's 26 rural counties. It meets bi-monthly in Sacramento to discuss common issues and to some extent provide a vehicle of input to the California Transportation Commission. Due to inherent small staffing, budget constraints, and travel distances, few rural counties have the resources to regularly attend the RTPA Group meetings. APC staff attends regularly and has had a history of involvement since RCTF inception. Sub-committees of the RCTF are often assigned to work on inter-regional issues of common concern.

- Caltrans-Regional Coordination Meetings: These meetings are generally bi-monthly and are coordinated with California Councils of Government (CalCOG) meetings. At these meetings the Caltrans Director and staff meet with regional agency directors or their designees to discuss transportation issues and policies. APC staff regularly attends these meetings.

- California Transportation Commission (CTC) Meetings: The CTC usually meets 10 times per year at various locations around the state. Although the primary purpose of the CTC is not inter-agency coordination, the venues regularly provide opportunities for such coordination. APC staff regularly attends CTC meetings.

- California Association for Coordinated Transportation (CalACT): CalACT is an association of private companies, individuals, organizations, regional transportation planning agencies and transit agencies committed to improve transit in California. In recent years the RCTF has teamed with CalACT to provide workshops, training and programs of mutual benefit to both organizations. APC staff regularly attends one of the two CalACT conferences per year.

Since 1986 there has been a level of transportation planning coordination between the Lake County/City Area Planning Council (APC) and the Mendocino Council of Governments (MCOG) that is perhaps unparalleled in this state. Both agencies contract for administration and transportation planning services. The APC contracts for an Executive Director and for Transportation Planning Services. MCOG combined both functions in 1999 and contracts with one consultant for both functions. Consequently, the same consultant provides transportation planning services for both agencies. Not only has this allowed for a high level of inter-regional coordination, it has also provided a cost effective means for both agencies to be represented at the RTPA, RCTF, Caltrans-regional Coordination meetings, CTC, CalACT, and other statewide meetings.

Mendocino Council of Governments was awarded a $260,000 grant through the Housing and Community Development Department (HCD) to establish an inter-regional partnership to address consequences of jobs, housing, and transportation imbalances. In November of 2001, MCOG began implementing what became known as the Wine Country InterRegional Partnership (IRP) to address jobs-housing imbalances between Lake, Mendocino, Napa, and Sonoma counties. The APC provided part of the match funding for the Wine Country IRP through the annual Transportation Planning Work Program. Much of the work was performed by outside consultants, but the effort was coordinated and directed by MCOG/APC staff. The final report was prepared by MCOG/APC staff and was completed June 30, 2004. The final report addresses the following issues: Wage Growth and Change, Housing Cost Dynamics, Housing

Affordability, Workforce Housing Shift and Work-Trip Commute Impact, Transportation Impacts, "Compelling Message" for Stakeholders, Stakeholder Outreach, and Implementation Plan Recommendations.

At least two tangible and ongoing inter-regional relationships have resulted due to the APC's involvement in the Wine Country IRP:

- Memorandum of Understanding (MOU) with the Association of Bay Area Governments (ABAG): In February 2004 the Lake County/City Area Planning Council entered into an MOU with ABAG to explore areas of mutual concern and to move forward with the identification of joint planning efforts and implementation actions of mutual benefit to the Bay Area and rural Lake County.

- Wine Country IRP Phase 2 (Origin & Destination Studies): Mendocino Council of Governments has taken the lead to conduct origin & destination studies at specific cordon sites in to monitor trip purposes between Lake, Mendocino, Napa, and Sonoma counties. This State Planning Research funded study was approved in March, 2005 and is expected to be completed by June, 2006. The APC, MCOG, the Napa County Transportation Authority, Sonoma County Transportation Authority, ABAG, Metropolitan Transportation Commission, and Caltrans districts 1 & 4 are participating in this effort.

Much of the 2005 RTP deals with efforts to improve the Principal Arterial System through Lake County by building segments of State Route 29 to the south of Clear Lake. This concept was re-confirmed in the *Route 20 Corridor Study* that was completed in 2000. The Route 20 Corridor actually includes segments of Route 29 as well as all of Route 53. In addition to extensive public outreach within Lake County, community meetings were held in Ukiah (Mendocino County) and in Williams (Colusa County) as part of the corridor outreach process.

In addition to staff overlap between the APC and MCOG, directors of both agencies have met to discuss common issues such as inter-regional transit and major highway improvements. They have agreed to meet periodically in the future as needs arise.

Public Involvement

The Draft 2005 Lake County Regional Transportation Plan was released in May of 2005. This draft was distributed to Caltrans, Native American Tribes, and Area Planning Council, members of the TAC, and made available for public review. In addition, discussions of the RTP process and progress have appeared on the APC's agendas throughout the development of the Plan, allowing the public to participate. In August 2005, APC staff held two public workshops (Lowerlake and Lakeport) to discuss the Plan, the environmental review, and receive public input. In spite of efforts to notify the public of the meetings, including distribution of the Plan to several locations throughout the county and notices in the local papers, attendance at the meetings was disappointing. Two newsletters were also distributed county-wide which encouraged public involvement and comment to the RTP process. The public had a final opportunity to comment during the public review period preceding the public hearing to adopt

the Plan and at the hearing itself. Appendix B includes documentation of public outreach efforts taken by APC staff.

In addition to direct input from the public for the RTP, other documents were used in preparing this Plan which were developed with public involvement. In particular, the Route 20 Corridor Study (August 2000), which encompasses some of the most significant actions discussed in this Plan, was developed with extensive public input through well attended public workshops and public hearings.

Private Sector Involvement

An overview of the 2005 RTP and invitation to comment was presented to the Lake County Business Outreach and Response Team (BORT) at their meeting May 20, 2005. BORT was provided a draft copy of the 2005 RTP and encouraged to provide comments. BORT had previously participated in Wine Country IRP Phase 1. Although not directly involved with the development of the 2005 RTP, representatives from regional banks, housing developers, wine growers, and business associations became familiar with Lake County's transportation constraints through involvement with the Wine Country IRP process. BORT's agenda is included in Appendix B as documentation of private sector outreach efforts provided by the APC.

Native American Coordination and Consultation

Native American tribes were the first to receive notice of development of the 2005 Regional Transportation Plan update in a letter dated January 13, 2003. Letters were then sent to tribal chairs in September 2004, offering consultation on the RTP process in October and November. Although there were no consultations on the 2005 RTP requested, the Area Planning Council participated with Caltrans at a workshop with the tribes on December 7, 2004. The APC presented an overview of the RTP and elements of the planned update at that time. Copies of the draft Tribal Transportation section of the 2005 RTP were sent for comment to all tribes in April 2005. Each tribe was also sent a draft plan for comment prior to scheduled adoption by the APC. Again, documentation of consultation and coordination efforts are included in Appendix B – Outreach Efforts in Developing 2005 Regional Transportation Plan.

It is the goal of APC staff that coordination and consultation with the Native American tribes in the regional transportation planning process can become more regular in the future, and that a strong, symbiotic government-to-government relationship be developed.

RECOMMENDED ACTIONS

The following recommended actions are necessary to implement the regional transportation system as described in this document:

- Implement the 2005 State Transportation Improvement Program and subsequent programs in a timely manner. (State)

- When developing the Lake County Regional Transportation Improvement Program, include projects consistent with this Regional Transportation Plan. (Local)
- Incorporate Lake County Regional Transportation Improvement Program (RTIP) projects into future State Transportation Improvement Programs. (State and Local)
- Modify existing or identify additional revenue sources to ensure a revenue stream adequate to meet maintenance and improvement demands. (State and Local)
- Pursue competitive funding sources (HBRR, HES, etc.) for improvements to local road system. (Local)
- Maximize use of available TDA funds and other grants and competitive programs (such as SR2S) which may be available for non-motorized purposes. (Local)
- Continue to pursue grant funding for air facility improvements at Lampson Field. (Local)

ENVIRONMENTAL CONSIDERATIONS

A Negative Declaration has been prepared for the Regional Transportation Plan. The majority of projects discussed in this document are improvements within existing corridors and right of ways, such as rehabilitation or safety improvements on existing roads, and therefore have few foreseeable environmental issues. However there are some projects, particularly those on the State highway system that will require extensive environmental analysis. An individual environmental review will be done for each project at the time of implementation. Environmental work continues on both segments (1 & 2) of State Route 29 (PM 23.9-31.6) where improvement priorities have been established. Environmental work is expected to be complete on the EIR/EIS for this project in December, 2006.

INTRODUCTION

REGIONAL TRANSPORTATION PLANNING

The Lake County/City Area Planning Council (LC/CAPC) is the Regional Transportation Planning Agency (RTPA) for the Lake County region. First established in 1972 by a Joint Powers Agreement, the LC/CAPC now consists of eight members—two members of the Lake County Board of Supervisors, two council members from the City of Lakeport, two council members from the City of Clearlake, and two at large citizen members appointed by the Board of Supervisors.

Three standing committees aid the Area Planning Council in performing its transportation planning functions. The Policy Advisory Committee (PAC) is composed of Area Planning Council members and a Caltrans District 1 representative. The Technical Advisory Committee is composed of the Lake County Public Works Director, the Lake County Community Development Director, the Clearlake City Planner, the Clearlake City Engineer, the Lakeport City Engineer, the Lakeport City Planner, the local California Highway Patrol Commander, a representative of the Lake County Airport Advisory Committee, and a Caltrans District 1 Transportation Planner. Senate Bill 498, approved in 1987, established the Social Services Transportation Advisory Council (SSTAC) which represents interests of the elderly, handicapped, and persons of limited means. The SSTAC also has statutory responsibility to advise the RTPA on other transportation-related issues.

Senate Bill 45 Impacts

Senate Bill 45 (Kopp), which took effect in 1997, had significant impacts on the regional transportation planning process. Impacts of the bill include:

- Gave RTPA's a more active role in the programming process;
- Mandates 25% of the State Highway Account to the Interregional Transportation Improvement Program and 75% to fund Regional Transportation Improvement Programs (after "off the top" allocations such as SHOPP);
- Encouraged decision-making through partnerships among stakeholders;
- Introduced greater regional agency fiscal accountability into the STIP process.

SB 45 also established new Regional Transportation Plan requirements, including that the RTP be updated every four years. SB 45 took effect in 1997, rendering the first four year update due in 2001 and the subsequent update due in 2005.

THE REGIONAL TRANSPORTATION PLAN

Regional Transportation Plans (RTPs) are planning documents developed by RTPA's as required by State legislation. The purpose of an RTP is to provide a clear vision of the regional transportation goals, policies, objectives and strategies. An RTP should also:

- Provide an assessment of the current modes of transportation;
- Predict future needs;
- Identify specific actions and improvements in order to address needs;
- Provide guidance in future decision making processes;
- Discuss financing in association with recommended improvements and actions;
- Consider the views of all stakeholders in development of the Plan.

The 2001 Regional Transportation Plan was completely revised as well as updated and re-formatted. It incorporated newer planning documents that had been completed since the prior update and ensured the new RTP was consistent with transportation planning and programming changes due to Senate Bill 45. The 2001 plan was not adopted until January 8, 2003.

The 2005 Regional Transportation Plan is a rather narrow-scoped revision of the 2001 plan that focuses on the following:

- Updating financial forecasts and socio-economic data as available
- Updating local project priorities
- Responding to supplemental Regional Transportation Plan Guidelines (December 2003) to include an enhanced discussion of (1) Interagency coordination (2) Tribal Government Issues (3) Private Sector Involvement, and (4) Identification of Financially Un-constrained Projects

In reality, little has changed within the region since the 2001 RTP. The most significant projects in the region are programmed in the State Transportation Improvement Program (STIP). The 2002 STIP resulted in delaying projects programmed in 2000. The 2004 STIP resulted in pushing these projects further into future years. Projects that were once thought to be in the short range have drifted into the long range. The fundamentals of the RTP adopted in 2003 remain valid for the year 2005.

THE REGION

Lake County is located within the northern Coast Ranges of California. This mountain system consists of long, parallel ridges which trend from the southwest to the northwest. In Lake County, the mountain pattern is interrupted by the Clear Lake Basin. The majority of the population of the county resides along the shores of Clear Lake. The northern third of the county is largely unoccupied, much of it lying within the Mendocino National Forest. Mountains are also predominant in the southern one third of Lake County, and this area is sparsely populated. Lake County has a Mediterranean climate, with warm, dry summers and cool, moist winters.

Population

The California Department of Finance estimated the Lake County population at 63,250 as of January 1, 2005. This includes a population of 44,332 within the unincorporated area of the County, 5,108 within the city of Lakeport, and 13,810 within the city of Clearlake.

Growth in the region slowed relative to previous boom decades, but is poised to increase once again. Between 1980 and 1990, Lake County grew by 39.2%. However, the 2000 Census revealed that population in the region only increased by 15.2% between 1990 and 2000. This was only slightly higher than the state average of 13.8%. However, according to a report from the Department of Finance, June 2001, population in the area is expected to increase by roughly 57% by 2020. Lake County, particularly areas to the south, along Highway 29, is increasingly becoming a bedroom community for Sonoma County. As housing prices continue to increase in Sonoma County, more and more people move to Lake County as an affordable alternative.

One significant factor of the population in Lake County is the large percentage of individuals over the age of 65. 19.5% of Lake County residents are 65 and older, with higher concentrations in some areas. This is significantly higher than the state average of only 10.6%. Additionally, 33.9% of all households in Lake County have an individual 65 years or older. The majority of these individuals have limited financial resources and special needs relative to transportation.

Economy

The region's economy is based primarily on agriculture and retail sales and services to tourists and residents. The unemployment rate in Lake County ranges from as low as 2.8% in the Hidden Valley area all the way up to 12.6% in Clearlake Oaks, with a County rate of 5.4%. Median household income in Lake County is $27,295 (based on a 1997 U.S. Census Bureau estimate). This is substantially lower than the median household income for California, which was $39,595 for the same year. The industries that employ the most people are agriculture, the retail trade industry, health and social assistance, and arts entertainment and recreation. According to a 1997 estimate, 20.1% of individuals in Lake County live below the poverty line.

The economy of Lake County lags behind the rest of the State. The current condition of the State highway system throughout the region limits economic development activities due to poor, inefficient access to most areas within the County. It is critical to the economic future of Lake County that the Principal Arterial Corridor be improved. Widening to accommodate the ever-increasing through traffic and goods movement between Interstate 5 and US 101 is essential. This is especially important as the commuter traffic along the corridor between Lower Lake and Lakeport has continued to build. Recreational traffic, attracted by Lake County's natural features and close proximity to a major metropolitan area, adds to growing congestion and safety concerns. Improvement of the corridor facilities to their maximum capability will be a major step in facilitating the economic development needed to improve quality of life for residents in the region.

Traffic Forecasts

Traffic projections for the entire roadway network, including the State highway system, throughout Lake County and its cities were done as part of the Lake Countywide Roadway Needs Study (Whitlock & Weinberger, December 2000). The study used the Lake County traffic model to generate roadway and intersection traffic volume projects for the years 2005, 2010 and 2020. Year 2005 volumes are anticipated to increase from 10 to 37% over existing conditions. Volumes are expected to increase 27% to 40% by 2010. By 2020, volumes are estimated to increase by 40% to 80% over existing levels. Road segments along SR 29 (Lakeport to

Kelseyville) and SR 53 (Lower Lake to Clearlake) are expected to remain the highest areas of traffic volume. Tables showing traffic volume projections from the study can be found in Appendix C.

Traffic models have not been updated for the 2005 RTP, however Caltrans published new 20-Year growth factors for District 1 in July, 2004. The growth factors are reasonably consistent with prior model projections. A growth factor of 1.5 indicates that traffic is expected to increase 50% over a 20-year period. The highest expected growth rate in Lake County (90% over 20 years) is expected on S.R. 29 south of Middletown and on S.R. 281. Caltrans growth factors for State highways in Lake County are:

1.5 Route 20 between the S.R. 29 junction and the S.R. 53 junction along the north shore of Clear Lake

1.6 Route 29 from the north end of the Lakeport Freeway to the S.R. 20 junction near Upper Lake.

1.7 Route 20 between U.S. 101 and the S.R. 29 junction near Upper Lake; Route 53 (entire length); Route 175 from the Mendocino County line to the S.R. 29 junction near Lakeport.

1.8 Route 20 from the junction of S.R. 53 to the Colusa County line; Route 29 from the junction of S.R. 175 in Middletown to the end of the Lakeport Freeway; Route 175 from the S.R. 29 junction in Middletown to the S.R. 29 junction near Kelseyville.

1.9 Route 29 from the Napa County line to the S.R. 175 junction in Middletown; S.R. 281 (Soda Bay Road)

PROJECTS COMPLETED SINCE LAST ADOPTED RTP

Due to the short time span since completion of the previous RTP and the severe economic constraints experienced the past several years, the list of projects completed since the the RTP is in this case, rather short:

State Highway System

- State Route 20, P.M. 12.2 to 13.6, in Nice, a continuous left turn lane was constructed as well as side-street/driveway improvements.
- State Route 20, P.M. 8.4 to 30.0, along the North Shore, “Pedestrian Safety Corridor” signing was installed.
- State Route 20 @ State Route 53 junction, P.M. 31.5 to 31.8, intersection modifications to improve safety
- State Route 29, P.M. 11.7 to 12.5, left turn channelization at Spruce Grove Road
- State Route 29, P.M. 38.3 to 38.9, intersection modification and signalization at Highland Springs Road.

Local Roads

Lake County Roads

- Mendenhall/Elk Mountain Road, Street Rehabilitation
- Point Lakeview Road, Street Rehabilitation
- Spruce Grove Road, Street Rehabilitation
- Country Club Drive, Street Rehabilitation

City of Lakeport Street Projects

- Completed the area's first roundabout for traffic circulation at the Lakeport Boulevard/Parallel Drive/Todd Road intersection

Non-Motorized Transportation

Lake County

- Lakeshore Boulevard Bikeway-Phase III, Parkway to 2100' north of Parkway

City of Clearlake

- Old Highway 53 from Lakeshore Drive to Lakeview Way with a loop along Ballpark, Bluejay and Laguna Avenue

Transit

- Completed and opened the Lamkin-Sanchez Transit Operations Center in Lower Lake
- Modified and replaced the Lake Transit Authority fleet
- Received Section 5311(f), Federal Inter-city Bus Program funds which established service between Lakeport and Ukiah

Aviation

- Completed perimeter fence
- Completed Clear Zone Tree Clearing Northwest of Runway
- Airport Business Development Plan

LAND USE

Lake County is a sparsely developed rural area, having only about 46 people per square mile (compared with a State rate of 217 per square mile). Only a small percentage of the total area is developed, with population clustered in small areas around Clear Lake. Agriculture and rangeland are the predominant land uses, with industrial activities accounting for very little land use.

The City of Lakeport adopted its general plan in 1992. The plan guides development and land use in Lakeport and vicinity for a 30-year horizon. The downtown district, focusing on Main Street and Forbes Street, has traditionally been the commercial, office, and high-density residential center of the community—this pattern is expected to continue. Although there has been an increase in commercial/office land use along 11th Street (west of Pool Street), much of recent commercial expansion has occurred in the Lakeport Boulevard, Parallel Drive/Todd Road area. In fact, much of the growth projected in the general plan will be directed in this area. Another likely area of growth will be along South Main Street, extending into the unincorporated portion of this arterial. Open space and recreational development is likely to occur in the southwest, near State Route 175.

The City of Clearlake is operating under a general plan that is nearing twenty years old. The City has acknowledged the need to update the plan, but has yet to find the resources to undertake the task. In recent years, commercial development has concentrated in the south and southeast, off Dam Road and Old Highway 53 (including abandoned Pearce Field). Other commercial development has occurred along Lakeshore Drive and Olympic Drive, arterials that bisect traditional commercial centers. Although much vacant land is available for in-filling, significant residential development is expected to be directed to the northeast, generally north of Olympic Drive and east of Burns Valley Road. Agricultural uses occur in the outlying portions of Clearlake, in the Burns Valley Creek area north of Olympic Drive. In addition, vineyards are being developed in the surrounding areas at a rapid pace.

Land use in unincorporated Lake County is varied, but reflective of its rural character. Countywide, over 384,000 acres are in public ownership and 41,000 acres are devoted to agriculture. Another 37,000 acres are available for rural residential use, but only 285 acres are in high-density residential use. As opposed to the high growth of the 1970s, residential growth in the 1980s and 1990s was much slower. New residential growth was somewhat unbalanced, with a disproportionate amount of residential growth in the Middletown/Hidden Valley Lake area. Lake County will soon be updating the County of Lake Comprehensive General Plan, which was adopted in 1981. The new plan is scheduled for completion in 2006.

INTELLIGENT TRANSPORTATION SYSTEMS

The Lake County/City Area Planning Council participated in the California Oregon Advanced Transportation System Strategic Deployment Plan. There were no implementation projects that were identified for this region.

At such time that the Lake County/City Area Planning Council considers proposing an ITS project, the project will be in conformance with the common structure of the regional architecture as identified in the California Oregon Advanced Transportation System (COATS) Regional Architecture.

I. STATE HIGHWAY SYSTEM ELEMENT

SYSTEM DEFINITION

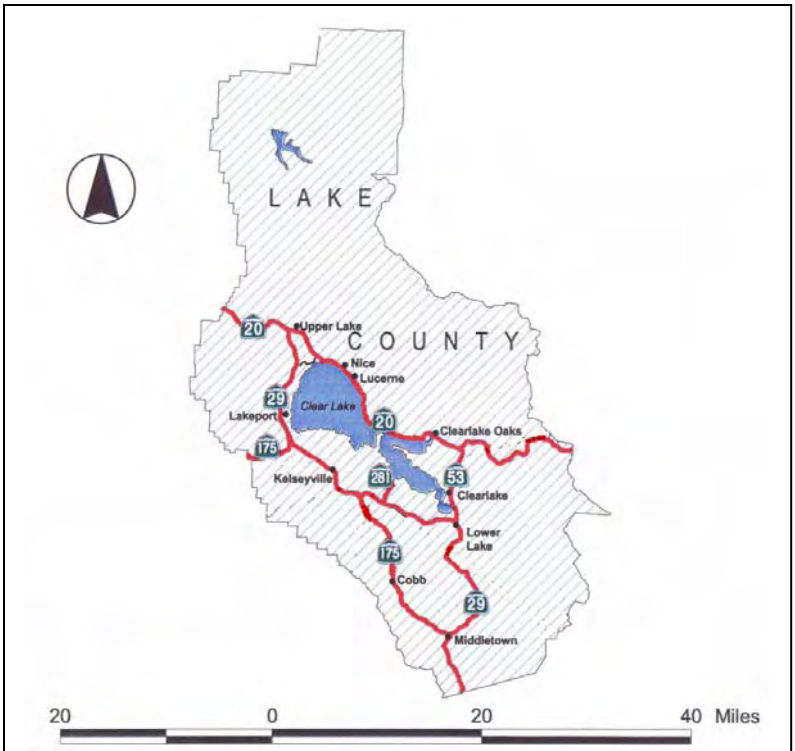


Figure I-1 State Highway System within Lake County

The State highway system of Lake County is made up of 137.5 miles of State highway, which includes State Route 20, State Route 29, State Route 53, State Route 175, and State Route 281. With the exception of a 7.5 mile freeway segment on State Route 29 near Lakeport, the 3.0 mile Clearlake Expressway, and several shorter three lane sections in other areas, all of the State highways currently serving Lake County are two-lane facilities. Traffic operations on two-lane, two-way highways are unique in that traffic flow in one direction is influenced by flow in the other direction. Passing is possible only in the face of oncoming traffic in the opposing lane, causing motorists to adjust their travel speed as volume increases and the opportunity for passing decreases.

The State highway system in Lake County is geographically constrained. The County is mountainous and highways must wind around the extensive lake system. State Route 20 provides the main east west corridor through the County, extending from the Mendocino County line to the Colusa County line. For the communities of Nice, Lucerne, Glenhaven, and Clearlake Oaks, Route 20 is "Main Street." However, Route 20 itself is limited to a curving, two-lane facility by its surrounding geography. The Route 20 Principal Arterial Corridor, which in Lake County includes portions of Route 20, Route 29, and all of Route 53, was identified by Caltrans as a High Emphasis Focus Route in California in the Interregional Transportation Strategic Plan (June 1998). It provides a connection between the I-5 and US-101 corridors, as well as providing links between most of the population centers of Lake County.

NEEDS ASSESSMENT: ISSUES, PROBLEMS, AND CHALLENGES

Critical issues to consider when assessing the needs of the State highway system in Lake County are safety, creating opportunity for economic development to improve quality of life for residents within the corridor communities, meeting traffic flow demands and land access needs.

State Route 20 (Principal Arterial Corridor)

In 2000, the Lake County/City Area Planning Council, in conjunction with Caltrans District 1, prepared the *Route 20 Corridor Study* for the purpose of assessing the route concept and corridor needs. The Principal Arterial Corridor includes portions of Route 20, Route 29, and all of Route 53. The Study identified priorities for corridor improvements on both a regional and interregional level. When constructed, through traffic on Route 20 will be re-directed to the south of Clear Lake. The Principal Arterial Corridor takes advantage of relatively unconstrained right-of-way and existing four-lane segments while avoiding topographical and environmental constraints, as well as community impacts, of the north shore route. The primary corridor improvements within Lake County over the next ten years are to implement a four-lane freeway/expressway on segments of the Route 20 Principal Arterial Corridor between Lakeport and the community of Lower Lake.

The corridor concept (for the entire corridor, not just that within Lake County), as identified in the *Route 20 Corridor Study* is as follows:

- Four-lane freeway/expressway. Route 20 east from the junction with US-101 to the junction with Route 29, south on Route 29 to the junction with Route 53, then north on Route 53 to rejoin Route 20 east of the community of Clearlake Oaks.

- Two-lane conventional highway, fully improved, with passing lanes. Route 20 east from the community of Clearlake Oaks (eastern junction with Route 53) to Interstate 5 in the City of Williams.

Traffic Projections and Level of Service

Table I-1 shows daily traffic, peak hour traffic and level of service at 1998 levels and levels projected for the year 2020 for road sections within the State Route 20 Principal Arterial Corridor. (A detailed explanation of the Level of Service can be found in Appendix D.) The typical capacity of a two-lane rural highway is estimated at 3,200 vehicles per hour in both directions (per the 2000 Highway Capacity Manual). This is an ideal capacity that would decrease with changes in grade, curve radius, and shoulder width. A minimum standard roadway in steep terrain and restricted sight distance could have maximum effective capacity reduced to 1,500 vehicles per hour in both directions.

The four-lane freeway section of Route 29 has a capacity of 2000 vehicles per lane, per hour in the peak hour, and the four-lane expressway section of Route 53 has an estimated 1800 vehicles per lane, per hour for peak hour capacity. Traffic volume on corridor roadways range from under 4,000 to over 13,000 vehicles per day, and from 450 vehicles per hour to 2,100 vehicles per hour in the peak hour period of travel. The lowest level-of-service grades (LOS "E") are found in the two-lane mountainous segments of the corridor in Lake County. The highest level-of-service grades (LOS "A") are found on the four-lane sections of Route 29 near the City of Lakeport, and Route 53 in and through the City of Clearlake. Unless traffic carrying capacity is added, the level of service on all Principal Arterial Corridor segments (with the exception of the Lakeport freeway) will drop to unacceptable levels by the year 2020.

Inspection of Table I-1 reveals that traffic volume for the corridor is expected to double within the next 15 years.

Table I-1
State Route 20 Principal Arterial Corridor
Current Traffic Data
and Projections for 2020

	Current (Based on 1998 Data)			2020 Projections		
Corridor Segmentation	**Daily Traffic**	**LOS**	**Peak Hr Traffic**	**Daily Traffic**	**LOS**	**Peak Hr Traffic**
Segment 1 – Route 20 West						
Blue Lakes -- P.M. 0.0 to 3.6	9,300	E	930	17,500	F	1,750
Bachelor Valley – P.M. 3.6 to 8.3	7,000-7,200	D	640-650	13,200-13,500	E	1,200-1,220
Segment 2 – Route 29 South Shore						
North of Lakeport – P.M. 48.4 to 52.5	4,950-5,000	C	450-490	8,750-8,850	E	800-870
Lakeport Freeway -- P.M. 40.9 to 48.4	5,000-11,600	A	490-1,050	9,950-23,100	C	980-2,090
Lakeport to Route 281 -- P.M. 27.9 to 40.9	6,500-11,000	E	620-1,050	12,900-21,900	F	1,230-2,090
Route 281 to Lower Lake -- P.M. 20.3 to 27.9	6,000- 8,600	D	650-830	11,900-17,100	E	1,290-1,650
Segment 3 – Route 53						
Route 281 to Lakeport -- P.M. 0.0 to 3.0	11,700-13,800	A	1,550-2,100	23,300-27,500	D	3,080-4,180
North Clearlake -- P.M. 3.0 to 7.5	6,500-6,600	D	620-850	12,900-13,100	E	1,230-1,690
Segment 4 – Route 20 East						
Route 53 to Cache Creek Br -- P.M. 31.6 to 37.1	4,900-5,500	E	690-700	9,750-10,900	F	1,370-1,390
Cache Creek Br. to Colusa County Line -- P.M. 37.1 to 46.5	3,900-4,900	E	690-700	7,750-9,750	F	1,370-1,390

Traffic Volumes: From 1998 Traffic volumes on California State Highways
Level of Service: Calculated using peak hour volumes and McTrans HCM Software
Projected Traffic Volumes: Projected from 1998 Traffic volumes on California State Highways
Level of Service Projections: Calculated using peak hour volume projections and McTrans HCM Software

State Route 20 (Minor Arterial Segment)

The Minor Arterial segment of State Route 20 stretches from Upper Lake to Clearlake Oaks. While most of Lake County is impacted by additional seasonal traffic, impacts on this portion of Route 20 are particularly adverse. The highway segment is characterized by widespread roadside development, unrestricted lake access, curvilinear alignment, numerous speed zones and few passing opportunities. This portion of SR 20 serves as "main street" to the lakeside communities of Upper Lake, Nice, Lucerne, Glenhaven, and Clearlake Oaks. Safety improvements are needed for both vehicles and pedestrians. In addition, operational and channelization improvements would help distinguish communities, provide visual "gateways," and make these communities more livable for residents as well as attractive to seasonal tourists.

However, these types of projects are more likely to gain support once the improvements to the Principal Arterial Corridor are completed. Until such time, this section of highway will most likely continue to serve as the primary route through the County.

Highway 20 Northshore Traffic Calming and Beautification Plan

This project was included in the Lake APC 2004/05 Work Program, and completed with funds made available through a Caltrans Community Based Planning Grant, the Lake County/City Area Planning Council, and Lake County Redevelopment Agency. The purpose of the project was to develop a detailed traffic and beautification plan through a highly participatory process with residents of Nice, Lucerne, and Clearlake Oaks. RRM Design Group, the lead consulting group, completed the project the end of summer 2005. *Highway 20 Northshore Traffic Calming and Beautification Plan* goals included:

- Increasing safety and mobility for all highway users, with emphasis on high conflict points and safer routes to school for children.
- Developing of a plan for increased visual interest and beauty in the study area.
- Increasing involvement of northshore residents in partnering with local government to revitalize their communities.
- Complementing the APC's regional goal of redirecting truck and inter-regional traffic to the proposed principal arterial corridor SR 20/29/53, while using context sensitive solutions for SR 20 in the proposed project area.

Recommendations and improvement opportunities for each of three communities are included as Attachment D.

State Route 29 (Minor Arterial Segment)

Improvements to this stretch of highway will be an emerging need in the future. The number of people that commute from this area of Lake County to employment in Napa and Sonoma Counties is growing rapidly. The portion of the highway within Lake County is sufficient for the time being, although as demands increase, the condition will quickly become inadequate. Once over the Napa County line, Route 29 becomes a windy, difficult to maneuver highway traversing steep terrain. While the need for improvement to SR 29 will be rapidly increasing over the next several years, funding those improvements may be difficult to nearly impossible. Caltrans bases its programming on its high priority "focus routes" (State Route 20 Principal Arterial Corridor is one such route). As this stretch of Route 29 is not a focus route, it is highly unlikely to receive any ITIP funding. Therefore, improvements to this stretch of highway would have to be fully funded with local RIP money. Currently, regional funding priority is being given to developing the Route 20 Corridor, leaving insufficient money to fund this work. As the need for improvements to this route increases, it will become of higher concern to both Lake and Napa Counties. The need to improve the route may be addressed by a partnership between the counties. However, at this time, this portion of Route 29 remains a lower priority to the region, although it is an issue that will be of increasing concern in the future.

State Route 175

State Route 175 is a discontinuous rural highway traveling through mountainous terrain. The Minor Arterial segment of Route 175 (P.M. 0.00 to 8.19) connects Lakeport with Hopland in southern Mendocino County, providing a secondary access to the US 101 corridor. The portion of Route 175 which extends south from Route 29 near Kelseyville serves as a Major Collector (with the exception of the segment south of the intersection with Bottle Rock Road, which is also Minor Arterial) providing a connection to Middletown.

There is only a minor seasonal increase in traffic on this highway. However, because of the surrounding geography, limited lane and shoulder widths, steep grades, and sharp curves, even the small increase in recreational traffic has a negative effect on the operating capabilities of the highway.

Minor Arterial Segment (P.M. 0.00 to P.M. 8.19)

The Minor Arterial segment of Route 175, between Lakeport and Hopland is a narrow two lane highway, with little roadside development, no traffic controls and relatively light traffic flow. In recent years, restrictions have been imposed on this section of highway prohibiting vehicles over 39 feet in length, providing some improvement to operational ability of this segment. While major improvements to this segment would benefit Lake County by providing a more direct route to the US 101 Corridor, the magnitude of such a project and lack of funding, prohibit such improvements at this time.

The entire length of this segment was identified in the Lake Countywide Roadway Needs Study as having a high rate of accidents. The average accident rate for a two-lane rural highway such as Route 175 varies from 0.8 to 1.75 accidents per million vehicles entering (acc/mve) depending on geography. However, the accident rate on Highway 175, from Route 29 to the county line is 2.14 acc/mve, which is significantly above the average.

Major Collector Segment (P.M. 8.25 to P.M. 28.04)

The majority of this segment of Route 175, which connects Route 29 with the community of Middletown, serves as a Major Collector with the exception of the portion south of Cobb. While this segment of Route 175 is similar in many ways to the Minor Arterial segment, it differs in that it is constrained by roadside development, speed controls, and truck traffic. Fortunately, much of the traffic flow between Route 29 and Cobb is served by Bottle Rock Road, which runs parallel to this segment. No projects, other than maintenance and safety improvements when necessary, are planned for this highway segment.

State Route 281

This highway, only 3.0 miles in length, provides access to Clear Lake Riviera and Konocti Bay from Route 29. Route 281, a Major Collector, is a two-lane facility with moderate traffic flow through rolling terrain. It provides access to recreational areas and is significantly impacted during peak periods. This highway continues along the south shore of Clear Lake as County-maintained Soda Bay Road. Eventually, it would be desirable to upgrade this highway to arterial

standard. However, due to lack of funding and other regional priorities, no improvements are planned for this highway, with the exception of maintenance and safety improvements as needed.

Other Needs

There is also a large backlog of deferred maintenance, rehabilitation and safety improvement projects throughout the region's State highway system. While the State Highway Operations Protection Program (SHOPP) can address some of these needs, APC must evaluate operational and safety needs that demand attention over and above the State's programming. Table I-2, State Highway Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability, shows a detailed list of improvements to the Highway System in Lake County which were identified by the Lake Countywide Roadway Needs Study, December 2000, prepared by Whitlock and Weinberger Transportation, Inc. (modified by Dow and Associates) and accepted by the Lake County/City Area Planning Council on February 14, 2001 (see Appendix D). The table lists projects that are necessitated by operational, safety, or capacity issues. Some projects shown in the table are already programmed in either the STIP or the SHOPP.

Table I-2
State Highway
Recommended 10 to 20 Year Capital improvement Projects
Subject to Funding Availability*

State Highway	From	To	Project Type	Project Cost (in thousands)
Proposed 10 Year CIP				
SR 29	Intersection	S.R. 20	Accident Reduction	$350-9,000
SR 53	Intersection	Olympic Drive	Accident Reduction	$1,000
SR 29	Intersection	S.R. 281	Accident Reduction	STIP*
SR 29	Intersection	Seigler Canyon Rd.	Traffic Control	$500
SR 20	Intersection	Scotts Valley Rd.	Traffic Control	$800
SR 20	Intersection	Bartlett Spr. Rd.	Traffic Control	$400
SR 20	Intersection	Lakeview Drive (Co.)	Traffic Control	Infeasible***
SR 20	Intersection	Island Drive	Channelization	$900
SR 29	Intersection	Bottle Rock Rd.	Traffic Control	$500
SR 20	Intersection	Lakeview Drive (Nice)	Traffic Control	SHOPP**
SR 20	Intersection	Nice-Lucerne CO.	Traffic Control	$400
SR 20	Intersection	High Valley Rd.	Widening	$144
Proposed 20 Year CIP				
SR 20	Intersection	Foothill Dr.	Traffic Control	$600
SR 20	Intersection	Widgeon Way	Channelization	Infeasible***
SR 20	Intersection	Main Street UL	Traffic Control	$400
SR 20	Intersection	Country Club Dr.	Channelization	$500
SR 29	Intersection	Point Lakeview Rd.	Channelization.	$500
SR 53	Intersection	North Clearlake	Traffic Control	$10,000
SR 29	S. R 175	Main Street KV	Widening	$80,000
SR 29	Intersections	Various Kelseyville	Traffic Control	Undetermined

* Project already programmed in the STIP
** Project already programmed in the SHOPP
*** Project determined not feasible by Caltrans

Origin & Destination Study within Lake, Mendocino, Napa and Sonoma Counties

Mendocino Council of Governments, the regional transportation planning agency for Mendocino County, provided funding through Public Transportation Account funds (made available by Caltrans) to perform an Origins and Destination (O&D) Study. The study will be conducted to determine travel characteristics on several key routes that carry inter-county traffic. Five locations within the four-county area have been tentatively identified as locations for this study. Information derived from this study will be used in future modeling efforts which may result in the identification of projects to address the future transportation needs of the region. The entire project should be completed no later than June 15, 2006.

Routes in Lake County to be studied are as follows:

State Route 20

Route 20 between Lake and Mendocino counties is part of a Principal Arterial corridor that extends from U.S. 101 to Interstate 5 near Williams. Most travel from the Central Valley to the Mendocino coast uses this corridor. It is a two lane highway within the study area. The 2003 Average Annual Daily Traffic on Route 20 near the Lake/Mendocino line is 8,400. The 2003 Peak Month average is 10,200 vehicles per day.

State Route 29

Route 29 in the study area is a Minor Arterial that extends from the junction of State Route 53 in Lower Lake to State Route 128 in Calistoga. This segment of Route 29 has been experiencing increased travel due to available housing in southern Lake County and employment opportunities in Sonoma County. It is a two lane roadway within the study area. The 2003 Average Annual Daily Traffic on Route 29 near the Lake/Sonoma line is 7,100. The 2003 Peak Month average is 7,600 vehicles per day.

Origin and destination information is critical to clearly understand the magnitude of regional transportation issues such as assessing the ability of the current transportation system to meet transportation demands, identifying projects and/or programs to address this demand, and enlisting the aid of local and statewide leaders to focus on the impacts as well as root causes of these impacts.

GOALS, POLICIES, OBJECTIVES AND PERFORMANCE MEASURES

Goal

- Provide a safe, well-maintained, and efficient State highway network that satisfies statewide mobility needs for people and goods, while meeting growing inter-regional, local and recreational travel demands.

Policies and Objectives

Policy 1.01 Improve safety conditions on the State highway system serving Lake County.

Objective 1.01.1 Seek Safety and/or SHOPP funding for State highway projects identified in the Lake Countywide Roadway Needs Study.

Objective 1.01.2 Provide input and consultation with Caltrans on State highway safety issues as they are identified.

Objective 1.01.3 Consider signalization at major State highway/local road intersections, when warranted by conditions (only as an interim mitigation measure on principal arterial routes).

Objective 1.01.4 Construct grade separations (interchanges, overpasses, underpasses) as long-term solutions to safety/capacity issues at major intersections on the Principal Arterial System.

Performance Measure: Improve Traffic Accident Rates for Corridor segments that exceed the statewide average (for comparable facility type) by more than 25% of the base rate to a level lower than or equal to the statewide average.

Policy 1.02. Continue maintenance and rehabilitation of the State highway system at levels needed to meet increasing demands due to the expansion of the resident population, increased commercial and industrial activity and the impact of nonresident recreational traffic.

Policy 1.03 Improve east/west highway circulation within and through Lake County, especially with systematic improvements to the Principal Arterial System.

Objective 1.03.1 Develop the Principal Arterial System as a four-lane freeway/expressway from Route 101 in Mendocino County to the Route 53 junction at Route 20, with the Route 29 segment between Lakeport and Lower Lake assigned highest priority for construction.

Performance Measure: Maintain or improve upon current Level of Service on all segments of the State highway system.

Performance Measure: Increase the number of new lane-miles of full design standard facilities based on the Route Concept Report.

Objective 1.03.2 Develop the Principal Arterial System as a two-lane facility, with passing lanes, from the Route 53 junction to Interstate 5 in Colusa County.

Objective 1.03.3 Collaborate with regional agencies in Mendocino, Colusa, Sutter, Yuba, and Nevada counties to highlight Route 20 Corridor needs for Interregional Improvement Program funding.

Objective 1.03.4 Continue operational improvements on State highways as needed to facilitate goods movement on the designated Hazardous Materials transportation Route in Lake County.

Policy 1.04 Improve State highway access between Lake County and major population centers to the south.

Objective 1.04.1 In the short term, provide operational improvements, as needed, on the Route 20 segment west of the Route 29 junction.

Objective 1.04.2 In the long term, and after addressing priority projects on Route 29, pursue implementation of improvements (consistent with the Route Concept) on Route 20 west of the Route 29 junction.

Objective 1.04.3 Safety improvements should be made as necessary, and operational improvements at spot locations with safety concerns should be considered for Route 175 between Lakeport and Hopland.

Objective 1.04.4 Identify and mitigate safety and operational concerns on Route 29 between Lower Lake and Calistoga (junction of Route 128).

Objective 1.04.5 Coordinate with Caltrans, the California Transportation Commission, and the Metropolitan Transportation Commission to address the growing need to improve Route 29 in Napa County to accommodate interregional commuter traffic between Lake County and Sonoma County.

Policy 1.05 Implement operational improvements to the State highway system in areas impacted by adjacent development.

Objective 1.05.1. Provide two-way left turn lanes, where appropriate, on the Minor Arterial segments of Route 20 and Route 29.

Objective 1.05.2. Provide other operational improvements, including signalization, if warranted, on Minor Arterial segments of Route 20 and Route 29.

Policy 1.06 Pursue funding from Federal, State, and local sources to implement State highway project priorities identified in the Regional Transportation Plan.

Objective 1.06.1 Pursue Interregional Improvement Program (IIP) funds for highway improvement projects on the Principal Arterial System.

Objective 1.06.2 Secure from developers the expense of mitigation measures needed on State highways due to the impacts of development.

Objective 1.06.3 Consider State highway improvement needs in the process of programming Regional Improvement Program (RIP) funding.

Objective 1.06.4 Pursue grant funding, such as Community Based Transportation Planning Grants, for studies to improve pedestrian and bicycle mobility within communities that have State highways as their Main Street.

ACTION PLAN: PROPOSED PROJECTS

The highest priority improvements to the State highway system in Lake County are the development of the Principal Arterial Corridor. Development of the corridor will aid in the flow of traffic through the county as well as provide more efficient transportation to both local residents and seasonal tourists. By developing the corridor, better commercial and tourist access will be provided to areas much in need of economic development. It will aid in connecting areas of Lake County to communities to the south, as well as I-5 to the east.

High Priority Improvements within the Principal Arterial Corridor

Implementation priorities for the 10-year time frame will focus on the completion of capacity improvements to the south shore sub-segments between the communities of Kelseyville and Lower Lake. The following are the regional priority improvements in development of the desired Principal Arterial Corridor concept. For ease of construction, the improvements in this area have been divided into segments numbered from east to west.

Purpose and Need

Specifically, the goal of the Route 20 (including segments of Route 29 and Route 53) focus route is to provide an east-west connection from the mostly rural northern California corridor from U. S. 101 in Mendocino County, through Lake County, and into the Sacramento Valley, with connections to more urbanized areas along the I-5 and I-80 corridors. The Route 20 Corridor facilities are planned to provide a moderate level of service and lifeline accessibility for interregional movement of people, goods, agriculture, and recreational travel across the northern part of the state.

The purposes for proposed improvement to Route 29 (Route 20 Corridor) are to:

- Facilitate the efficient flow of goods and services through Lake County.
- Provide a modern transportation facility that would provide adequate capacity to accommodate anticipated traffic growth
- Provide a facility with potential for diverting through traffic (including through truck traffic) from north shore Route 20
- Accommodate local planning goals as set forth in the 2001 Lake County RTP
- Help achieve the goals of the Interregional Transportation Strategic Plan (June 1998)
- Provide a balanced circulation system and reduce out of direction travel
- Improve the safety and operation of state Route 29

The need for Route 29 improvements is that traffic is expected to nearly double over the next 20 years. The proposed project is part of the Principal Arterial Corridor that includes segments of Route 20, Route 53 and the priority segments of Route 29. Currently, Route 29 segments operate

at Level of Service (LOS) "D", whereas the Concept Level of Service is "C" or better. The LOS is expected to deteriorate to "E" by the year 2020 if no capacity increasing improvements are made.

- Route 29, P.M. 23.8 to 27.4 (Segment 1). Diener Drive to Route 281, construct 4-lane freeway/expressway. This project received $3.5 million of State Interregional Improvement Program funds programmed in the 1998 STIP cycle for environmental studies. This project is estimated by Caltrans to cost approximately $39 million

- Route 29, P.M. 27.4 to 31.6 (Segment 2). Route 281 (Soda Bay Road) to Route 175, construct 4-lane freeway/expressway. $2.8 million of RIP funds were programmed in the 1998 STIP for environmental studies and engineering. **This is the only project currently programmed**. An additional $10 million of RIP funds has been reserved for future construction work on this project. Caltrans' most recent cost estimate for this project was approximately $28 million. As this project is already partially programmed, highest priority should be given to its completion.

  For the purpose of environmental evaluation and project development, this Segment has been combined with Segment 1. Caltrans is currently evaluating alternatives to upgrade PM 23.8 to 31.6 of the existing State Route 29 which will provide capacity to accommodate anticipated traffic growth, reduce traffic delay, and increase safety. A preferred route will be identified for construction and will include necessary environmental documentation. The project schedule is as follows:

Table I-3
State Route 29 Environmental Milestones

Anticipated Major Milestones Segment 1&2-PM 23.8 to 31.6	**Completion Date**
Project Approval & Environmental Document (PA&ED)	12/06
Plans, Specifications and Estimate (PS & E)	03/09
Right of Way Certification	04/09
Ready to List (RTL)	09/09

- Route 29, P.M. 31.6 to 34.1 (Segment 3). Route 175 to Kelseyville, construct 4 lane expressway. This project is estimated by Caltrans to cost approximately $38.9 million. Steps need to be made toward initiation of this project, along with Segment 4. This project is likely to be beyond the 20-year horizon of the 2005 RTP.

- Route 29, P.M. 34.1 to 40.9 (Segment 4). Kelseyville to south Lakeport, construct 4-lane expressway. This project is estimated by Caltrans to cost approximately $119.2 million. It is very likely that this project will be constructed beyond the 20-year time frame of the 2005 RTP.

Figure I-2
State Route 20/29/53 Proposed Principal Arterial Corridor

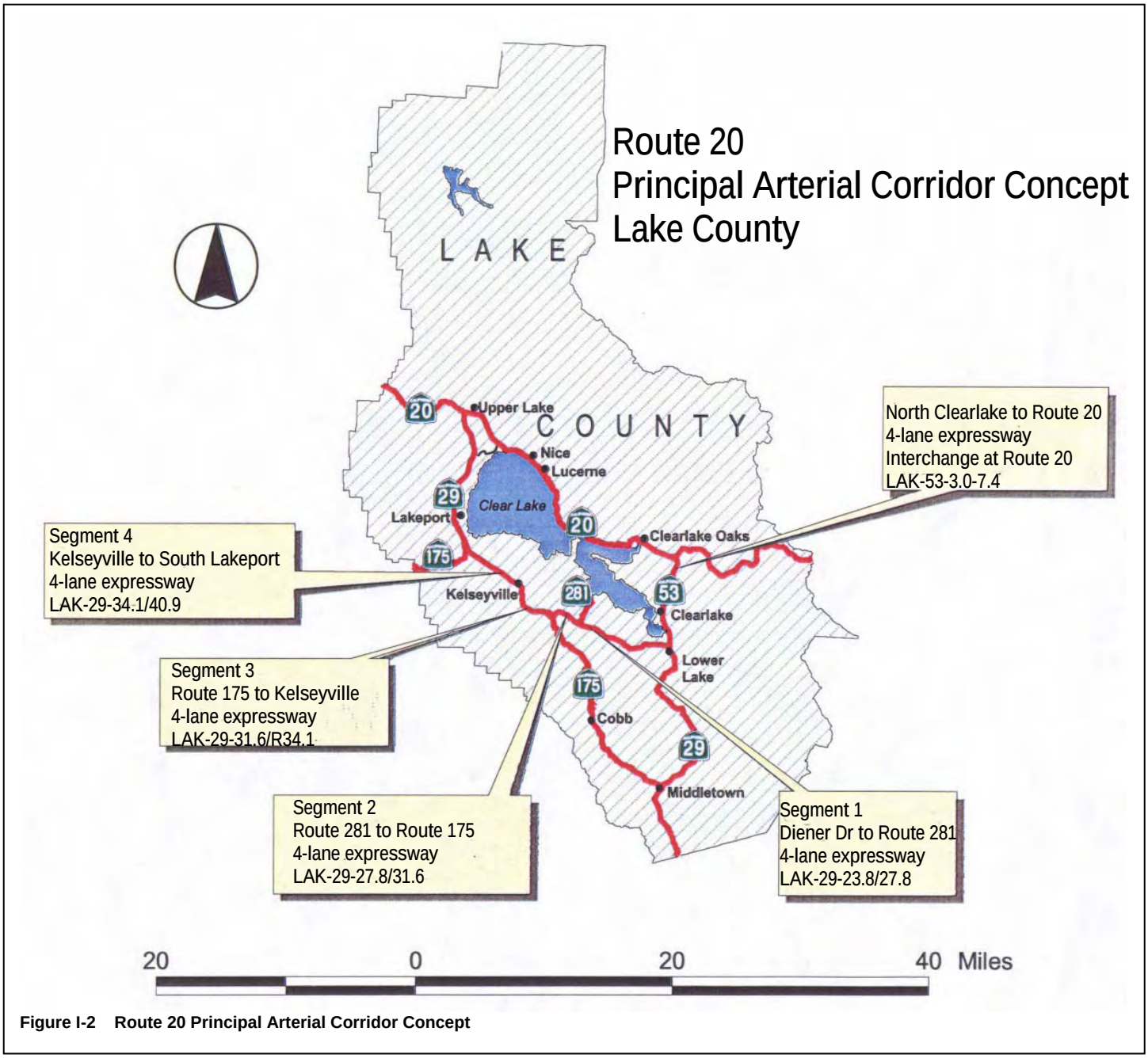


Figure I-2 Route 20 Principal Arterial Corridor Concept

- Route 53, P.M. 3.0 to 7.4. North Clearlake to Route 20, construct 4-lane expressway with an interchange at Route 20. Funding was programmed in the 2000 STIP to proceed with environmental review of this project. In 2004, it became apparent that there was insufficient projected funding to proceed in the foreseeable future. An interchange costing $20-25 million is needed at the junction of Route 53 and Route 20. Safety funding was insufficient

to provide the ultimate interchange solution. Caltrans has initiated an interim safety project at the junction, which was completed in June 2005.

Initial priority should be given to the combined Segments 1 and 2, as significant funding has already been programmed towards that project. However, if it becomes necessary to stage the project after the project development phases, highest priority should be given to the completion of the Soda Bay Road to SR 175 segment within Segment 2. The next level of priority should be given to other improvements within the combined Segments 1 and 2. Additional work on all segments, including Right of Way and Construction, is dependent on availability of RIP and IIP funding and the readiness of Caltrans to complete work. At some time in the future, the environmental components of Segments 3 and 4 should then be considered. Final priority should be given to the section of Route 53 that runs through Clearlake and connects to Route 20. This stretch of highway will ultimately need to be improved to a 4-lane freeway/expressway with an interchange at Route 20.

Prospects for significant progress toward completion of priority projects within the 10 year time frame are contingent upon participation of the State on Route 29 projects through the Interregional Improvement Program. If only Regional Improvement Program (RIP) funding is devoted to Route 29 projects in the 10-year period defining the short term, then it is likely that the most which could be accomplished is the following:

1. Programming and construction of Segment 2, the Soda Bay Road to Route 175 4-lane facility project on Route 29 (P.M. 27.8 to 31.6). Estimates are that an additional $34 million will be needed to complete this project.

2. Programming of other limited improvements (to be identified in the environmental process) within Segments 1 and 2.

The extent to which the State commits Interregional Improvement Program funds to Principal Arterial Corridor projects on Route 29 will determine how much can be accomplished in the short term period.

In consideration of the magnitude of the priority projects, it is expected that work on various elements of Route 29 projects (Segments 1-4) will continue through the long term period as well.

Lower Priority Improvements within the Principal Arterial Corridor

Also a part of the State Route 20 concept plan is the portion of Route 20 between Route 53 and the Colusa County line. While this segment of highway has relatively light traffic volumes in comparison with sub-segments on Route 53 and Route 29, it is impacted by the lack of passing opportunities and several sustained grades. There is a need for improvements related to safety and capacity. Shoulder widening and the addition of passing lanes at selected locations will greatly enhance the traffic flow during the peak demand period.

The corridor concept depicts the section of State Route 20 between the Mendocino County line and the junction with Route 29 as being a 4 lane facility. To date, no cost estimates have been

done for improvements to this segment of the corridor. However, passing lanes were completed in 2003 on a grade at the Lake/Mendocino county line. At such time that further improvements to this segment become of higher priority, they may possibly be addressed in cooperation with Mendocino County, as this highway links Lake and Mendocino Counties.

FINANCING

Source of Funds

State Transportation Improvement Program (STIP)

The STIP is the source of the majority of transportation related funding within the Lake County region. At the State level, these funds are divided into two programs—the Regional Improvement Program (RIP) funded from 75% of new funding, and the Interregional Improvement Program (IIP), funded from 25% of new STIP funding. Regional Transportation Planning Agencies (RTPAs) are given the authority to decide how to program the county share of RIP funds, subject to STIP eligibility guidelines. To be eligible, projects must be nominated by the regional agency in their Regional Transportation Improvement Program (RTIP). Caltrans has the authority to program the Interregional Transportation Improvement Funds. Similar to the RTIP, Caltrans must nominate projects within the Interregional Transportation Improvement Program (ITIP). STIP funds are primarily intended for use on capital projects. Eligible projects include improving state highways, local roads, public transit (including buses), pedestrian and bicycle facilities, grade separations, intermodal facilities, and safety. Due to lack of a better funding source, these funds may also be used for local road rehabilitation. However, there is no guarantee that the California Transportation Commission, who has authority over the STIP program, will continue to allow STIP funds to be used for this purpose.

STIP funds were at one time made available every four years. Since 1996, funds have been made available every two years. Starting in 1998, the funds could be spread out over six years. However, this was reduced to four years with the 2000 STIP cycle, and then increased again to five years with the 2002 cycle. Although funds were anticipated to continue on the same schedule, no funding was received in the 2002 STIP because of the State's financial crisis. All projects were respread into the 2004 STIP resulting in many delays.

Caltrans has adopted high emphasis "focus routes" to guide where its share of IIP funds are programmed and partnerships have been created between regional agencies and Caltrans to fund mutual high priority State highway projects. The Principal Arterial Corridor System (including portion of SR 20, SR 29 and all of SR 53) is a high emphasis focus route. All capital improvements on other State highways in Lake County are likely to be solely funded with RIP money.

The 2006 STIP Fund Estimate for Lake County is uncertain and depends on year-to-year funding. It is probable that the 2006 fund estimate will include two tiers: Tier 1 would prepare for the worst-case scenario and assume no Proposition 42 funds or loan repayments. Tier 2 would anticipate the best-case scenario and would assume allocation of Proposition 42 revenues and repayment of loans.

Proposition 42, which was passed overwhelmingly by California voters in March 2002, permanently dedicated sales taxes on gasoline to transportation maintenance and improvement projects. However, language in the law permits the Governor and Legislature to suspend Proposition 42 during state fiscal emergencies. California has been in fiscal crisis since voters passed the initiative, therefore local streets and roads have received little benefit from this legislation. In fiscal year 2003-04, approximately $410,000 was lost to Lake County for road maintenance and rehabilitation due to Proposition 42 suspensions. The cities of Clearlake and Lakeport lost about $53,000 and $20,000, respectively, from their maintenance budgets. Another $424,000 was lost for improvement and rehabilitation projects that could have been programmed in the State Transportation Improvement Program (STIP) for state highway and local improvement projects in Lake County. In fiscal year 2004/05, $393,000 was lost for County road maintenance, $57,000 for Clearlake, and $21,000 for Lakeport. Another $406,000 in countywide highway improvement projects in the State Transportation Improvement Program remains unfunded due to this action.

Governor Schwarzenneger has proposed one-time funding of Proposition 42 funds in the amount of $1.4 billion to the State of California for fiscal year 2005/06. If passed by the legislature, the 2006 STIP will include new funding capacity; however the need for a dependable funding source is critical to sustain and improve the transportation system of Lake County.

While RIP funds can be used for projects on local roads, as well as transit, bicycle, and pedestrian projects, in order to implement desired improvements to the State highway system, RIP funds must also be used for State highway improvement. Given the expected amount of RIP funds the region will receive in the next several years, it is unrealistic to expect that the entire corridor concept can be developed with local money alone. Projects must be carefully selected to maximize State participation and produce usable segments that are consistent with local priorities.

State Highway Operating and Protection Plan (SHOPP)

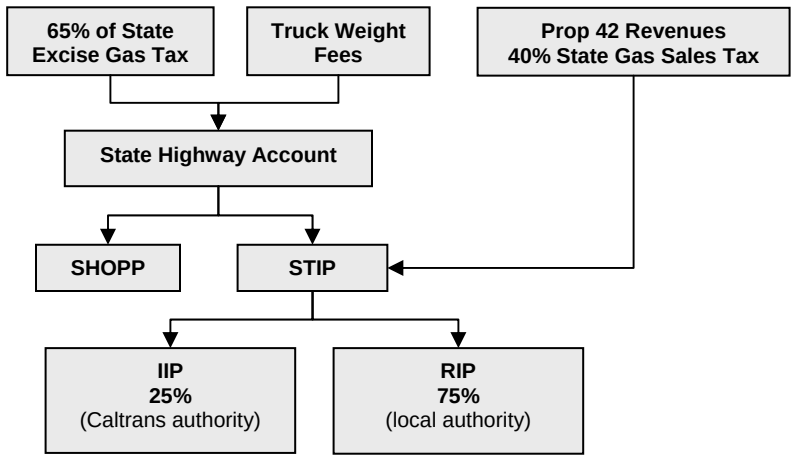
Non-capital projects are programmed through the SHOPP. This includes safety related improvements, maintenance and rehabilitation, and environmental enhancements. The SHOPP includes four years of programming and is adopted simultaneously with the STIP every two years. Although the LC/CAPC is allowed input to the SHOPP program, the State has sole discretionary authority over the use of SHOPP funds.

Origins of Funding

Funding for the STIP and SHOPP comes from a combination of sources. When you buy gasoline, you contribute to these funds through the 18¢ State excise tax on gasoline and diesel. This refers to the per gallon tax, not a sales tax. Therefore, when fuel prices increase, the excise tax does not. About 65 percent of these revenues go to the State, while 35 percent go directly to cities and counties for local streets and roads. Another source of funding is from weight fees collected on commercial vehicles (trucks). These revenues go into the State Highway Account, which funds the STIP and the SHOPP. (Figure I-3 depicts the sources of funds and how funds are divided.)

The passage of Proposition 42 in March of 2002 added another source of funding for the STIP. Proposition 42 permanently dedicated revenues from the state's share of the sales tax on gasoline to transportation projects. Unlike the excise tax discussed above, this is a sales tax and increases or decreases along with the price of fuel. While overall sales tax rates range from 7.25% to 8.5% depending on where you live, the state's share of the sales tax on gasoline is equivalent to 6%. Previously, revenues from the sales tax on gas were captured by the State's general fund. In 2000, this was changed by the State's Traffic Congestion Relief Program (TCRP) that dedicates the majority of the State's share of the sales tax on gasoline to 141 specific transportation projects throughout California (none in Lake County) through 2006. Passage of Proposition 42 now permanently redirects all sales tax on gasoline for transportation purposes to be divided as follows: 20% for city street repairs; 20% for county road repairs; 20% for mass transit and intercity rail; and 40% for the STIP. The legislature has the ability to change the formula by which the money is allocated, or redirect the sales tax on gas revenues back into the general fund in a budget "emergency," but only with a two-thirds vote.

Figure I-3
Transportation Funding



Of course, there are many variables which can affect revenues from any of these funding sources. When the economy is poor, people are less likely to travel, and therefore buy less gas, reducing the amount of money going into the State Highway Account and the amount of sales tax collected. The amount of commercial trucking decreases as well with a weak economy. Gas taxes, both sales and excise, can also be affected by changes in fuel efficiency of vehicles (likely to increase thus decrease the revenues generated). In addition, revenues dedicated by Proposition 42 may be impacted by the cost of a gallon of gas and the amount of the State's share of the sales tax. Because the sources of funding for the STIP are so dependent on our economy, and so prone to change, it is difficult to accurately predict what future STIP and SHOPP funding amounts will be.

ENVIRONMENTAL CONSIDERATIONS

While all improvements to the State highway system will require separate environmental analysis, some known environmental issues surrounding the Principal Arterial Corridor can be discussed at this time.

Environmental issues range from specific endangered plant species to wildlife protection. Of particular concern are numerous archaeologically significant areas principally around Clear Lake and at stream crossings. Caltrans also identified possible hazardous waste sites, for example tailing deposits containing mercury from mining operations at the Abbott Mine.

Common concerns relative to projects on the highway system typically include impacts on endangered plant and animal species and negative effects on human population caused by toxic materials. Such concerns would be addressed in depth, and mitigations would be determined, at the time of project development for each individual project.

Figure I-4 shows areas of possible environmental concern. This was prepared by Caltrans for the Route 20 Corridor Study, August 2000, and is based on existing environmental data bases and identified environmentally sensitive areas.

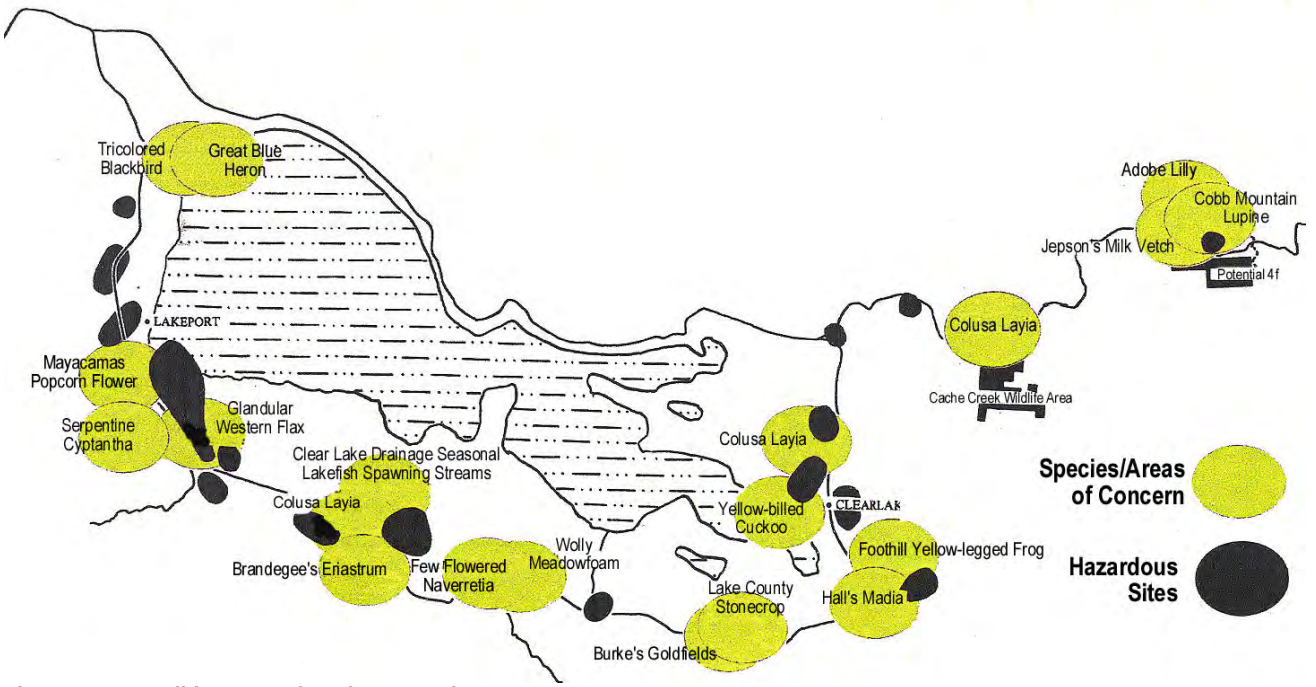


Figure I-4 Possible Areas of Environmental Concern

II. BACKBONE CIRCULATION AND LOCAL ROADS ELEMENT

SYSTEM DEFINITION

The roadway system within the Lake County region is made up of streets within the cities of Clearlake and Lakeport and roads within the unincorporated area of Lake County. County roads serve the communities of Kelseyville, Lower Lake, Cobb, Middletown, Clearlake Oaks, Lucerne, Nice, Upper Lake and others. Roads range from fully improved arterials and collectors to single lane dirt roads. The majority of streets within the system are two-lane roadways, however, some four lane roadways exist in areas of higher traffic demand. Roads within the system serve the purpose of providing access to local area destinations, regional connectors and the State highway system. Unfortunately, the majority of roads within the system are in poor condition, and there is an ever-increasing backlog of work to be done.

NEEDS ASSESSMENT: ISSUES, PROBLEMS, AND CHALLENGES

Lake Countywide Roadway Needs Study

In December 2000, the Lake Countywide Roadway Needs Study was completed by Whitlock & Weinberger Transportation, Inc. which assessed the needs of roads throughout the region and recommended funding priorities for capacity, circulation and safety improvements. The Lake County/City Area Planning Council subsequently accepted the study on February 14, 2001, as a guiding document in planning for future roadway improvements.

Capital Improvement Projects

As part of the study, capacity related projects, high accident locations, geometric improvement projects and flood needs were combined into a list of capital improvement projects for each agency. The 10 to 20 Year Capital Improvement Projects Subject to Funding Availability for the County, City of Lakeport, and City of Clearlake can be found in Appendix F. The lists were supplemented by those projects which were included in the 1990 Lake County Roadway Safety and Capacity Needs Study which remained unconstructed. Also, the County of Lake and City of Lakeport provided a list of roadway capital improvement projects and bridge replacement projects that were not addressed in this study, but are warranted based on historical and local needs. The study prioritized projects based on a number of criteria, including current funding, safety, capacity, traffic volume, and special conditions. However, there are additional needs and priorities for each individual entity, which were not identified in the region-wide study.

An update to the Critical Accident Analysis (Appendix D) and Capital Improvement Projects list of the Roadway Needs Study is scheduled to be completed by the County of Lake Public Works Department as part of the 2004/05 Area Planning Council Work Program (Work Element 604). The Capital Improvement Projects list will be revised based on the updated Critical Accident Analysis which will include updated accident rates for all city and County roadway segments and intersections. Updated bridge sufficiency ratings based on bridge inspection reports completed

by the State of California will also contribute to the updated Capital Improvement Projects list. Revisions to the Roadway Needs Study will be incorporated into the next Regional Transportation Plan since they will not be finalized for use in the development of the 2005 RTP Update.

Traffic Projections and Level of Service

The Study used the Lake County traffic model (QRS-2) to generate average daily traffic (ADT) volume projections for the year 2005, 2010 and 2020 on the arterial street system within the Lake County region. In general, State highway segments along the SR 29, between Lakeport and Kelseyville, and on SR 53 (Lower Lake to Clearlake) are expected to remain the highest traffic volume corridors in the county. Streets and roads in developed areas, especially Lakeport, are expected to be most impacted by increasing volumes and the resultant deterioration of level of service, as identified in Table II-1.

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Level of Service (LOS) A conditions are generally found only in rural areas, where there is little roadside development and through traffic is minimal. LOS B conditions still offer excellent mobility to motorists. LOS C is a common urban condition and is considered acceptable by most communities. LOS D is considered marginal and is a precursor to the capacity conditions which exist at the bottom of LOS E. The LOS E/F threshold is the point which is commonly termed "gridlock" at peak periods. Table II-1 shows the segments expected to exceed the LOS D/E or LOS E/F threshold by Year 2010 and Year 2020, as identified in the study.

Table II-1
Volume and Level of Service for the Year 2010 and 2020
Lake County Region - Arterial Street System

		Year 2010			Year 2020		
Road Name	**Entity**	**Volume (ADT)**	**LOS D/E Threshold Exceeded?**	**LOS E/F Threshold Exceeded?**	**Volume (ADT)**	**LOS D/E Threshold Exceeded?**	**LOS E/F Threshold Exceeded?**
11th St, E of S. R 29	Lakeport	18,712	Y	Y	21,905	Y	Y
Main Street, N of Lakeport Blvd	Lakeport	15,589	Y	Y	18,816	Y	Y
High St, Btw 20th & 16th	Lakeport	15,959	Y	N	18,756	Y	Y
Main St, S of Lakeport Blvd	Lakeport	12,803	Y	N	15,470	Y	Y
11th St, W of Main St.	Lakeport	12,917	Y	N	15,132	Y	Y
Lakeport Blvd, E of S.R. 29 Fwy	Lakeport	12,623	Y	N	14,767	Y	Y
Lakeport Blvd, W of Main St.	Lakeport	12,068	Y	N	14,628	Y	Y
Main St (CR 522V) S of State St	County	11,768	N	N	13,994	Y	N
Lakeshore Dr, S of Olympic	Clearlake	13,431	N	N	13,960	Y	N

Region-Wide Need for Maintenance and Rehabilitation

While there are many issues individual to each entity, they all share one overwhelming need. That is the ever-increasing backlog of maintenance and rehabilitation needed on local roads. Unfortunately, this need does not have a sufficient funding source. For this reason, the County and Cities fall further and further behind in maintaining their road systems.

The California State Association of Counties and the League of California Cities surveyed their members concerning local road and street rehabilitation expenditures and needs in early 1999.

The survey results were presented in the California Transportation Commission's Inventory of Ten Year Funding Needs for California's Transportation Systems. Table II-2 displays the survey results for the Lake County region.

Table II-2
Expenditure Needs and Deferred Maintenance

Agency	Pavement Maintenance and Rehabilitation Actual Exp. 1998		Total Annual Exp. Need from Local Agency	Deferred Maintenance Backlog from Local Agency
	Rehabilitation	Maintenance		
Lake County	$350,000	$550,000	$5,300,000	$144,000,000
Clearlake	$80,000	$30,000	$100,000	$10,000,000
Lakeport	$0	$300,000	$2,000,000	$20,000,000

Deferred maintenance comes at the price of costlier rehabilitation needs in the future. Periodic pavement treatment is relatively inexpensive. However, if roads are not maintained in a timely manner, the road bed underneath may deteriorate, leading to a need for full-scale rehabilitation costing as much as five times higher per lane mile.

Pavement Management Program

The Pavement Management System in Lake County was originally developed in three phases, commencing in 1995, and included network identification, pavement condition surveys, data input and Pavement Condition Index (PCI) calculations. There were a total of 488 miles of roads within the programs for all three jurisdictions included in the last county wide database. The County database included 433 roads totaling 402 miles; the City of Lakeport database included 112 streets totaling 28 miles; and the City of Clearlake database included 149 streets, totaling 48 miles. Since initial project implementation, successful utilization of the program among local agencies varied. For this reason, accuracy of the program quickly declined.

A project was included in the APC's 2004/05 Work Program to provide consultant services to update the Pavement Management Programs (PMP) for the County of Lake and the cities of Clearlake and Lakeport by conducting condition surveys and updating databases. This update included "all" paved roads in the County and two cities, therefore several more miles of roads were added to the database. In addition, the project included a component to link the PMP databases to the County and the cities' Geographic Information System (GIS) street centerline files. This link allows standard queries to be visually represented in ArcView software.

Harris & Associates, the selected consultant for the project, inspected the County's streets and roads and conducted a condition assessment for street segments defined in the existing PMPs. Electronic pavement conditions data was imported in the PMP software and PCIs were calculated for each pavement segment. Pavement maintenance strategies were developed by examining several budget scenarios and project reports summarizing pavement conditions are now available to provide a systematic method for determining roadway pavement maintenance, rehabilitation and reconstruction needs.

County of Lake

Lake County's unincorporated area includes approximately 500 miles of maintained paved roads, of which 465 miles have been inventoried. Currently the average PCI condition is 51 on the 100-point scale. The following chart shows the County of Lake's total pavement mileage by condition category. Over 50% of the county roads are either in very poor or poor condition. With only $200,000 annual funding anticipated for rehabilitation to roads in the County's unincorporated area, the PCI is expected to decrease from 51 to 39 by the year 2009 and deferred maintenance costs will increase from $12.1 million in 2005 to $21.9 million in 2009.

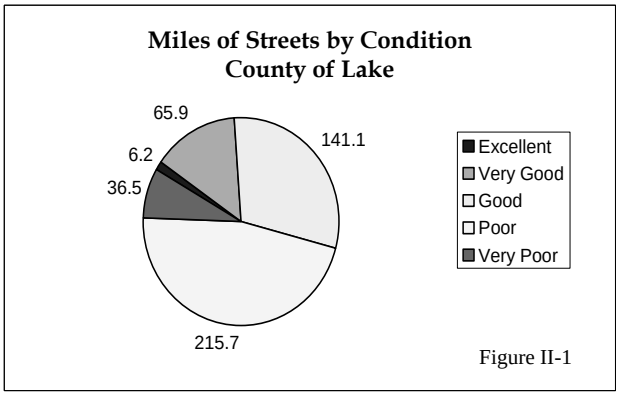


Figure II-1

City of Clearlake

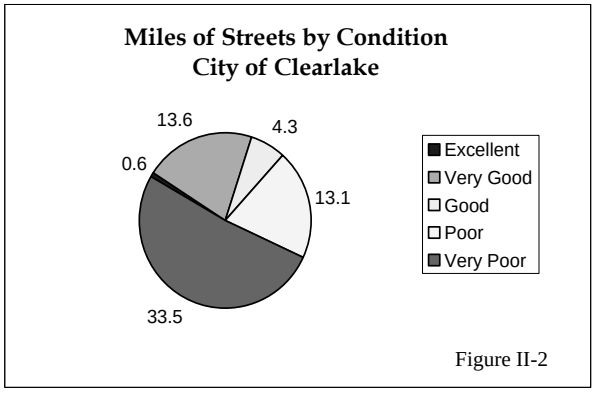


Figure II-2

The City of Clearlake maintains approximately 65 miles of paved streets and 49 miles of unpaved (gravel) streets. Sadly, the average PCI condition of the paved streets is 38 on the 100-point scale. With the expected $100,000 in annual rehabilitation funding for the local streets, the PCI is expected to fall another 16 points by the year 2014. With a PCI of 22 on the 100-point scale, the entire street system would need to be reconstructed. As shown in the graph below, over 70% of the paved streets in Clearlake are currently in either very poor or poor condition.

City of Lakeport

The City of Lakeport has approximately 29 miles of paved streets. The PMP reports 78% of those streets are in either very poor or poor condition, with the average PCI of 43. The expected level of annual funding at just $200,000 for street rehabilitation will decrease the current PCI of 43 to 39 by the year 2014. Deferred maintenance costs will increase from the current $1.5 million in 2005 to $4.7 million in 2014.

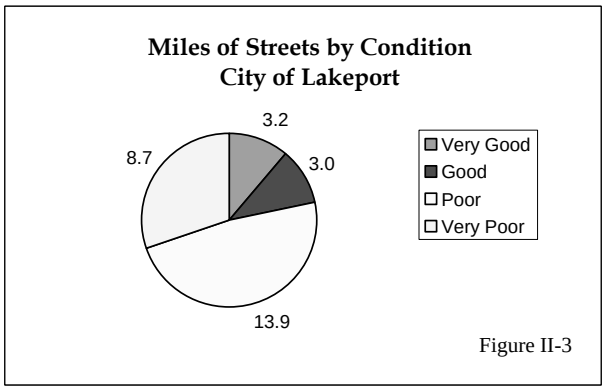


Figure II-3

County Maintained Road System

The biggest needs on the County road system involve safety issues and road rehabilitation. As discussed previously, there is an overwhelming need within all jurisdictions throughout the region for reconstruction and rehabilitation of the road system. Addressing this need will remain a priority for the County over the next several years. The Lake Countywide Roadway Needs Study identifies many recommended capital improvements on the County road system. The majority of these improvements are needed generally for safety and capacity reasons. Although roadway capacity is not generally a concern on the County road system, several potential safety concerns have been identified. There is a serious need to begin addressing these recommended projects. Following is a more complete discussion of safety issues.

Safety Issues

There are several locations on the County road system, shown in Table II-3, which were identified in the Lake Countywide Roadway Needs Study as having high accident rates. Rates for road segments are measured by accidents per million vehicle miles (acc/mvm), while rates for intersections are measured by accidents per million vehicles entered. Accident rates were compared with averages determined by the California Department of Transportation in their publication, *Accident Data on California State Highways*. The average rate for rural highways with similar characteristics and varying geography range from 0.80 acc/mvm to 2.10 acc/mvm. Average rates for intersection are 0.35 acc/mve for a side stop control, 0.64 acc/mve for all-way stop controls, and 0.70 acc/mve for a signalized intersection.

Table II-3
Critical Accident Analysis
County Maintained Road System

Roadway Segment	Accident Rate
State Street (Main Street to Gaddy Lane)	3.22 acc/mvm
Konocti Road (Main Street to Oak Hills Lane)	3.10 acc/mvm
Intersection	
Park Way/Hill Road East (Side Stop Control)	2.09 acc/mve
Big Valley Road/Stone Road (Side Stop Control)	1.39 acc/mve
Scotts Valley Road/Riggs Road (Side Stop Control)	1.12 acc/mve
Big Valley Road/Merrit Road (All-Way Stop Control)	1.11 acc/mve
Morgan Valley Road/Lake Street (Side Stop Control)	1.04 acc/mve

Bridges

There are a number of deficient bridges on the Lake County road system. Over time, some bridges have become structurally deficient, and therefore are in need of reconstruction or replacement. Most of the bridges are also functionally deficient, generally meaning that they are too narrow to accommodate current traffic and or pedestrian/bikeway demands. Narrow bridges and those posted with load limits sometimes pose a safety concern, but primarily place an undue burden on the movement of goods through the county. Rerouting of truck traffic to avoid structures with posted load limits is inefficient and inappropriately impacts parallel routes. Table II-4 includes capital improvement projects to be completed on bridges in Lake County.

Table II-4
Capital Improvement Projects
County of Lake - Bridges

Bridge	Project Cost (approx.)	Completion Date
Merritt Road Bridge	$3,500,000	2007
Cole Creek Bridge	$750,000	2008

A bridge inventory of all County bridges was previously completed by the Lake County Public Works Department; however actual dimensions and conditions of existing structural components were not included. A Short-Span Bridge Inspection Plan Update was included in the 2004/05 APC Work Program for the purpose of analyzing structural components of each bridge to determine load ratings and structural sufficiency. A Capital Improvement Plan will be developed as a result of this work element which identifies maintenance and reconstruction needs for bridges in Lake County with spans less than 20-feet in length.

Other Needs

As the projects on the State highway system are developed, there will be a need for efficient frontage roads. This issue will become evident over the next several years as new freeway portions are constructed. With fewer points of access to the freeway/expressway system, traffic will be collected on the local system and directed to a limited number of signalized intersections or interchanges. Frontage roads, therefore, will need to be built to a standard capable of handling the additional capacity placed on them as a result of limited access design of the new freeway/expressways.

City of Clearlake Road System

As is true in all other jurisdictions within the region, maintenance and rehabilitation of the existing road facilities are of major concern in the City of Clearlake. The City is the most populous area in the region. However, its street system is perhaps in the most critical condition. Many streets within the system remain functionally inadequate, seriously deteriorated, or unpaved. Limited right-of-way restricts improvement options on much of the Clearlake system. Adding to the inferior condition of the street system in the City of Clearlake is the poorly developed drainage system. Street improvement projects must invariably consider costly drainage improvements, further limiting the effectiveness of street improvement funding.

Safety Issues

Areas experiencing high accident rates throughout the Clearlake street system were identified in the Roadway Needs Study. The average rate used for comparison is 3.00 acc/mvm for road segments. Rates used for comparison of intersections are those discussed previously for the County road system. Table II-5 identifies the areas of highest concern.

Table II-5
Critical Accident Analysis
City of Clearlake Road System

Roadway Segment	Accident Rate
Sulphur Bank (Arrowhead Road to City Limits)	4.94 acc/mvm
Intersection	
Old State Highway/Austin Road (Side Stop Control)	0.58 acc/mve
Division Avenue/Uhl Avenue (Side Stop Control)	0.39 acc/mve

City of Lakeport Road System

The Lakeport Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability, found in Appendix F, identifies many needs relative to operation, capacity and circulation, as well as safety. While there is a need for these improvements, the primary need within the City of Lakeport is to preserve and upgrade the road surfaces of the existing street system. The current backlog of needed road rehabilitation and reconstruction is roughly estimated to cost $20 million. Due to insufficient funding, this backlog increases steadily, making the conditions of streets within the City of Lakeport very poor. Even if the current backlog of maintenance were addressed, the cost of maintaining the condition of the roadways would be in the hundreds of thousands each year. The City has made efforts to improve the surfaces of roads as money is available, utilizing STIP and other sources of funding. However, the backlog increases faster than improvements have been made.

Safety Issues

The Roadway Needs Study also identified areas of high accident rates throughout the Lakeport street system. Although specific intersections were found to be a problem, there were no street segments with unusually high accident rates. The accident rates for these intersections were compared with the average rates discussed above. The most critical areas identified are shown in Table II-6.

Table II-6
Critical Accident Analysis
City of Lakeport Road System

Intersection	Accident Rate
Hartley Street/16th Street (Side Stop Control)	0.78 acc/mve
11th Street/N. Forbes Street (Side Stop Control)	0.72 acc/mve
N. Forbes Street/3rd Street (Side Stop Control)	0.39 acc/mve

GUIDING GOALS, POLICIES, AND OBJECTIVES

Goal

Provide a well maintained, safe, and efficient local circulation system that is coordinated and complementary to the State highway system and meets interregional and local mobility needs of residents, visitors, and commerce.

Policies and Objectives

Policy 2.01. Maintain, rehabilitate, and reconstruct local streets and roads consistent with local and regional needs, city and county area plans, and financial constraints.

Objective 2.01.1. Maintain the current Pavement Management Program database for use by the County and cities in determining needs and priorities for circulation system maintenance and rehabilitation.

Objective 2.01.2. Continue efforts to rehabilitate and resurface existing road and street systems with available funding.

Objective 2.01.3. Consider programming Regional Improvement Program (RIP) funds for local rehabilitation and reconstruction projects, consistent with short and long term priorities for State highway development.

Policy 2.02 Assure that use of County and City streets and roads is safe for all motorists.

Objective 2.02.1. Monitor intersection and roadway segment accidents and prepare mitigation plans as appropriate.

Objective 2.02.2. Pursue Federal and State funding programs for safety improvements to the extent feasible.

Objective 2.02.3. Consider safety projects as high priority in the transportation programming process.

Policy 2.03. Improve traffic flow, capacity, and operations on the local transportation network.

Objective 2.03.1. Develop Capital Improvement Programs for the local streets and roads system on a regular and timely basis.

Objective 2.03.2. Consider systematic implementation of improvements identified in the Capital Improvement Program of the Lake Countywide Road Needs Study (December, 2000).

Policy 2.04. Provide a local system of streets and roads that is seamless and fully integrates with the State highway system, particularly the Principal Arterial Corridor.

Objective 2.04.1. Minimize approval of new direct state highway access points.

Objective 2.04.2. Represent local streets and roads issues through the Project Development Team process for State Route 29 development.

Objective 2.04.3. Coordinate long-term highway development plans with the local planning and programming process.

Objective 2.04.4. Consider Regional Improvement Program (RIP) funding for projects on local streets and roads that relieve or complement the State highway system

Policy 2.05. Pursue Federal, State, local, and private funding sources that are necessary for transportation system maintenance, restoration, and improvement projects identified in this plan.

Objective 2.05.1. Participate in state-wide coordination efforts with other regional organizations to encourage greater State funding of maintenance and rehabilitation projects.
Objective 2.05.2. Investigate feasibility of new transportation maintenance, rehabilitation, and improvement revenue sources, which may include local option sales taxes, special assessment districts, and traffic impact fees.

Objective 2.05.3. Support developer participation in cases where private development will contribute to the need of making said improvements, and where private development will directly benefit from the improvement project.

Policy 2.06. Support regional social and economic growth while conforming to the land use element of the general plans of the County and cities.

Objective 2.06.1. Mitigate the traffic impacts of growth resulting from residential development, commercial and tourist expansion, and industrial activity through effective short range and long range planning at the local level.

Objective 2.06.2 Require traffic studies for proposed major development projects and implement recommended mitigation measures.

Objective 2.06.4. Evaluate circulation needs in developing and undeveloped areas.

Objective 2.06.5. Support projects that conform to air quality and environmental standards of the region.

ACTION PLAN: PROPOSED PROJECTS

County Maintained Road System

Short Range Plan (1-10 years)

- Over the next several years, the County will begin addressing the capital improvement projects identified in the County Road 10 to 20 Year Capital Improvement Projects Subject to Funding Availability (see Appendix F). The priority projects will be the first 12 identified in the study (see Table II-7). Priority number 6 from the study, Park Way has recently been completed, and, therefore, is not included in Table II-7. Priorities number 1 and 2, Lakeshore Boulevard (Park Way to Worley Drive) and S. Main-Soda Bay Road, are currently in the preliminary design phase. The County is in the process of obtaining funding for priority

number 3, Nice-Lucerne Cutoff. The first 5 projects on the table will be the highest priorities within the next 10 years.

Table II-7
County of Lake
Proposed Capital Improvement Projects*

Road Name	From	To	Project Type	Project Cost (In thousands)
Lakeshore Blvd.	Park Way.	Whalen Way	Safety/Cap	$5,000
S. Main/Soda Bay	Intersection	Intersection	Traffic Control	$521
Soda Bay Road	Blower Road	Park Drive	Curve Realignment	$500
Nice-Lucerne Cutoff*	Lakeshore Blvd.	Rodman Slough Br.	Widening	$2,500
State Street*	Main St.	Gaddy Lane.	Accident Red.	$205
Konocti Rd.	Main St.	Single Springs	Accident Red.	$110
Big Valley/Stone.	Intersection	Intersection	Accident Red.	$28
Big Valley/Merritt	Intersection	Intersection	Accident Red.	$28
Morgan Valley/Lake.	Intersection	Intersection	Accident Red.	$28
Bottle Rock Rd.	Various locations		Hazard Mitigation.	$100
Lakeshore/Rainbow	Intersection	Intersection	Channelization	$50
Main St./State	Intersection	Intersection	Realignment	$250

* Adapted from "Lake Countywide Roadway Needs Study" (Whitlock & Weinberger Transportation, Inc., December, 2000)

- The County will be making a major effort to improve the road surfaces within its system. Table II-8 identifies the County's priority rehabilitation projects for the next 10 years. The County plans to seek STIP funds to finance these projects. Therefore, programming and completion of these projects depends largely on availability of STIP funds or new revenue sources.

Table II-8
County of Lake
Proposed Road Rehabilitation Projects

Road Name	From	To	Project Cost
Merritt Road Bridge/Low Water X-ing	Big Valley Rd	Gunn St	$3,600,000
South Main Street	All		$1,600,000
Soda Bay Road	Big Valley Rd	Mission Rancheria Rd	$954,000
Soda Bay Road	South Main St	Manning Creek	$1,900,000
Morgan Valley Road	Mill St	Bonham Rd	$720,000
Big Valley Road	Finley East Rd	Merrit Road	$698,000
Butts Canyon Rd	P.M. 3.3	P.M. 4.9	$1,267,000
State St	Main St	Gaddy Ln	$612,000
Park Way	Keeling Ave	Lakeshore Blvd	$583,000
Third Street	Main Street	Gaddy Ln	$236,000
Scotts Valley Rd	Lakeport City Limits	500' w/o Hill Road	$1,886,000
Hill Road	Hill Rd East (N)	Helbush Dr	$157,000
Gaddy Ln	Gunn St	Soda Bay Rd	$3,700,000
Highland Springs Rd	Big Valley Rd	SR 29	$410,000
Nice-Lucerne Cutoff	SR 29	New Section	$2,461,000
Big Canyon Rd	Wardlaw St	Harbin Springs Road	$1,755,000

** Note: These projects are currently programmed and have secured STIP funding.*

Long Range Plan (11-20 years)

- In the long term, the County will continue to address the first 12 capital projects identified in the Roadway Needs Study. It is anticipated that the first 5 priorities will be accomplished within 10 years, and priority number 6 is already being constructed. This leaves priorities 7 through 12 to address within the long term time frame (see Table II-7).

- The County will continue in its efforts to rehabilitate the road system. As this is an ongoing, and ever increasing need, a continuous effort is necessary in order to address it.

City of Clearlake Road System

Short Range Plan (1-10 years)

- The City of Clearlake has several safety-related improvements planned for the next 10 years. Several of these areas of concern were identified in the Roadway Needs Study. Actual completion and time of construction for each project depend heavily on funding availability. The City may consider the use of Hazard Elimination & Safety (HES), STIP and general fund money to finance these projects. Table II-9 describes the City's priority safety related projects.

Table II-9
City of Clearlake
Planned Safety Improvements

Street	From	To	Scope of Work	Cost Estimate
Lakeshore Drive*	Olympic	State 53	Curb, Gutter & Sidewalk (drainage)	$6,204,000
Lakeshore Drive	Bridge	Woodland	Flood Abatement	$481,750
Burns Valley Rd*	4 Corners	Senior Center	Curb, Gutter & Sidewalk	$750,000
Old Highway 53	Intersection of Austin Dr		Safety-accident reduction	**
Lakeshore Drive	Intersection of Olympic Dr		Install Traffic signal or roundabout	**
Burns Valley Road	Intersection of Olympic Dr		Signalize intersection w/ emergency vehicle pre-empt	**
Lakeshore Drive	Olympic Drive	Arrowhead Rd	Overlay, shoulder improvement, channelize intersection of Woodland/Pomo to define turning movements	$591,802
Pomo Elementary School*	@ Acacia, Pomo, Arrowhead, Huntington, and Burns Valley Roads		Construct a new drop-off/pick-up area, pave all 5 surrounding streets, Pomo to become a one-way street, new crosswalks	$500,000

***** These projects also discussed in the Non-Motorized Transportation Element due to pedestrian and/or bicycle improvements included in the projects.

****** Currently no estimate

- The City's improvement plans for the next ten years also include efforts to rehabilitate and resurface streets within its system. Table II-10 shows the City's priority rehabilitation projects for the next 10 years. As is true with all street improvements, programming and completion of these projects depends largely on availability of funds. Possible funds which

can be used for these projects include STIP funds, gas tax, general fund, Regional Surface Transportation Program (RSTP) funds and AB 2928 funds.

Table II-10
City of Clearlake
Proposed Street Rehabilitation Projects

Street Name	From	To	Length in Miles	Scope of Work	Cost Estimate
Olympic Drive	Old Hwy 53	Lakeshore	2.20	Overlay and Widen	$805,825
Lakeshore Drive	Olympic Dr	City Limits	2.40	Overlay	$879,082
Lakeshore Drive	Olympic Dr	Old Hwy 53	1.50	Overlay	$686,783
Olympic Drive	Old Hwy 53	State Route 53	0.70	Overlay and Petromat Ramp	$288,449
Phillips Avenue	18th Ave	Davis Drive	1.30	Overlay & Minor Drainage	$595,212
Lakeshore Drive	Olympic Dr	Oak Road	4.10	Overlay	$1,689,486
Lakeshore Drive	Pomo Road	Arrowhead	0.40	Overlay	$164,828

Long Range Plan (11-20 years)

- The City will make an ongoing effort to improve the surface of its road system by implementing rehabilitation and resurfacing projects as funding permits. Until such time that an adequate funding source for maintenance and rehabilitation is created, only minimal improvements can be made to the road system and the backlog of deferred maintenance will continue to increase.
- Safety is of prime concern to the City of Clearlake. Improvements to correct safety issues on the roadway system will be made as necessary.
- As funding permits, and use necessitates, operational and capacity improvements will be made. However, such improvements will be prioritized only after safety and maintenance and rehabilitation issues have been addressed.

City of Lakeport Road System

Short Range Plan (1-10 years)

- Safety, of course, is the number one priority for the City of Lakeport. The following intersections were identified as safety concerns in the Lakeport Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability table of the Lake Countywide Roadway Needs Study:

Table II-11
City of Lakeport
Proposed Safety Related Projects

Street Name	From	To	Project Type	Project Costs (In thousands)
Hartley Street	Intersection	16th Street	Accident Reduction	$27.5
N. Forbes Street	Intersection	11th Street	Accident Reduction	$27.5
N. Forbes Street	Intersection	3rd Street	Accident Reduction	$27.5
Bevins Street	Intersection	Bevins Court	Accident Reduction	$27.5

It is critical to proceed with projects to correct these safety concerns in order to protect motorists on City streets. The City plans to work with the LC/CAPC to further assess what type of improvements are actually needed in order to correct the safety issues at these locations, and determine costs of the improvements. Table II-9 identifies preliminary cost estimates for these projects. However, upon further assessment of needed improvements, project costs may change. Some improvements may be as simple as installing additional stop signs, while some may be as complex as road relocation, making the projects far more costly. If this is the case, additional funding sources will have to be sought to provide for these needed safety improvements. The City intends to begin these projects within the next two years.

- The second priority for the City of Lakeport is rehabilitation and reconstruction of the current system, as discussed in the Needs Assessment above. The City's initial goal is to rehabilitate the arterials within the system, followed by collectors. Residential streets would be a lower priority, and only improved as funding allowed. Operational and capacity related improvements will be done as funding is available, and only after funding rehabilitation/resurfacing projects.

Long Range Plan (11-20 years)

- In the long term, the City plans to continue with their rehabilitation and resurfacing efforts to preserve and improve the existing road system. As is discussed below in the Financing section, there is a need to develop a sufficient funding source for this type of work.
- Other capacity, operational, and circulation related improvements will be done as funding allows, including those projects identified in the Roadway Needs Study.
- Safety issues will continue to be a prime concern and will be addressed as they arise.

FINANCING

The following is a discussion of funding sources available for local road improvements. Some of these sources are regular, ongoing funding sources, such as STIP and the general fund. However, several of these funding sources are competitive and cannot be relied upon as a steady source of funding. Unfortunately, none of the funding sources are sufficient to meet the overall needs of the local road system.

Federal Funding Opportunities

Transportation Enhancement Activities (TE)

A thorough discussion of the TE program is contained in the Non-Motorized Transportation Element of this document. TE is a Federal funding source that provides funds for transportation-related capital improvement projects that enhance quality-of-life, in or around transportation facilities. Projects must be over and above required mitigation and normal transportation projects, and the project must be directly related to the transportation system.

The TE program is authorized by the Federal government in 6-year cycles. During the first TE cycle, applicants had to compete for funding statewide. Allocations for the second cycle were distributed directly to each region to be disbursed locally, similar to STIP funds. The most recent authorization covered the period from October 1997 through September 2003 and provided $917,000 to the region. Seven projects were reviewed and ranked by the Lake TAC for consideration. Because project costs of the submitted applications exceeded the available funds, only four of the seven projects were approved for funding by the APC at their meeting held on June 9th, 2004: South Main Street, Lakeport; Soda Bay Road, Lakeport; sidewalks near the fairgrounds, Lakeport, and Main Street in Kelseyville.

Highway Bridge Replacement and Rehabilitation (HBRR)

The Highway Bridge Replacement and Rehabilitation (HBRR) Program is authorized by the Federal Transportation Equity Act for the 21st Century (TEA21). The purpose of the Program is to replace or rehabilitate public highway bridges over waterways, other topographical barriers, other highways, or railroads when the State and the Federal Highway Administration determine that a bridge is significantly important and is unsafe because of structural deficiencies, physical deterioration, or functional obsolescence. Eligible work for this program includes replacement, rehabilitation, painting, scour countermeasure, bridge approach barrier and railing replacement, and seismic retrofit.

About $160 million of Federal funds are made available to local agencies annually. The Federal reimbursement rate is 80% (88.53% for bridge railing replacement) of the eligible participating project costs including preliminary engineering, right of way, and construction. Candidate projects are submitted to Caltrans for review on an annual basis. Successful projects are included in the HBRRP multiyear plan.

Hazard Elimination Safety Program

The Hazard Elimination Safety Program (HES) is a Federal safety program that provides funds for safety improvements on all public roads and highways. These funds serve to eliminate or reduce the number and/or severity of traffic accidents at locations selected for improvement.

Local agencies compete statewide for HES funds by submitting candidate safety projects to Caltrans for review and analysis. Caltrans prioritizes these projects and releases an annual HES Program Plan that identifies the projects that are approved for funding. As this is a statewide competition, it must be recognized that this is in no way a guaranteed source of funding.

State Funding Opportunities

State Transportation Improvement Program (STIP)

The STIP has become the source of the majority of major improvements to County and City streets. A thorough discussion of the STIP can be found in the State Highway System Element.

For projects to be eligible for STIP funds, they must be nominated by the regional agency in their Regional Transportation Improvement Program (RTIP). STIP funds are primarily intended for use on capital projects. Eligible projects include improving state highways, local roads, public transit (including buses), pedestrian and bicycle facilities, grade separations, intermodal facilities, and safety.

Improvements to the State highway system have historically been, and continue to be, a priority in the Lake County region. Due to lack of a better funding source, these funds have also been used for local road rehabilitation. However, there is no guarantee that the California Transportation Commission, who has authority over the STIP program, will continue to allow STIP funds to be used for this purpose.

Because of the State's financial crisis, the 2004 STIP simply redistributed projects that were programmed in the 2002 STIP. Additional programming in the 2006 STIP will rely heavily on Proposition 42 funds and loan repayments from the general fund. A "two-tier" system will be implemented in preparation for the 2006 STIP because funding remains uncertain. Tier 1 will assume no new funding, and Tier 2 will assume some new funding capacity.

Traffic Congestion Relief Program (AB 2928)

Assembly Bill 2928 was part of the Governor's Traffic Congestion Relief Program and provided money to cities and counties for preservation of the local road system. In FY 2000/2001, the bill allocated $400 million "one-time funding" to cities and counties for maintenance and rehabilitation. Approximately $100 million was scheduled to be allocated annually to cities and counties statewide for a period of five years. Unfortunately, these funds were suspended in FY 03/04 and 04/05 as a result of the State financial crisis. The County and both cities should begin to receive maintenance funding again in Fiscal Year 05/06. The County of Lake is estimated to receive approximately $552,000, Clearlake $61,000, and Lakeport $23,000. Funding under AB 2928 is due to expire on June 30, 2006.

Proposition 42 Revenues

The passage of Proposition 42 in March of 2002 created a new source of funding for improvements to city and County streets. A more complete discussion of Proposition 42 can be found in the State Highway System Element.

At one time, revenues from the sales tax (as opposed to the excise tax discussed above) on gas were captured by the State's general fund. In 2000, this was changed by the State's Traffic Congestion Relief Program (TCRP) that dedicated the majority of the State's share of the sales tax on gasoline to 141 specific transportation projects throughout California (none in Lake County) through 2006, with a small portion going directly to cities and counties as mentioned above.

Proposition 42 permanently redirects all sales tax on gasoline for transportation purposes and allots 20% to cities and 20% to counties statewide. These funds will be distributed directly to cities and counties and will add significantly to money available for improvements to local

streets and roads, including rehabilitation and maintenance. In addition to these funds, Proposition 42 will benefit cities and counties by increasing the STIP funds available for local road improvements. However, new funding revenues generated as a result of the passage of Proposition 42 will not begin to flow into the county until FY 2008/2009

Table II-12 gives projected revenues from Proposition 42 that will be distributed directly to the County and two cities. Because Proposition 42 does not take effect until 2008, these projections only cover 17 years to align with the timeframe of this Plan.

Table II-12
Lake County by Jurisdiction
Projected Proposition 42 Revenues

Fiscal Year	County of Lake	City of Clearlake	City of Lakeport	Total Annual Revenues
2008/2009	$1,279,901	$137,128	$50,376	$1,467,405
2009/2010	$1,305,499	$139,871	$51,384	$1,496,754
2010/2011	$1,331,609	$142,668	$52,411	$1,526,688
2011/2012	$1,358,241	$145,521	$53,459	$1,557,221
2012/2013	$1,385,406	$148,432	$54,529	$1,588,367
2013/2014	$1,413,114	$151,400	$55,619	$1,620,133
2014/2015	$1,441,376	$154,428	$56,732	$1,652,536
2015/2016	$1,470,204	$157,517	$57,866	$1,685,587
2016/2017	$1,499,608	$160,667	$59,024	$1,719,299
2017/2018	$1,529,600	$163,881	$60,204	$1,753,685
2018/2019	$1,560,192	$167,158	$61,408	$1,788,758
2019/2020	$1,591,396	$170,501	$62,636	$1,824,533
2020/2021	$1,623,224	$173,911	$63,889	$1,861,024
2021/2022	$1,655,688	$177,389	$65,167	$1,898,244
2022/2023	$1,688,802	$180,937	$66,470	$1,936,209
2023/2024	$1,722,578	$184,556	$67,799	$1,974,933
2024/2025	$1,757,030	$188,247	$69,155	$2,014,432
2025/2026	$1,792,171	$192,012	$70,538	$2,054,721
TOTAL	$27,405,639	$2,936,224	$1,078,666	$31,420,529

It is important to keep in mind that these funds are largely dependent on the economy. Factors such as the cost of gas, miles driven by consumers, and fuel efficiency of vehicles can all increase or decrease the anticipated revenues. In addition, the legislature could change the formula by which the money is allocated, or redirect the tax revenues back into the general fund in a budget "emergency," but only with a two-thirds vote.

State Excise Gas Tax

Approximately 35 percent of the State excise tax on gas and diesel goes directly to cities and counties to fund local street and road improvements. Similar to STIP funding, this is heavily dependent on the economy. Cities and counties receive a monthly allotment from this funding source. The funds are apportioned by the State to Counties on a formula that is based 25 percent on maintained mileage and 75 percent on vehicle registration. Cities receive their apportionment based on population percentages. These funds can be used for a wide range of road related work,

including signage, tree trimming, curbs, gutters, sidewalks, and crosswalks as well as resurfacing and rehabilitation. Table II-13 identifies recent revenues distributed to the jurisdictions by Fiscal Year.

Table II-13
State Gas Tax Revenues

Agency	FY 2002/03	FY 2003/04	FY 2004/05
County of Lake	$1,997,856	$2,041,245	$1,538,056 (July 1 – March 31)
City of Clearlake	$254,238	$262,473	n/a
City of Lakeport	n/a	$100,941	$87,665 (July 1 – May 31)

Regional Surface Transportation Program

These are funds which are apportioned by the State pursuant to Sections 182.6 d(1) and d(2) of the Streets and Highways Code. In most regions, Section 182.6 d(1) funds are distributed by the Regional Transportation Planning Agency (LC/CAPC) to each entity based on population. The State distributes Section 182.6 d(2) directly to counties. In Lake County, it was agreed that both funds would be combined and then distributed to the three entities by population. These funds can be used for a number of different types of projects including construction, reconstruction, rehabilitation, resurfacing, restoration and operational improvements on roads classified above a local or rural minor collector in the Federal Aid Highway System. The amounts of these funds received in FY 2004/05 can be found in Table II-14. Amounts received for FY 2005/06 are anticipated to be slightly higher.

Table II-14
RSTP Funds Received for FY 2004/05

Agency	RSTP d(1)	RSTP d(2)
County	$240,981	$244,873
Clearlake	$153,486	
Lakeport	$56,427	

Note: RSTP funds not actually received until following FY.

Local Funding Sources

General Fund

General funds may be used for transportation, but must compete with other governmental functions each year for funding. When used for transportation, general funds are most often used for road improvements and regular maintenance. The primary source of the general funds is sales tax. There is no transportation specific sales tax at this point in time in either of the cities or the County. The City of Lakeport has tried twice to pass a measure implementing such a sales tax. In both instances the measure received a majority vote, however, did not receive the required two-thirds vote.

Funding Maintenance and Rehabilitation

It is critical to the local road system to find and develop a permanent, sufficient, funding source for road maintenance and rehabilitation. Currently, funding for this type of work comes from STIP funds, gas tax, local general funds, RSTP funds, and Traffic Congestion Relief (AB 2928)

funds. Not only are these sources inadequate to make a dent in the tremendous backlog of rehabilitation, but they are insufficient to simply keep the roads at the same level they are at currently. As a result, the backlog will continue to grow at a rapid pace. Possible sources of additional funding might include creation of a regional sales tax for transportation maintenance, rehabilitation, and improvement projects, establishment of special assessment districts, and participation in coordination efforts with other regional organizations to encourage greater State funding of maintenance and rehabilitation projects.

City of Lakeport Sales Tax Revenues

Measure I, a general ½ cent sales tax, was passed by the citizens of Lakeport at the November 2, 2004 General Election. The State Board of Equalization began collecting the tax on April 1, 2005, and will remit the funds to the City on a monthly basis. Measure J accompanied by Measure I, which earmarked funds to be used to repair and maintain the City streets, park and community service facilities, and expand public services and programs.

The City of Lakeport estimates it should receive approximately $400,000 of increased revenue annually from Measure I. Of the increased revenue, the City anticipates spending roughly 50% to fund the repair and maintenance of local streets in the City of Lakeport.

ENVIRONMENTAL CONSIDERATIONS

A separate environmental document will be prepared for the Regional Transportation Plan. The majority of projects discussed in the Action Plan of this Backbone Circulation and Local Roads Element are improvements within existing corridors and right of ways, such as rehabilitation or safety improvements on existing roads. For this reason, there are no foreseeable environmental issues. However, an individual environmental review will be done for each project at the time of implementation.

III. NON-MOTORIZED TRANSPORTATION ELEMENT

SYSTEM DEFINITION

The non-motorized transportation system within the Lake County region is made up of bicycle and pedestrian facilities within the incorporated cities of Clearlake and Lakeport and the unincorporated areas of Lake County. Bicycle facilities include Class I, Class II and Class III bikeways. Pedestrian facilities, although very limited in the region, include both ADA (Americans with Disabilities Act) compliant and non-compliant sidewalks. All new facilities, however, are constructed to meet ADA requirements.

In recent years, many improvements have been made to this particular mode, largely due to Proposition 116, the Clean Air and Transportation Improvement Act of 1990. This Proposition provided, for the first time in Lake County, significant funding for non-motorized transportation improvements, and therefore, the impetus for bikeway and pedestrian planning. The Proposition granted approximately $1.9 billion for transportation improvements in California through the year 2000, which included $73 million in funding for the 28 rural counties. The use of the funds was specifically intended for rail, bus, bikeway and pedestrian improvements. Table III-1 shows non-motorized projects that were completed through this program. This was, however, a one time funding source and is no longer available. Table III-2 identifies projects that have been constructed with other funding sources.

Table III-1
Proposition 116 Funded Non-Motorized Projects

Agency	Type of Project	Description
Clearlake	Pedestrian	Olympic Drive Pedestrian Improvements
Lakeport	Pedestrian	Pedestrian Improvements
Lake County	Pedestrian	Pedestrian Improvements – Gaddy Lane
Lake County	Pedestrian	Pedestrian improvements – 7 locations
Lake County	Bike	Lakeshore Boulevard Bikeway Phase II
Lake County	Bike	Lake Street Bikeway
Lake County	Bike	Konocti Road Bikeway

Table III-2
Non-Motorized Projects Constructed by Other Funding Sources

Agency	Project Title	Project Description	Year Completed	Funding Source
Lake County	Lakeshore Boulevard Bikeway	Main Street in Lakeport to Crystal Lake Way, north of Lakeport	1992	BLA
Lake County	Lakeshore Boulevard Bikeway-Phase II	Extends from Crystal Lake Way to Park Way	1994	TEA/BTA/ Prop. 116
Lake County	Lakeshore Boulevard Bikeway-Phase III	Park Way to 2100' north of Parkway	2004	TEA/TOT
Lake County	Lake Street Bikeway	Morgan Valley Road in Lower Lake to Cache Creek in Clearlake	1996	BLA/ Prop. 116

Lake County	Konocti Road Bikeway	Konocti Road junction at Main Street in Kelseyville, east 0.7 mi.	1997	BTA/Prop. 116
Lake County	Hartmann Road Bikeway	¼ mi from Hidden Valley Road Gate to the existing creekside access to Coyote Valley Elementary School	2000	TEA
Lake County	Hartmann Road Bikeway-Phase II	Coyote Creek to State Route 29	2001	STIP
City of Clearlake	Old Highway 53 Bikeway-Phase I	Old Highway 53 from Lakeshore Drive to Lakeview Way with a loop along Ballpark, Bluejay and Laguna Avenues	2001	STIP/TEA/ Local

NEEDS ASSESSMENT: ISSUES, PROBLEMS, AND CHALLENGES

Pedestrian Needs

Although a significant amount of work was accomplished through Proposition 116, the non-motorized transportation system of the region is still in great need of improvement. Most pedestrian facilities that have been constructed lie on school routes. However, there are many other frequently traveled pedestrian routes in Lake County that are either discontiguous or unimproved. It is the nature of rural counties that many roads were constructed without pedestrian facilities or even shoulders to provide for pedestrian travel.

Use of the State highway system for pedestrian transportation in Lake County is relatively infrequent. Most improvements along the highways are concentrated in areas where the highways penetrate unincorporated communities. Sidewalks have been installed along Route 29 in Middletown, Route 20 in Lucerne, and other locations where needed. Development within and west of Nice has increased roadside pedestrian traffic along Route 20 in recent years. Pedestrian facilities in this area should be given consideration in the future.

The County's road system is primarily rural in nature. Most County roads provide for intra-regional travel within a sparsely populated area. Although some pedestrian facilities are incorporated within the County system, most County roads are lacking pedestrian improvements. Most County roads, in fact, lack shoulders. Road shoulders are important safety features that provide: (1) a safety margin for the correction of a vehicle's travel path, (2) a haven for disabled vehicles, and (3) a valuable pathway for pedestrians and cyclists in rural areas.

In Clearlake, many pedestrian facilities are needed parallel to the city street system. The street system is based on a local and collector system inherited from the County road system upon incorporation. Although the city is growing in population and high-density traffic generators are developing, many of streets are still not equipped with curbs, gutters, and sidewalks.

Clearlake has a special need for efficient pedestrian facilities due to the concentrated number of elderly and disabled residents of the City. It is important to incorporate wheelchair and disabled access into all pedestrian improvements.

Although the pedestrian system in the City of Lakeport is better developed than that in Clearlake, considerable gaps remain, and many areas are in need of repair or replacement. However, pedestrian facilities are available along most major corridors.

Poorly developed pedestrian facilities are a safety concern in many areas where the only alternative for walking is on the roadway. They are also a major impediment to the choice of pedestrian travel as an alternative travel mode, particularly for short trips in developed areas. As growth and development occurs over time, the provision of these facilities will become more important. As improvements to the system are being developed, linking pedestrian facilities to transit services should be considered.

Bicycle Facility Needs

Bikeway development in Lake County remains in the infancy stage and has been particularly constrained due to the lack of consistent funding for these facilities. Prior to Proposition 116, State Bicycle Account funds had only been awarded to one project in Lake County. Although Proposition 116 funds no longer exist, several other reliable funding sources such as the Safe Routes to School program, Bicycle Transportation Account (BTA), Transportation Enhancement Activities (TEA), State Transportation Improvement Program (STIP), and Transportation Development Act (TDA) are available.

Since the bikeway system in Lake County is in its early stages of formation, it will be several decades before components of an interconnected bikeway system will begin to emerge. Bikeways funded primarily through Proposition 116 were focused in areas with relatively high commute demand because of their proximity to public schools. Emphasis on future bikeway development will be placed on commuter bikeways that serve as access to or function as routes to school and other traffic generators.

Proposed projects are described below:

County of Lake

- Lake Street Bikeway-Phase II, will extend from Main Street to Dam Road, in Lower Lake. This project has received BTA funding and is currently in the design phase. It is anticipated that this project will be completed in FY 2005/06.

- The initial phase of the Lakeshore Boulevard Bikeway in Lakeport was an effort to link central Lakeport to the schools complex (Lakeport Elementary, Terrace Middle School, Clear Lake High School) at the north end of the city. Another school-related bikeway along Hartmann Road has recently been constructed and provides access from State Route 29 to Coyote Valley Elementary School.

  North of Lakeport, the Lakeshore Boulevard Bikeway extends the existing facility from Park Way to 2100' north of Park Way. As funding becomes available, an inter-community route will extend to Nice via the Nice-Lucerne Cutoff and county roads in the Nice area.

A third inter-community bikeway could be developed between Lakeport and Kelseyville via South Main Street, Soda Bay Road and Big Valley Road (or Gaddy Lane). Due to limited funding prospects, significant development of this inter-community route is not likely in the near future.

City of Clearlake

- As school-related bikeways are being completed, progress is being made toward inter-community bikeway development at opposing ends of Clear Lake. Remaining segments are on Dam Road from Lake Street to State Route 53 and on Old Highway 53 from State Route 53 to Lakeview Way.

- A planned extension along Dam Road to the State Route 53/Dam Road intersection will link Oak Hill Middle School and the Yuba College campus. The extended route will continue along Old Highway 53 in Clearlake to the Lakeshore Drive intersection, completing the inter-community route.

2002 Lake County Regional Bikeway Plan

The 2002 Lake County Regional Bikeway Plan was prepared by Dow and Associates and adopted by the Lake County/City Area Planning Council on September 11, 2002. The plan incorporates, into one document, proposals of bikeway improvement needs within all jurisdictions of the region. It is intended to serve as a basis for selecting candidate projects for grant funded programs, and meets the provisions of the California Bicycle Transportation Act which are included in the Streets and Highways Code, Sections 890 through 894.2. Proposed bikeway improvement projects are included in Attachment H.

Updates are required to bikeway plans biannually in order to meet State requirements. Staff of local governments, the County and two cities, will be reviewing projects currently identified in the Lake County Regional Bikeway Plan in a major revision that is identified in the APC's 2005/06 Overall Work Program. The update will reflect the most current information, invite citizen input, and integrate GIS mapping for existing and proposed bikeway projects

The Regional Bikeway Plan defines "bikeway" as all facilities that provide for bicycle travel. The Plan gives the following classifications and discussions of bikeways:

Class I. These facilities are commonly referred to as "bike paths." They provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflows of motorists minimized.

Class I bikeways will have limited application in Lake County. Their primary function will be to provide a link between other bikeways where other facilities are impractical, or to provide a direct route to a specific destination (such as a park).

Class I bikeways are generally expensive to construct and maintain. Right-of-way must be obtained and the facility must be built with sufficient width and pavement design strength to

support maintenance vehicles. Providing Class I facilities through areas where there are visual obstructions also pose some security concerns.

Class II. These facilities are commonly referred to as "bike lanes." They provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycle traffic, with through travel by motor vehicles or pedestrians prohibited. Adjacent vehicle parking and crossflows by pedestrians and motorists are permitted.

Class II bikeways will have significant application in Lake County. They will be used to provide for bicycle travel where vehicle speeds, volumes or other conditions are present which make it desirable to separate bicycle traffic from motorized traffic.

Class II bikeways are generally provided adjacent to existing roadways. Right-of-way costs are usually minimal, but drainage improvements, grading and utility relocation can be significant. Experience in construction of Class II bikeways in Lake County indicates that construction of this type of facility adjacent to existing roadways ranges between $800,000 and $1.5 million per mile.

Class III. These facilities are commonly referred to as "bike routes." They are generally on-street facilities that provide right-of-way designated by signs and/or pavement markings and are shared with pedestrians and motorists.

Class III bikeways will have significant application in Lake County. They will be used to provide links between other bikeways and as the primary bikeway facility in rural areas. Their use will be primarily in locations where vehicular volumes are low and speeds are low to moderate.

Improvements required to establish Class III facilities may be minimal because right-of-way is shared with vehicular traffic. Shoulder widening may be advisable in some areas, but improvements could be limited to signing and pavement marking installation.

GUIDING GOALS, POLICIES, AND OBJECTIVES

Goal

Provide a safe and well-maintained system to meet the transportation needs of bicyclists, pedestrians, and equestrians, where financially feasible.

Policies and Objectives

Policy 3.01 Consider the needs of non-motorized users when constructing, upgrading, or maintaining street, roadway, and highway facilities.

Objective 3.01.1 Improvement on adopted bike routes in the Lake County Regional Bikeway Plan should receive particular attention.

Policy 3.02 Provide safe bicycle parking facilities at locations where high traffic volumes are generated or attracted.

Policy 3.03 Reserve two percent of Transportation Development Act funds annually for allocation to pedestrian and bicycle projects.

Objective 3.03.1 Candidate projects will be selected for funding based upon a priority rating system adopted by the LC/CAPC.

Objective 3.03.2 Transportation Development Act funds should be used to match funding from other sources, if available.

Objective 3.03.3 Bikeway projects must be consistent with the Lake County Regional Bikeway Plan in order to be considered for Transportation Development Act funding.

Policy 3.04 Encourage local agencies to apply for grant funding to augment Transportation Development Act funding for bikeways and pedestrian facilities.

Objective 3.04.1 Continue regular updates of the Lake County Regional Bikeway Plan to qualify the Lake County, Clearlake, and Lakeport for Bicycle Transportation Account (BTA) funding.

Policy 3.05 Encourage incorporated cities to continue policies requiring sidewalks on all new street construction projects.

Policy 3.06 Encourage and support local agencies in the development of bicycle and pedestrian facilities.

Objective 3.06.1 Initial priority shall be given to development of pedestrian and bikeway facilities along routes to school.

Objective 3.06.2 Provide pedestrian facilities as needed to support the use of public transit.

Objective 3.06.3 Continue the development of inter-community bikeways:

1. Lower Lake to Clearlake
2. Lakeport to Nice
3. Lakeport to Kelseyville

Policy 3.07 Support the development of multi-use pedestrian/equestrian paths when economically feasible and safety and security concerns can reasonably be addressed.

ACTION PLAN: PROPOSED PROJECTS

Pedestrian Facility Improvements

Short Range Plan (1-10 years)

There are multiple ways in which pedestrian needs can be addressed. Pedestrian improvements are often constructed in conjunction with roadway improvements. For instance, if a street is being rehabilitated, curbs and sidewalks may be improved as well. Pedestrian improvements are also commonly a requirement of development. This is especially the case when proposed development is adjacent to an area of historical or planned pedestrian travel.

Through Proposition 116, the region received a significant boost in addressing the pedestrian needs of the area. However, this was a one time funding source and is no longer available. Remaining funding sources are discussed in the Financing section of this element. Due to the limited amount of funding available, it is unlikely that a significant amount of pedestrian improvements can be made in the near future.

The following are priority projects throughout the region. As with all transportation improvements, programming and completion of these projects is heavily dependent on funding availability.

County of Lake

- Main St. Walkway, Landscaping & Decorative Lighting, Kelseyville. The County of Lake recently received partial TE funding to install concrete walkways, tree wells and landscaping along 460 feet of Main Street from Guinn Street to First Street, and install new decorative street lighting along about 850 feet of Main Street from Guinn Street to Second Street in Kelseyville. The project is anticipated to be completed by August 2007.

- South Main St. Rehabilitation & Widening, City Limits to Hwy. 175, this project will be completed with TE funds (FY 2004/05) by the County of Lake and will construct 4 foot of additional shoulder width on each side of the roadway to achieve 8 foot wide bike lanes with signs and pavement markings along 2,600 feet of So. Main Street from the Lakeport City Limits to the Hwy. 175 intersection. The 8-foot wide shoulders will also function as emergency parking areas for disabled vehicles. Separate funding will be used for the balance of the project to provide 3 vehicle lanes and 4 foot paved shoulders.

- Soda Bay Road Rehabilitation & Widening, Hwy. 175 to Manning Creek, to also be completed with TE funds by the County of Lake will be a continuation of the above-mentioned project to construct 4 foot of additional shoulder width on each side of the roadway to achieve 8-foot wide bike lanes with signs and pavement markings along 4,600 feet of Soda Bay Road from Hwy 175 to Morrison Creek. The 8-foot wide shoulders will also function as emergency parking areas for disabled vehicles. Separate funding will be used for the balance of the project to provide 3 vehicle lanes and 4 foot paved shoulders.

City of Clearlake

- Pomo Elementary School. The City of Clearlake applied for funding from the Safe Routes to School (SR2S) program in 2002 for significant improvements around Pomo Elementary School. Improvements will benefit pedestrians, bicyclists, and vehicular traffic. The project was approved for SR2S funding however the City of Clearlake later dropped the project due to insufficient matching funds. This project is also discussed in the Backbone Circulation and Local Roads Element of this document.

- Lakeshore Drive. The City of Clearlake plans to construct curb, gutter, drainage and sidewalk facilities along Lakeshore Drive from Olympic to State Route 53, for a length of 2.00 miles. This project is needed to correct safety issues identified in the Lake Countywide Roadway Needs Study.

- Burns Valley Road. Curb, gutter and sidewalk facilities will be constructed on Burns Valley Road, from the Four Corners area to the Senior Center, within the City of Clearlake.

- Clearlake Bicycle/Pedestrian Projects. In addition to the projects identified above, the City of Clearlake will incorporate the installation of pedestrian facilities in all of the Class II bikeway projects identified in Appendix F as well as several street rehabilitation projects shown in Table II-9 of the Backbone Circulation and Local Road Element.

City of Lakeport

- Lakeshore Boulevard Pedestrian Walkway. The City of Lakeport plans to construct Phase I of the Lakeshore Boulevard Pedestrian Walkway within the next 5 years. This portion of the walkway will extend along Lakeshore Boulevard from Lange Street northerly to the city limits. It is anticipated that this phase of the project will cost approximately $50,000. Local 2% TDA funds (see discussion under Financing) will be utilized to fund this project. This project was previously awarded funding under the TEA program. However, the project was put on hold and TEA funding was lost. The northern 200' of this project was constructed with local funds during the fall of 2004, and options for completing Phase I are currently being reviewed.

  The second phase of this project will extend southerly along Lakeshore Boulevard from Lange Street to Ashe Street. Due to necessary bank stabilization involved in this phase of the walkway, it will be significantly more expensive, estimated at approximately $200,000. It is likely that STIP funds will be sought to fund this phase of the project.

- Lake County Fairgrounds Sidewalk Improvement Project, this project, submitted by the City of Lakeport, received TE funds (FY 2004/05) to construct approximately 850 feet of ADA compliant sidewalk, curb, and gutter at the Lake County Fairgrounds on the south side of Martin Street, from Main Street to the Fairground entrance, in the City of Lakeport. Project also includes installation of 48 inch piping and inlets/outlets to address flooding, which is a problem in this area and must be addressed as a necessary component of this project.

Note: Staff is currently searching for additional funding to assist in the completion of this project. If additional funds are located, TE funds currently programmed to this project will be reprogrammed into the Landscaping and Decorative Lighting Project in Kelseyville.

Long Range Plan (11-20 years)

Although there is no countywide plan for pedestrian facilities, the planning and development of these facilities is an important issue in Lake County. As population grows, the need for pedestrian facilities adjacent to roadways originally planned as rural facilities increases. Unfortunately, due to the limited amount of financing available for such improvements, and other regional priorities, it is difficult to make any significant improvement to the system. Improvements will continue to be made as funding allows and safety necessitates.

Bicycle Facility Improvements

Short-Range Plan (1-10 years)

Although the Regional Bikeway Plan was developed in order to qualify entities for a specific funding source (BTA), it has been more generally used as the planning document to identify projects for other funding as well. The following projects are those identified as priorities in the 2002 Lake County Regional Bikeway Plan:

County of Lake

- Lakeshore Boulevard Bikeway. The first two phases of this bikeway have been completed, extending from Main Street in Lakeport to Crystal Lake Way, and then to Park Way. The third phase of this project, which is currently in the design phase, extends 2100' north from Park Way Drive in the unincorporated area of the County. Construction of this project is anticipated to begin in FY 2005/06. $928,000 in TEA, BTA, and other funding is currently programmed for the project; however, it is very likely that the remaining segment of this project will also be constructed in phases (south to north) as funding becomes available. The County of Lake recently applied for BTA funds to extend Lakeshore Blvd to Worley Drive.

  Plans are to link Lakeport to the community of Nice through a bikeway along Lakeshore and the Nice-Lucerne Cutoff. This will provide a non-freeway link between communities. This roadside along Lakeshore primarily is residential with some lake-related resorts and small businesses interspersed. Extensions of the existing bikeway to the north will link this residential area to Lakeport Elementary School, Terrace Middle School, and Clear Lake High School as well as to the central business district of Lakeport.

City of Clearlake

- Old Highway 53 Bikeway. This project is approximately 2.78 miles and includes three phases. It will be a Class II facility to serve the bicycle commute needs between central Clearlake, area schools, and eventually the community of Lower Lake. Phase I of this project was recently completed and extends along Old Highway 53 from Lakeshore Drive to Lakeview Way with a loop along Ballpark, Bluejay and Laguna Avenues within the City of

Clearlake. The project also includes sidewalk facilities for pedestrian use. This project was funded with STIP, TEA, and local funds. Total project costs for this phase are estimated at $620,000. Phase II will incorporate an additional 0.5 mile of bikeway extending from Phase I at Lakeview Way to State Road 53/Dam Road. Phase III is approximately 0.78 miles from Lakeshore Drive to Olympic Drive

Developer improvements adjacent to WalMart, immediately east of the southern terminus, have recently made bicycle access available from Dam Road to Oak Hill Middle School and the Lake County campus of Yuba College. A recently completed bikeway project along Lake Street will complement this proposed project by providing a bikeway from Lower Lake to central Clearlake via Lake Street, Dam Road, and Old State Highway.

Access to the central business district of Clearlake and the city's Redbud Park (bike parking needed) will be available from the northern terminus of the project. The project will provide direct access to residential and commercial areas that lie adjacent to Old State Highway 53. When this project, Phase II and the Lake/Dam Road segment are complete, a low volume transportation alternative will be available to Clearlake students who attend Oak Hill Middle School, Yuba College, Lower Lake Elementary School and Lower Lake High School.

Old State Highway will provide direct access to central Clearlake once it is widened between State Route 53 and Lakeview Way. It is currently the number one priority in the Short Range Implementation Plan and has been awarded Transportation Enhancement Activities (TEA) funding for Class II bikeway construction.

- Austin Road Bikeway. This bikeway is approximately 1.0 mile and proposed for two phases. It will be a Class II facility to serve the bicycling community between Austin Park, at Lakeshore Drive, and the Old Highway 53 bikeway facility.

  Phase I will extend from Lakeshore Drive to Maple Drive (approx. 0.4 mile) with Phase II extending from Maple Drive the Old State Highway 53 (approx. 0.6 mile). Access to the central business district and the City's Austin Park will be available from the western terminus. Direct access to residential and commercial areas that lie adjacent to Old State Highway 53 will be available from the eastern terminus.

- Lake/Dam Road Bikeway. This segment of bikeway will extend 0.25 mile in length from 500 feet south of Cache Creek on Lake Street to 700 feet west of the Lake Street junction at Dam Road in Clearlake. It will provide continuity between a developing bikeway system connecting the community of Lower Lake and the City of Clearlake. The Lake/Dam Road Bikeway segment is the missing link between a constructed Class II bikeway (Lake Street), a widened roadway capable of Class II striping (Dam Road), and a future Class II Bikeway project (Old State Highway).

  The bikeway will link the Lake Street Bikeway, Dam Road and the Old Highway 53 Bikeway. Although no formal cost estimate has been developed for this project, based on the cost formula used in the Regional Bikeway Plan ($400,000 to $800,000 per mile for Class II bikeways) this project would cost $100,000 to $200,000.

In 1996, the Lake Street Bikeway was completed, providing a Class II bikeway from Morgan Valley Road to a point just short of the Cache Creek Bridge. Most of Dam Road was widened in a road relocation project which was completed in 1989. The easterly 700 feet of Dam Road remains unwidened.

City of Lakeport/County of Lake

- South Main Street Bikeway. This bikeway will extend 1.25 miles from the junction of Lakeport Boulevard to Soda Bay Road, including areas within the Lakeport City Limits and the unincorporated County. Surrounding land use is primarily commercial and light industrial. Increasing development of this corridor makes bikeway development a high priority in the area. It will provide a Class II facility to meet the commute needs of residents of south Lakeport and the unincorporated community to the south. Based on the formula used in the Regional Bikeway Plan this project would cost an estimated $500,000 to $1 million.

  In the long term, this facility will link bikeway improvements to be constructed in north Lakeport as well as other bikeways planned by the City of Lakeport. Bikeway improvements along Soda Bay Road to the south and east which will tie into the South Main Street project are also planned. The roadside use in the vicinity of the proposed project is primarily commercial and light industrial. Increasing development of this corridor tends to make bikeway development a high priority.

Long Range Plan (11-20 years)

The Lake County Bikeway Plan, 1992, provided the first comprehensive plan for bikeway development in Lake County. In that plan, bikeway development projects for the ten planning areas (Upper Lake, Cobb Mountain, etc.) in the county were identified. As a County document, the plan did not include projects within the incorporated areas of Clearlake and Lakeport. The Lake County Regional Bikeway Plan was later prepared, utilizing bikeway candidate project information from the Lake County Bike Plan and adding candidate projects from the two incorporated cities. The section of the Lake County Regional Bikeway Plan entitled "Inventory of Proposed Bikeways" now functions as the Long Range Plan. Bikeway improvement projects beyond the time frame of the Short Range Plan are expected to be selected from these candidate projects. A series of twelve tables (one for each of the ten planning areas and one for each city) comprise the Long Range Plan. These tables are included in Appendix F to this Regional Transportation Plan.

FINANCING

Now that Proposition 116 funds have been exhausted, new funding sources have emerged. Possible funding sources include the Safe Routes to School Program (SR2S), the Transportation Enhancement Activities Program (TEA), the Bicycle Transportation Account (BTA), and the State Transportation Improvement Program (STIP). A discussion of each of these funding sources follows.

Federal Funding Sources

Transportation Enhancement Activities (TEA)

TEA is a Federal funding source that provides for projects that creatively and sensitively integrate surface transportation facilities into their surrounding communities. TEA projects may protect the environment and provide a more aesthetic, pleasant and improved interface between the transportation system for the communities and people adjacent to transportation facilities. Funds are to be used for transportation-related capital improvement projects that enhance quality-of-life, in or around transportation facilities. Projects must be over and above required mitigation and normal transportation projects, and the project must be directly related to the transportation system. The projects should have a quality-of-life benefit while providing the greatest benefit to the greatest number of people. Projects must fall within the following twelve categories:

1. Provision of facilities for pedestrians and bicycles.
2. Provision of safety and educational activities for pedestrians and bicyclists
3. Acquisition of scenic easements and scenic or historic sites.
4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities)
5. Landscaping and other scenic beautification.
6. Historic preservation.
7. Rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals).
8. Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails).
9. Control and removal of outdoor advertising.
10. Archaeological planning and research.
11. Mitigation of water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
12. Establishment of transportation museums.

The TEA program is authorized by the Federal government in 6-year cycles, with the first cycle from 1991 through 1997. During the first TEA cycle, applicants had to compete for funding statewide. The program was reauthorized to cover the period from October 1997 through September 2003. During the second cycle, money was distributed directly to each region to be disbursed locally, similar to STIP funds. Projects within the region that received TEA funding were the Old Highway 53 Bikeway, the Lakeshore Boulevard Pedestrian Walkway project (this project was later dropped, to be pursued at a later time), the Hartmann Road Bikeway, and the Lakeshore Boulevard Bikeway. Applications for the third cycle of TEA funding exceeded the $917,000 available to Lake County. All applications were reviewed and ranked by the TAC. Three County projects and one City of Lakeport project were selected for funding.

State Funding Sources

State Transportation Improvement Program (STIP)

A complete discussion of the State Transportation Improvement Program (STIP) can be found in the State Highway System Element of this document. STIP funds are primarily used for projects on the State highway system and on the local road systems. However, these funds are eligible for use on bicycle and pedestrian improvement projects as well. In the 2000 STIP cycle, STIP funds were used to supplement TEA funding for the Old Highway 53 Bikeway project.

State Bicycle Transportation Account (BTA)

The State Bicycle Transportation Account (formerly Bicycle Lane Account) funds city and county projects that improve safety and convenience for bicycle commuters. Assembly Bill 1020, which passed in 1997, increased the annual $360,000 funding pot to $1 million in 1998, 1999, and 2000, $2 million in 2001 and 2002, and would have increased to $3 million in 2003, and finally to $5 million in 2004. However, the passage of SB 1772 in 2000, which took effect in July 2001, increased the annual BTA funding to $7.2 million for fiscal years 2001/2002 through 2005/2006. Commencing in FY 2005/2006, the amount of funding will be reduced to $5 million annually, with a maximum allotment per applicant of $1.8 million. BTA funds are distributed on a statewide competitive basis. In order to apply for these funds, an applicant must have an adopted Bicycle Transportation Plan. Use of BTA funds requires a 10% match.

Safe Routes to Schools

The passage of AB 1475 in 1999 created a new traffic safety program in California, Safe Routes to Schools (SR2S). The program funds the construction of improvements to create safer routes to schools, on a statewide competitive basis. The purpose of the program is primarily to fund construction, but also pays for education, enforcement and encouragement activities. Eligible projects include sidewalk improvements, traffic calming and speed reduction, pedestrian/bicycle circulation, on street bicycle facilities, off street bicycle/pedestrian facilities, and traffic diversion improvements. In the first year of the program, the State awarded approximately $20 million statewide, with the same amount to be available in the second year. Use of these funds requires a 10 percent match.

Regional Surface Transportation Program (RSTP)

A complete discussion of this funding source can be found in the Backbone Circulation and Local Roads Element of this document. Although RSTP (Section 182.6 d(1) and d(2)) funds have historically been used in the Lake County region for improvements to the road systems, they can be used for bicycle and pedestrian improvements as well.

Office of Traffic Safety (OTS)

The Office of Traffic Safety (OTS) provides bicycle and pedestrian grants to assist local agencies with safety and educational programs, including bicycle rodeos and bicycle helmet distribution

programs. Grants are awarded on a statewide competitive basis, and not available for construction of pedestrian or bikeway facilities.

Local Funding Opportunities

Transportation Development Act (TDA)

The Transportation Development Act (TDA) provides two funding sources, the Local Transportation Fund (LTF) and the State Transit Assistance (STA) fund. The LTF is derived from a 1/4 cent of the statewide general sales tax. This 1/4 cent sales tax is returned to every county in the state from where the tax was collected. The STA is derived from sales tax on gasoline and diesel fuel. Fifty percent of the STA funds are allocated according to population, while the other fifty percent is allocated according to the ratio of the total public transit revenues that were generated in each area during the prior fiscal year.

The entire regional amount of STA funds go to the Lake Transit Authority for transit services. LTF funds are also used primarily to fund Lake Transit Authority as well as the LC/CAPC administration and planning programs. However, the LC/CAPC reserves 2 percent (about $20,000 yearly) of these revenues for approved bicycle or pedestrian projects. Although a comparatively small funding source, these local funds may be banked for several years or used to provide the local match to leverage larger grants.

ENVIRONMENTAL CONSIDERATIONS

A separate environmental document will be prepared for the Regional Transportation Plan. The majority of projects discussed in the Action Plan of the Non-Motorized Transportation Element are improvements within existing corridors and right of ways. For this reason, there are no foreseeable environmental issues. However, an individual environmental review will be done for each project at the time of implementation.

IV. TRANSIT SYSTEM ELEMENT

SYSTEM DEFINITION

Population

Lake County has several important demographic factors that perpetuate the high need of public transit throughout the region. As the county with the highest percentage of senior citizens in California (currently 19.5%), senior citizens comprise a significant and growing component of public transit ridership. Lake County also has a high incidence of individuals with disabilities. For the population of five years and older, 29.8% of are disabled. This compares with 19.2% for entire population in California. Relatively low income levels throughout the county also contribute to high levels of transit dependence. The median household level in Lake County is $29,627, compared to the state-wide average of $41,994 per household. It is estimated that 15.8 of Lake County residents live in poverty (1999 U.S. Census Bureau Estimate).

Transit System Organization and Management

In October 1995, the Lake County/City Area Planning Council adopted the transit development plan (Final Summary Report, prepared by Nelson/Nygarrd, September 1995), which recommended the formation of a transit authority to provide transit service in Lake County through a Joint Powers Agreement. Establishment of the Lake Transit Authority (LTA) was approved by the County and the two incorporated cities in December 1995. The new organization consolidated dial-a-ride services, which had operated in Clearlake and Lakeport since July 1981, and the countywide North Coast Opportunities Transportation Services, which began offering services to senior citizens as Lake County Senior Transportation in 1976. LTA was designated as the Consolidated Transportation Services Agency for Lake County.

Lake Transit Authority contracts for administrative, management, operating, and maintenance services. The Executive Director carries out the administrative responsibilities of the authority pertaining to policy board records, review of contracts, and similar matters. The Transit Manager is responsible for service planning and implementation, including service design, bus and equipment procurement, contract administration, marketing, data analysis, report preparation, community relations, and liaison with state, federal, and local governments on matters such as civil rights, vehicle emissions, bus stop locations and street signage. The Transit Manager also prepares all applications for state and federal funding, develops budgets, monitors accounting records, and prepares statistical data for State Controllers Reports.

Laidlaw Transit Services manages and conducts day-to-day operations and maintenance. The contractor is responsible to provide schedule and service information, dispatching, vehicle operators, fare collection, maintenance of the buses and street furniture, and most data collection.

Since the inception of LTA, the contractor has been responsible for the operations and maintenance facility. Laidlaw Transit Services recently moved into the newly constructed Lamkin/Sanchez Building located in Lower Lake. This structure is owned by Lake Transit

Authority and was largely subsidized through a $2.5 million "one-time" Rural Transit System Grant that provided for the construction of the facility as well as fleet replacement.

Description of Existing Services

Lake Transit Authority services include fixed routes, regional flex route service, local dial-a-ride services, and interregional bus routes connecting Lake County to Napa, Sonoma, and Mendocino counties.

Dial-A-Ride Services

Lakeport and Clearlake/Lower Lake Dial-A-Ride services were the first true public transit services in Lake County. Prior to the formation of Lake Transit Authority in 1996, the dial-a-ride services were the most productive among the publicly funded services offered in Lake County. When fixed route service was proposed in Clearlake in 1996, there were doubts if it would do well. Local bus route options have proven successful, resulting in the migration of dial-a-ride passengers to bus routes.

Route System

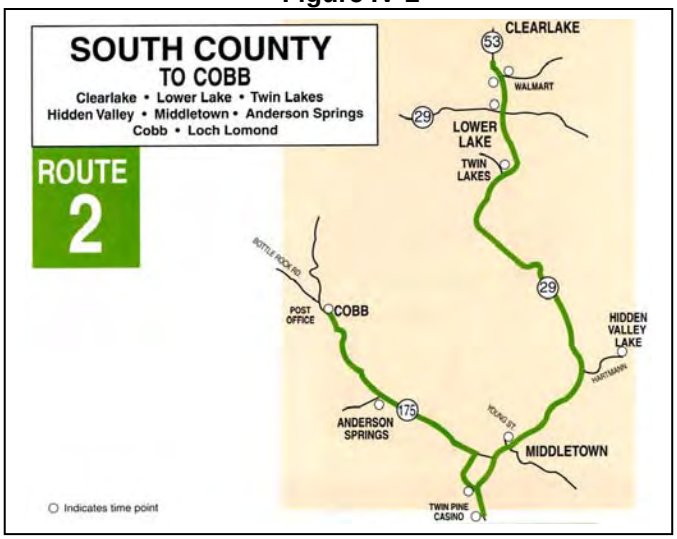
The Lake Transit Authority bus route system is comprised of eight routes, of which two are local fixed route bus service in the Clearlake area. The remainder of the system consists of regional "flex" routes. As might be expected, the regional system follows the primary highway network along Highways 20, 29, 53, and 175. The flex routes are so called because the bus will deviate, or flex, up to one mile off its route to pickup passengers on a demand basis. This has typically worked very well in Lake County because most of the population resides in close proximity to highways and lakefront. Each route is briefly described below:

Figure IV-1

Route 1 - *North Shore: Clearlake to Lakeport via Highway 20*

Provides service along the north shore of Clear Lake and makes four complete round trips per day, Monday-Friday between Clearlake and Lakeport. These are supplemented with two partial route roundtrips between Clearlake and Glenhaven. The interval between buses is two to four hours with slightly more service at typical commuter work hours.

Figure IV-2



Route 2 - *South County: Clearlake to Cobb via Highway 53, 29, 175*

Travels from Clearlake, down Highway 29 through Hidden Valley to Middletown, and then continues up Highway 175 through the mountains to Cobb. The ride requires about one hour each way, and the route operates four round trips per day.

Route 3 *- South County: Clearlake to St. Helena via Highway 29 (Santa Rosa – Thursday Only)*

Sponsored by St. Helena Hospital in Angwin, Route 3 is the interregional route that travels from Clearlake, down Highway 29 through Middletown, then on to Calistoga and the St. Helena Hospital at Deer Park in Napa County. This route makes one round trip on each Monday, Wednesday and Thursday. On Thursdays, the bus continues to Santa Rosa where it flexes to medical appointments and other locations.

Figure IV-3

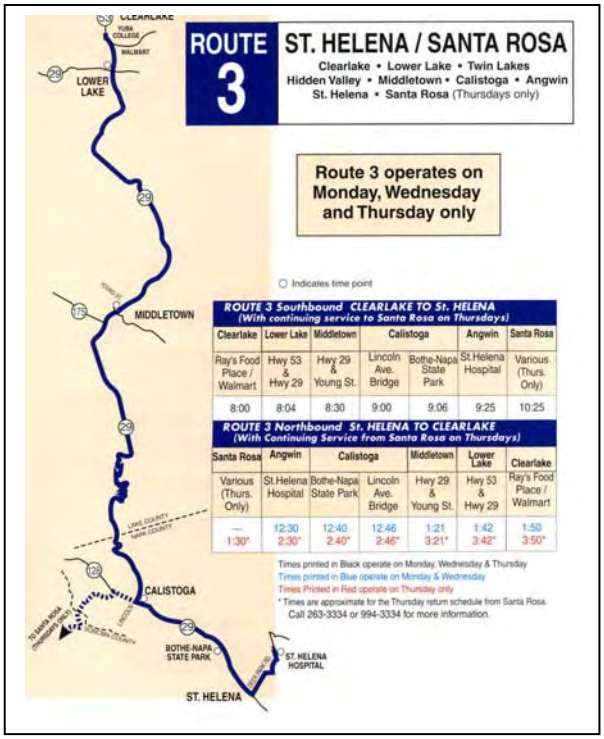
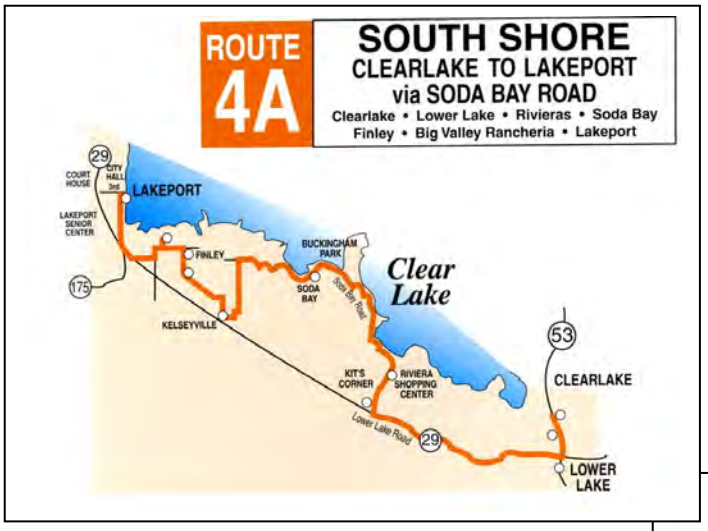


Figure IV-4

Route 4 *- South Shore: Clearlake-Kelseyville-Lakeport via Highway 29*

The primary commuter route between the cities of Clearlake and Lakeport and offers eight round trips daily, Monday-Friday, with service intervals of less than two hours. Since Route 4 is interlinked with Route 7 to provide a continuous link between Clearlake, Lakeport, and Ukiah; the Route is also available for four roundtrips on Saturdays.

Figure IV-5



Route 4A *-South Shore: Clearlake to Lakeport via Soda Bay Road*

Route 4A is an alternate to Route 4, with many of the same origins and destinations. It adds two roundtrips on weekdays, but deviates to Soda Bay Road where it winds along the shore close to lakefront residences.

Figure IV-6

Route 5 *- Clearlake City: North Loop*

This local fixed route bus service operates hourly, Monday-Friday, from early morning to early evening. Route 5 service, traveling from Ray's Food Place to Clearlake Park, lies within ½ mile of more than 90% of the City of Clearlake.

Figure IV-7

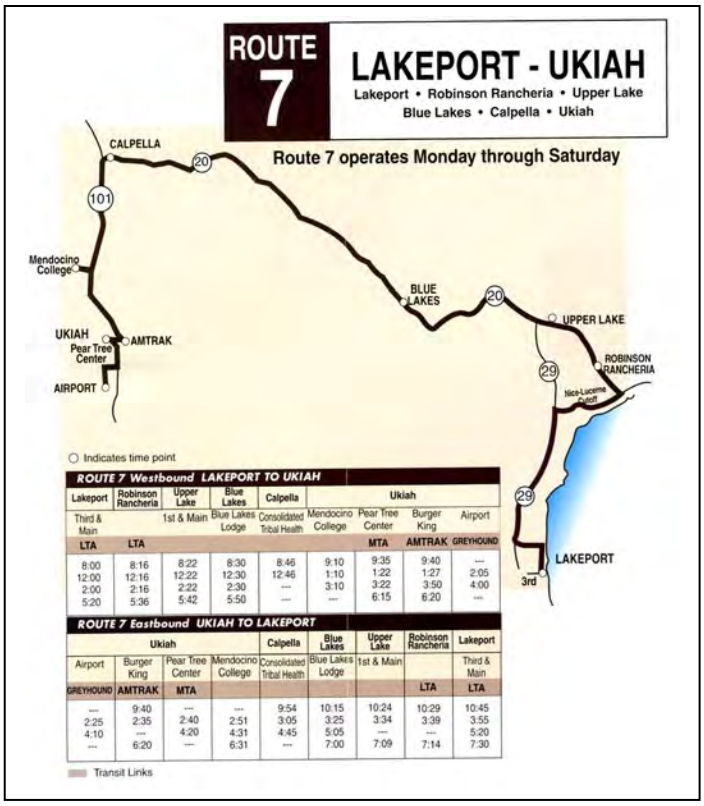
Route 6 *- Clearlake City: South Loop*

This service runs Monday-Friday, from early morning to late evening. Route 6 serves Lower Lake and Clearlake. The Clearlake segment complements Route 5 by operating in the opposite direction along the busiest portions of Route 5.

Route 7 *- Lakeport to Ukiah*

Figure IV-8

Route 7 was implemented in January 2003. The Route 7 schedule is designed to coordinate with Amtrak, Greyhound, and Mendocino Transit Authority buses in Ukiah. Route 7 also serves Mendocino College. This route offers four roundtrips daily.



ROUTE 7 Westbound LAKEPORT TO UKIAH

Lakeport	Robinson Rancheria	Upper Lake	Blue Lakes	Calpella	Ukiah			
Third & Main		1st & Main	Blue Lakes Lodge	Consolidated Tribal Health	Mendocino College	Pear Tree Center	Burger King	Airport
LTA	LTA					MTA	AMTRAK	GREYHOUND
8:00	8:16	8:22	8:30	8:46	9:10	9:35	9:40	---
12:00	12:16	12:22	12:30	12:46	1:10	1:22	1:27	2:05
2:00	2:16	2:22	2:30	---	3:10	3:22	3:50	4:00
5:20	5:36	5:42	5:50	---	---	6:15	6:20	---

ROUTE 7 Eastbound UKIAH TO LAKEPORT

Ukiah				Calpella	Blue Lakes	Upper Lake	Robinson Rancheria	Lakeport
Airport	Burger King	Pear Tree Center	Mendocino College	Consolidated Tribal Health	Blue Lakes Lodge	1st & Main		Third & Main
GREYHOUND	AMTRAK	MTA					LTA	LTA
---	9:40	---	---	9:54	10:15	10:24	10:29	10:45
2:25	2:35	2:40	2:51	3:05	3:25	3:34	3:39	3:55
4:10	---	4:20	4:31	4:45	5:05	---	---	5:20
---	6:20	---	6:31	---	7:00	7:09	7:14	7:30

Transit Links

Vehicles

The bus fleet is composed of 21 vehicles ranging in size from 10 to 30 passengers. The daily pullout requires 10 buses for the route system and 6 buses for dial-a-ride. This leaves five spares. There are a total of seven (7) large (20-30 passenger) buses, nine (9) medium-size (11-20 passenger) buses, and five small (10-passenger) buses. All of LTA's vehicles are equipped with wheelchair lifts and fully comply with all access features required by the Americans with Disabilities Act. In addition, LTA's buses are equipped with racks that can accommodate up to two bicycles. There is no additional charge for carrying of bicycles.

NEEDS ASSESSMENT: ISSUES, PROBLEMS, AND CHALLENGES

The Lake Transit Authority has been a very successful and popular program in the region. Prior to formation of LTA, service primarily consisted of demand responsive services only in the two largest population centers. Inter-community service was irregular, fragmented, and targeted toward the senior citizen community. The public system was complemented in the private sector by limited inter-community and interregional bus service, a taxi service in the largest incorporated city, and a paratransit service for the developmentally disabled. With the creation of LTA, transit services in the Lake County region were expanded to include regular intra-community (Clearlake) and inter-community fixed-route, reduced and targeted dial-a-ride services, within a general public transit framework.

Social Services Transportation Advisory Committee

The Social Services Transportation Advisory Council (SSTAC) was established to meet the intent of Senate Bill 498. The SSTAC assists the Area Planning Council in the identification of transit needs that may be reasonable to meet by establishing or contracting for new public transportation services, or specialized transportation services, or by expanding existing services.

In its early years, the SSTAC met on a regular basis. At times there were monthly meetings leading up to the point when the Lake Transit Authority was formed. Afterward, meetings were held quarterly until most start-up issues were resolved. Until recently, SSTAC meetings have been infrequent.

Since all available Local Transportation Fund dollars have been expended on existing transit services, the Area Planning Council has not completed a formal Unmet Needs process. However, each month the Lake Transit Authority (LTA) provides the opportunity to discuss unmet transit needs and other issues during a regularly scheduled agenda item.

Lake County Transportation Coalition

In July 2002, the United Way of Lake County received a grant in the amount of $28,000 for the purpose of facilitating and coordinating transportation services to families with children from the ages of 0-6 throughout the region. Phase Two of the grant, in the amount of $25,000, was awarded in July 2003. Beyond creating transportation opportunities for families with children ages 0-6, the grant helped provide the link needed to identify persons in need of transportation services via the development of the Lake County Transportation Feasibility Coalition, now known as the Lake County Transportation Coalition.

The Lake County Transportation Coalition (LCTC) created a Transportation Resource Manual to identify and coordinate transportation services to families, developed a Transportation Website, trained agencies in the use of public transportation, and coordinated a Ride-The-Bus Week event throughout Lake County in August 2004.

The grant provided the nexus for agencies to collaborate and coordinate transportation services in Lake County. In fact, since the completion of the grant, the LCTC has continued to hold meetings, and is beginning to work in conjunction with the Social Services Transportation Advisory Council.

Passenger Facility Plan

According to the Lake Transit Authority's *Transit Development Plan (June 2004)*, passenger facilities are extremely limited and should be the next focus for system improvement. The transit system has passenger-waiting shelters at 11 bus stops. Nine other bus stops have only passenger-waiting benches. Currently, the major transfer points of the route system have few amenities and are in potentially tenuous locations. Use of the transit system could be greatly increased with an adequate number of appropriately located and accessible bus stops.

To assess the regions current bus stop and shelter system, a Passenger Facilities Development Plan will be included in the 2005/06 Area Planning Council Work Program. This plan will also assess Lake Transit Authority's passenger facility development needs, and develop a comprehensive plan for the expansion of bus stops and transfer facilities. Final products of the Plan will include updated bus stop improvement policy guidelines, an updated bus stop inventory and a passenger facilities development plan.

GUIDING GOALS, POLICIES AND OBJECTIVES

Two joint-powers agencies cooperate in order to plan, fund, and implement transit service in Lake County. As the regional planning agency, the Lake County/City Area Planning Council (APC) is generally responsible for transit planning and funding. The Lake Transit Authority (LTA) is charged with the responsibility to provide transit services consistent with priorities established by the APC. The Area Planning Council's policies and objectives related to transit-planning are described below:

Regional Transportation Planning Agency Goal

Ensure that the basic mobility needs of the transit dependent population in Lake County are met.

Regional Transportation Planning Agency Policies and Objectives

Policy 4.01 Provide a forum for public agency coordination and public involvement in the transit planning and implementation process.

Objective 4.01.1. Continue the opportunity for input by representatives of senior citizens, the handicapped, and economically disadvantaged through annual meetings of the Social Services Transportation Advisory Council (SSTAC).

Objective 4.01.2. Conduct an annual public hearing on unmet transit needs, in years that Transportation Development Act funds are being considered for uses other than administration, bicycle and pedestrian development, planning, and transit.

Objective 4.01.3. Consider the comments and recommendations of the Technical Advisory Committee as they may pertain to transit planning and implementation issues.

Policy 4.02 Adopt definitions of "unmet transit need" and "reasonable to meet" for use in transit funding decisions.

Objective 4.02.1. **Unmet Transit Need** shall be defined by the Area Planning Council as follows:

> Whenever a need by a significant number of people to be transported by moderate or low cost transportation to specific destinations for necessary purposes is not being satisfied through existing public or private resources.

Objective 4.02.2. The Area Planning Council has determined that a transit need is reasonable to meet if:

- Funds are available;
- Benefits of services in terms of number of passengers served and severity of need justify cost; and
- Service is capable of meeting Transportation Development Act fare revenue/ operating cost requirements.

Policy 4.03. Establish priorities for transit service implementation within Lake County and extending into other regions.

Objective 4.03.1. Transit needs of seniors, disabled, and the economically disadvantaged shall be given special consideration within the framework of general public transit services provided by Lake Transit Authority.

Objective 4.03.2. Fixed route transit services serving high-density communities should be considered when economically feasible.

Objective 4.03.3. Inter-community transit service should be considered for implementation or expansion when economically feasible.

Objective 4.03.4. Inter-regional transit service (to Napa, Sonoma, and Mendocino counties) should be considered for implementation when economically feasible.

Policy 4.04. Provide funding for transit planning, administration, capital, management, and services.

Objective 4.04.1. Report annually to the Transit Manager the amount of Local Transportation Funds available for transit services in Lake County.

Objective 4.04.2. Annually, upon budget adoption by the County of Lake and the cities of Clearlake and Lakeport, allocate funds to the Lake Transit Authority for transit services.

Objective 4.04.3. Provide planning support in the Area Planning Council's annual work program for transit related and transit supportive activities.

Lake Transit Authority

The *2004 Transit Development Plan – Policy Section* identifies the Goals, Objectives and Policies for the Lake Transit Authority. This section is intended as a reference guide for the Transportation Commission, staff, and the public. This section is organized as follows:

Overall Goal - a broad statement of direction.

I. Objective: An action statement that has a measurable result.

A. **Policy:** States what shall be done to accomplish the objective.

1. **Standard:** Identifies how the activity will be measured.

a) **Criteria:** Provide the specific criteria for measurement.

Lake Transit Authority's System Goal

Provide mobility for all citizens in Lake County.

Lake Transit Authority's Objectives and Policies

I. OBJECTIVE: Give special attention to the mobility needs of the transit dependent.

A. **Service Design:** Areas of low automobile ownership, concentrations of elderly, young, disabled, and low-income population shall be considered when designing service levels.

1. Elderly shall be identified as 62 years of age or older.
2. Young shall be identified as 18 years of age or younger.
3. Individuals with disabilities shall include persons recognized as disabled by the Americans with Disabilities Act (the ADA).
4. Low income shall be defined by the poverty thresholds reported by the U.S. Census bureau each year and available on the Census Bureau website at www.census.gov.

B. **Elderly and Disabled Fare Discounts:** Lake Transit fares shall be discounted for elderly and disabled individuals who present valid identification when boarding.

1. Valid proof of age for the elderly fare discount shall include any of the following forms of identification:

- California Identification Card issued by the Department of Motor Vehicles
- California Driver's License
- Medicare Identification Card

2. Valid proof of disability for fare discount purposes shall include any of the following forms of identification.
    - ADA Paratransit Identification Card
    - California Disabled Person Identification Card
    - California Disabled Veteran Identification Card
    - A valid disability identification card from another transit agency.

C. **Children:** Parents will be encouraged to instruct their children in proper use of the transit system.

1. When accompanied by an adult, up to two children age six (6) or under may ride free of charge on Lake Transit services.

II. OBJECTIVE: Provide persons who have disabilities with comparable access to transit facilities, programs, and services.

A. **Full Access:** Any individual, regardless of disability, shall be afforded full access to any Lake Transit Authority service for the general public that the individual is capable of using. (49 CFR 37.5(b))

1. Designated Seating: An individual with a disability shall not be required to use designated priority seats if the individual does not choose to use such seats (49 CFR 37.5(c)).
2. Attendants: An individual with a disability shall not be required to be accompanied by an attendant (49 CFR 37.5(e)).
3. Life Support: Individuals shall not be prohibited from traveling with respirators or portable oxygen supplies, except when these items violate federal rules concerning the transportation of hazardous materials (49 CFR 37.167h and 49 CFR B(1)c).
4. Behavior: An individual shall not be refused service solely because of a disability that results in appearance or involuntary behavior that may offend, annoy, or inconvenience transit system employees or other persons; however, an individual with disabilities may be refused service for engaging in violent, seriously disruptive, or illegal conduct (49 CFR 37.5(h)).

B. **Integration:** Service available to persons with disabilities shall be provided in the most integrated setting appropriate to the needs of the individual.

C. **Accessible Vehicles and Facilities:** All new or replacement vehicles and facilities shall be accessible to persons with disabilities.

1. Vehicles shall include the access features and meet the requirements specified in 49 CFR Part 38.

2. Bus Stops: To the extent development and specification of new bus stops is within the control of Lake Transit Authority, new bus stops shall comply with LTA bus stop standards and Section 10.2 of Appendix A to 49 CFR Part 37.

   a) To provide for deployment of wheelchair lifts, bus stops shall provide a firm, stable surface with a minimum clear depth (from curb face or roadway edge) of 96 inches and a minimum clear width (parallel to curb or road way edge) of 60 inches to the maximum extent allowed by legal or site constraints. Maximum slope perpendicular to the roadway shall be 1: 50.

   b) The wheelchair deployment area shall be connected to streets, sidewalks or pedestrian paths by an accessible route.

   c) Bus route identification signs, excluding route maps and schedules, shall incorporate accessible features (49 CFR 37, A-4.30).

D. **Complementary Paratransit Service:** Paratransit service shall be provided to eligible individuals who have disabilities at a level that is comparable to the level of service provided to non-disability users of the fixed route service.

1. LTA Dial-A-Ride and Flex Stop service shall function as paratransit services complementary to Lake Transit bus routes.

2. ADA Paratransit Eligibility: Eligible individuals shall be persons certified by Lake Transit Authority as eligible for ADA paratransit service in accordance with the following criteria:

   a) The individual is unable as the result of a physical or mental impairment, and without the assistance of another person, to board, ride, or disembark from a fixed route bus even if they are able to get to the stop and even if the vehicle is accessible (49 CFR 37.123(e)(1)).

   b) The individual is able to travel on an accessible vehicle, but cannot because accessible features are not available or not in operation on a particular bus or at a particular bus stop (49 CFR 37.123(e)(2)).

   c) The individual is unable due to a specific impairment related condition to travel to a boarding location or from a disembarking location (49 CFR 37.123(e)(3)).

3. Trip-by-Trip Eligibility: An individual shall be ADA paratransit eligible only for those trips for which he/she meets the eligibility criteria (49 CFR 37.123(b)).

4. Eligibility of Visitors: Individuals presenting proof of ADA paratransit eligibility certification by another transit agency shall be presumed eligible for a period of 21 days (49 CFR 37.127).

5. Personal Care Attendants and Companions: The paratransit service shall accommodate individuals traveling with the ADA paratransit eligible individual as follows:

   a) A Personal Care Attendant (PCA) shall be accommodated when accompanying an individual whose disability requires the assistance of a PCA.

   b) In addition to a PCA, one companion shall be accommodated provided that a reservation is made for the companion.

   c) Additional companions will be accommodated on a space available basis.

   d) In order to be considered as companions accompanying the eligible individual, the other individuals shall have the same origin and destination as the eligible individual.

6. Paratransit Service Criteria: Paratransit service shall be provided in accordance with U.S. Department of Transportation service criteria for complementary paratransit service (49 CFR 37.131).

   a) Service Area: The paratransit service area shall include all origins or destinations within three-quarters (3/4) of a mile of a fixed route.

   b) Hours and Days of Service: The paratransit service shall be available throughout the same hours and days as the fixed route service it complements.

   c) Response Time: Paratransit service shall be provided within one hour of the requested pickup or drop-off time, as appropriate, in response to a request for service made the previous day.

   d) Reservations: Requests for reservations shall be accepted by telephone each day between 8:00 a.m. and 5:00 p.m. for up to six (6) days prior to the day of service.

   e) Fares: The following fares shall be charged to individuals who are eligible for ADA complementary paratransit service, their companions, and Personal Care Attendants, except that such fares do not apply to trips that are guaranteed to social service agencies or other organizations.

      - The fare charged to an ADA paratransit eligible user of the complementary paratransit service shall not exceed twice the full fare (general public fare) for a trip of similar length at a similar time of day on the fixed route system.
      - Personal Care Attendants shall ride free of charge.
      - Companions accompanying the eligible user between the same origin and destination shall pay the same fare as the ADA paratransit eligible individual.

f) Trip Purpose Restrictions: There shall be no restrictions or priorities based on trip purpose.

g) Capacity Constraints: The availability of complementary paratransit service to ADA paratransit eligible individuals shall not be limited by any practice or operational pattern that significantly limits the availability of service to ADA eligible persons. Such prohibited practices or patterns include, but are not limited to, the following:

- Restrictions on the number of trips that will be provided;
- Waiting lists for access to the service;
- Substantial numbers of significantly untimely pickups for initial or return trips;
- Substantial numbers of trip denials or missed trips;
- Substantial numbers of trips with excessive trip lengths.

E. **Communications and Public Information:** Adequate information in accessible formats shall, upon request, be provided to individuals with disabilities to facilitate service use and scheduling (49 CFR 37.167(f)).

1. Fixed Route Stop Announcements: Vehicle operators shall at all times announce bus stops sufficient to permit individuals with visual impairments or other disabilities to be oriented to their location.

   a) Vehicle operators shall announce transfer points, major intersections and destination points, and other locations at sufficient intervals for orientation (49 CFR 37.167(b)(1)).

   b) Vehicle operators shall announce any stop on request of an individual with a disability (49 CFR 37.167(b)(1)).

2. Route Identification at Bus Stops: Where more than one route serves a bus stop, means shall be provided to assist an individual with a visual impairment or other disability to board the proper vehicle.

3. Accessible Formats: Information such as route schedules, rider guides and other publications shall be provided on an as requested basis in accessible formats such as large print, computer diskettes, electronic mail, and others as appropriate to the individual's need and agency capabilities.

4. Communications Capacity: Telephone information and reservation services shall have adequate personnel and phone capacity to respond promptly to requests for information reservations.

5. Telecommunications Display Device (TDD) Access: California Relay Service shall be used to provide Telecommunications Display Device (TDD) access to reservation and administrative offices to enable persons with hearing and speech impairments to request trips, cancel or update requests or obtain other information or assistance.

   a) The California Relay Service TDD number, 1-800-735-2929 shall be published in transit schedules and information brochures.

III. OBJECTIVE: Promote connectivity and coordination of service with other transportation services.

A. Actively develop and promote connectivity to the intercity transportation network to the extent reasonable considering cost, local service priorities, and other factors.

B. Coordinate routes, bus stops, schedules, marketing information, and other access considerations with other transit operators.

C. Coordinate service with social agencies and other community based organizations.

IV. OBJECTIVE: Promote use of the transit system.

A. **Marketing**: Market the service to attract new riders, retain existing riders, and to inform the staff and the public of system features, benefits, and changes.

B. **Price**: Passenger fares shall be priced in a simple, straightforward, realistic, and standardized manner that is consistent with the level and quality of service provided.

1. Price Differential**:** Fares for dial-a-ride and route deviation (flex stop) service shall be priced at a level that is at least three times the comparable LTA fixed route fare. This price differential is consistent with the higher level of service and expense required to provide paratransit services.

2. Fares shall be reviewed annually.

   a) Small Children Free Fare: When accompanied by an adult, up to two children age six (6) or under may ride free of charge on LTA services.

   b) Transfers: When boarding the bus, passengers may request a transfer to continue a single trip on the next available bus.

   - Transfers are free to another route with the same or lower fare.
   - The passenger pays only the difference in fare to transfer to a route with a higher priced fare.
   - Transfers to and from Dial-A-Ride will be treated as flex stops unless the dispatcher waives the fare.

   c) Monthly Pass: $30.00

Valid for unlimited use of Lake Transit routes in Lake, Napa, or Mendocino County by one person during normal operating hours.

d) Punch Pass: $10.00

Valid for $11.00 in Lake Transit fares when new, the Punch Pass is valid for the amount of unpunched fare value symbols remaining.

C. **Access and Coverage:** Provide service to all segments of the population and, to the extent reasonable considering cost and other factors, all areas of the County.

1. Dial-A-Ride is intended to complement LTA bus routes in Clearlake, Lakeport, and contiguous unincorporated areas by extending transportation access to persons with disabilities, senior citizens, and to sparsely populated areas.

a) Clearlake Dial-A-Ride boundaries are: Clockwise beginning at intersection of Lakeshore Drive and San Joaquin Avenue (Gooseneck Point), then as follows: San Joaquin Avenue, Country Club Drive, East Lake Drive, Burns Valley Road, Clearlake City Limit, State Route 53, La Rosa Plaza at S.R. 53 and Ogulin Canyon Road, S.R. 53, Hayes Avenue, Eureka Avenue, Chateau Avenue, Emile Avenue, Davis Avenue, Parker Avenue alignment, Cache Creek, *Herndon Creek, Bonham Road, Morgan Valley Road, S.R. 29, Bell Park Avenue, Suzan Drive, Bell Avenue (including Bell Circle North and Bell Circle South), S.R. 29, Lee Barr Drive, Kugelman Street, S.R. 53, Anderson Ranch Parkway, S.R. 53,* Clearlake City Limit along Cache Creek and Clear Lake, continuing to Gooseneck Point (Lakeshore Drive and San Joaquin Avenue). Lower Lake area boundaries are in italics.

b) Lakeport Dial-A-Ride Boundaries are: Clockwise beginning at intersection of Robin Hill Drive and Lakeshore Drive, then as follows: Lakeshore Drive, the shoreline of Clear Lake, Mission Rancheria Road, Soda Bay Road, Highland Springs Road, Sky Park Drive, Workright Circle, Matthews Road, George Road, Highway 175, Parallel Drive, Todd Road alignment, Lakeport City Limit, Scotts Valley Road to a point 1/4 mile west of S.R. 29, continuing 1/4 mile west of S.R. 29 alignment, to Robin Hill Drive alignment, ending at intersection of Robin Hill Drive and Lakeshore Drive.

2. Flex stops shall complement LTA regional bus routes by extending transportation access for up to one mile from bus routes to individuals who are eligible for Americans with Disabilities Act paratransit service.

D. **Trip Purposes:** Design the service to satisfy a wide variety of trip purposes including shopping, medical, recreational, work, and school trips.

E. **Level of Service Standards:** Establish and monitor level of service standards to ensure that the quality and quantity of service offers a practical alternative to automobile use.

1. System Coverage: The percentage of the county population estimated to be within one mile of transit service.
2. Reliability – Bus Routes: The percentage of buses departing within 0 to 5 minutes after the scheduled departure time as indicated by published timetables.
3. Reliability – Dial-A-Ride Advance Reservations: The percentage of reservations trips served within a 30-minute window (plus or minus 15 minutes from the recorded reservation time).
4. Missed Trips (or Missed Run): A scheduled bus trip (run) shall be considered canceled if it departs from any scheduled time point 15 minutes or more after the scheduled departure time.
5. Dial-A-Ride or Flex Stop Missed Trips/Denials with Advance Reservations: Advance reservation trip requests that are not scheduled within one hour of the requested time shall be considered missed trips or denials, unless the passenger accepts a negotiated time outside of the one hour window.
6. Schedule Frequency: The interval between scheduled route buses, or the reservation or wait-time window for dial-a-ride.
7. Maximum Passenger Load: The percentage of the seated capacity utilized at the peak load point.

V. OBJECTIVE: Provide transit services in a safe, efficient, cost effective manner consistent with service needs.

A. **Performance Standards** for the system and each service mode shall be established and monitored to ensure a high level of efficiency, cost-effectiveness, and compliance with mandated requirements.

1. System Farebox Ratio: Farebox ratio is calculated by dividing the operating revenues (fares) by the net operating expense.
2. Vehicle Revenue Hour: Vehicle revenue hours are those hours when the vehicle is in service and available to passengers.
3. Road calls are defined as those roadside maintenance activities that are the direct result of a mechanical breakdown. These service interruptions require assistance from someone other than the revenue vehicle operator in order to restore the vehicle to an operating condition.

B. **Vehicle Capacity**: Buses shall not operate with passenger loads exceeding the designated vehicle capacity.

1. Fixed Route buses shall be at capacity when the Gross Vehicle Weight Rating (GVWR) is reached based on an estimated weight of 160 lbs. per passenger and 600 lbs. per wheelchair passenger.
2. Dial-A-Ride buses shall be at capacity when all available seats and wheelchair positions are utilized.

a) **Fleet Management:** The transit fleet shall be managed in a professional manner in accordance with industry standards to ensure the maximum productivity and life expectancy of Lake Transit Authority vehicles and equipment.

C. **Federal and State financing shall be maximized.**

D. **Competitive procurement** procedures, including competitive negotiation, will be used, when appropriate, in a manner which will insure the lowest price for the best product, considering local needs, quality, service, timeliness of delivery, and parts availability.

E. **Children:** Unaccompanied children must be capable of safely accessing the system, understanding and adhering to time schedules, assuming responsibility for payment of transit fares, and accessing the system at the proper location.

1. It is assumed that 7 years is the minimum age at which a child may have the necessary capabilities. Children under age 7 may use Lake Transit Authority services only when accompanied by an adult.
2. Up to two small children (age 6 and under) may ride free when accompanied by a fare-paying adult.
3. Although not required by law, parents are encouraged to bring infant or child safety seats on board for use by children.

F. **Training:** Personnel shall be trained to proficiency, as appropriate to their duties, so that they operate vehicles and equipment safely and properly, assist and treat individuals who use the service in a respectful and courteous way, with appropriate attention to the difference and special requirements of individuals with disabilities.

G. **New Development:** New development within the Lake Transit Authority service area shall be reviewed for impacts to the transit service, and when appropriate, the development shall include mitigating measures addressing the impacts.

H. **Bus Stop Design Standards:** LTA design standards shall be used for bus stop improvements whenever feasible.

1. Spacing Between Bus Stops: Bus stop signs shall be placed every 660 to 880 feet, excluding undeveloped areas, on all routes.
2. Location: Bus stops shall be placed close to subdivision access points and within one block of activity centers such as shopping centers, schools, health care facilities, social service offices, apartment complexes, and mobile home parks.
3. Far-Side Bus Stops are preferred at intersections where sight distance or signal capacity problems exist, where parking conditions are critical, where right or left Turns by general traffic are heavy, and where buses make left turns.
4. Near-Side Bus Stops shall be the preferred alternative where buses make right turns, and shall also be an alternative at intersections where transit flows are heavy, but traffic and parking conditions are not critical. See Diagram V.I.3-4 on the next page.
5. Mid-Block Bus Stops shall be an alternative in strip commercial areas where the block faces are longer, with multiple destinations served within the block; and in downtown areas where multiple routes require long loading areas that might extend an entire block, or where traffic, physical or environmental conditions prohibit near or far-side stops.
6. Turn-Out Bus Stops shall be an alternative only where traffic conditions prohibit conventional on-facility placement of bus stops.
7. Bus Stop Signs and Shelters shall be placed so as to allow adequate maneuvering space for pedestrians and passengers, including provision of accessible routes and areas for maneuvering, boarding and disembarking of passengers using the transit vehicle wheelchair lift.
8. Bus Stop Shelter shall be warranted when passenger activity averages 10 or more passengers per day.
9. Break-away Designs shall be considered for installation of bus shelters on State Highways.

ACTION PLAN: PROPOSED PROJECTS

Short-Range Plan (1-7 years)

Lake Transit Authority's *2004-2011 Transit Development Plan* is based on continuing the development of the transit system to respond to growth in demand within the service area, and to maintain a critical link to the intercity transportation network.

The primary focus of the plan is to continue to emphasize the efficiency and cost effectiveness of the route system, including local fixed routes and flex routes, as the transit modes which can best accommodate most long term community needs. Clearlake Dial-A-Ride has become a very specialized service to meet the needs of persons who are elderly or who have disabilities. The Lakeport Dial-A-Ride service will also change, although more gradually, to a more specialized paratransit role. To that end, care has been taken to ensure that this plan is consistent with the Americans with Disabilities Act and the Lake Transit Authority ADA Plan adopted in 1997.
This plan proposes to continue interregional bus service to connect with the intercity transportation system. The ability to sustain interregional service will depend greatly on its level of use and the continuing support of interested community agencies.

Fixed Routes

The seven-year plan for Route Service calls for continuous evaluation of the operational effectiveness and efficiency of the routes. During 2004/05, Routes 5 and 6 will be modified to improve on-time performance, and a Saturday service demonstration project will be implemented. It is anticipated that additional bus capacity may be needed by 2006-07. Due to budget limitations, this service level adjustment will be evaluated along with other service alternatives during 2006.

Regional Flex Routes

The regional flex route service has available capacity and appears to be gaining popularity. With fare pricing adjustments, and modifications to the Route 1 and Route 4 schedules, service demand is expected to continue to increase. An additional afternoon Route 1 schedule is high on the list of passenger requests, and it appears to be warranted based on growing service demand.

During 2005, the Route 2 schedule will be modified to consolidate some of its service times with the Route 3 service to Calistoga. This will help to reduce cost while potentially increasing destinations for its users. The route will continue to be evaluated and adjusted as needed to identify a more effective service strategy for the Middletown and Cobb Mountain areas.

Intercity Routes

Although there is a great deal of uncertainty about the level of service that intercity carriers will provide over the next seven years, LTA is committed to connecting Lake County residents and visitors with the available network. Ideally, LTA will involve and rely more upon transit systems in neighboring counties to provide or help pay for service connections. It appears that

Napa County Transportation Planning Agency may soon start daily service to Santa Rosa. A connection to the Napa buses at Calistoga would improve travel options for Lake County residents, particularly those in the southern part of the County.

It is unknown whether or not a connection to Santa Rosa via Calistoga would reduce demand for the Ukiah bus, but Routes 3 and 7 will continue to be evaluated as changes occur. It is likely that there will be additional minor schedule adjustments to Route 7 during 2004-05, with more extensive changes possible over the next two years.

LTA will focus much of its marketing effort on its intercity bus connections with efforts to improve travel information for visitors to Lake County. LTA will also target promotion to employers and college students who are likely to be regular users of the service.

Dial-A-Ride

Dial-A-Ride will continue to provide service to the general public, but its primary emphasis in Clearlake will be paratransit. In Lakeport, general public passengers who are able will be encouraged to try the local loop route service on Routes 1 and 4, but will be welcome to use Dial-A-Ride service as well. For both Dial-A-Ride services, advance reservations will be encouraged, but demand-response service will continue to be offered. Subscription service will be limited to no more than 50% of available capacity in order to assure that sufficient capacity is available to respond to ADA service requests on a timely basis.

Program Transportation

As the Consolidated Transportation Service Agency (CTSA) for Lake County, LTA is committed to supporting and providing services that coordinate or consolidate various transportation needs for social service programs. In the past, program transportation has been provided at a subsidized cost, at rates that did not consider administrative expense or capital replacement cost. LTA will continue to offer program transportation, but services will be based on fully allocated costs.

Long Range Plan (7-20 years)

Implement Fixed Route Service in Lakeport

If ridership in the Lakeport area increases, fixed route service may be implemented. Given recent ridership trends in the Lakeport area, it is likely that fixed route service is more likely to occur in the long-term time frame.

Capital Improvement Program

The seven year capital improvement program, shown below in Table IV-1, is designed to complete the operations and maintenance facility project, maintain the existing fleet, add buses as needed to respond to service demand, and greatly improve passenger amenities.

Table IV-1
Capital Improvement Program

Year	Quantity	Item
2004/05	1	Complete the Operations & Maintenance Facility
	1	25-30 Passenger Bus for Inter-City Service
2005/06	2	16-20 Passenger Bus (replacement)
	1	Photo Identification Card Equipment-includes camera, printing and laminating equipment
2006/07	60	Bus Stop Signs
	25	Passenger Waiting Shelters and Pads
2007/08	2	10 Passenger Paratransit Vehicles (replacement)
	2	25-30 Passenger Bus(replacement)
2008/09	3	10 Passenger Paratransit Vehicles (replacement)
2009/10	1	16-20 Passenger Bus (replacement)
2010/11	3	16-20 Passenger Bus (replacement)
2011/12	2	16-20 Passenter Bus (replacement)
2012/13	1	25-30 Passenger Bus (replacement)

FINANCING

Seven Year Financial Plan

The following seven year financial plan provides a summary of annual budgets, and an itemization of expenditures and revenues. The services and capital program will operate on the financial plan described below in Table IV-2.

Table IV-2
Budgets

Fiscal Year	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	Total
Operating	$1,326	$1,376	$1,416	$1,458	$1,501	$1,546	$1,593	$10,216
Capital	1,533	207	224	495	190	132	297	3,076
TOTAL	$2,859	$1,583	$1,640	$1,953	$1,691	$1,678	$1,890	$13,292

Anticipated Expenditures

The operating and capital expenditures included in the annual budgets are itemized below in Table IV-3. The expenditures maintain all existing operations, provide for capital replacements, and reflect planned capital improvements and incremental service level increases over the seven year period.

Table IV-3
Expenditures
(1,000's)

OPERATING	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	TOTAL
Administration	61	62	64	66	68	70	72	464
Contractor	1,092	1,139	1,173	1,209	1,245	1,282	1,321	8,461
Fuel	117	122	125	129	133	137	141	903
Advertising/Promo.	25	20	20	20	20	21	21	147
Direct Expense	32	32	33	34	35	36	38	241
Subtotal	$ 1,326	$ 1,376	$ 1,416	$ 1,458	$ 1,501	$ 1,546	$ 1,593	$ 10,216
CAPITAL								
Buses	324	145	-	444	139	82	246	1,380
Bus Stops	10	10	174	-	-	-	-	194
O&M Facility/Loan	1,179	51	51	51	51	51	51	1,482
Misc. Equipment	20	1	-	-	-	-	-	21
Subtotal	$ 1,533	$ 207	$ 224	$ 495	$ 190	$ 132	$ 297	$ 3,076
TOTAL	**$ 2,859**	**$ 1,583**	**$ 1,640**	**$ 1,953**	**$ 1,691**	**$ 1,678**	**$ 1,890**	**$ 13,292**

Anticipated Revenue

The bulk of revenue available for transit services is generated locally through the Local Transportation Fund. As with other sources of transit funding, it is difficult to project funding streams beyond a single year.

The transit system will utilize passenger fares, auxiliary advertising revenue, Transportation Development Act funds, the remaining balance of the Rural Transit System Program Grant, and various Federal Transit Act (FTA) funding sources. Of the FTA funding amounts, $569,000 is discretionary funding. This represents 4.3% of the total revenue requirement of the transit system over the next seven years. Table IV-4 below identifies resources and projected revenues through Fiscal Year 2010/2011:

Table IV-4
Revenues
(1,000's)

LOCAL	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	TOTAL
Fares	295	309	324	340	350	368	386	2,371
Auxilliary Revenue	10	10	11	11	11	12	12	77
Interest/Misc.	4	3	3	4	6	6	7	32
TDA	1,321	994	916	1,317	1,000	1,076	1,263	7,886
Subtotal	**$ 1,629**	**$ 1,316**	**$ 1,254**	**$ 1,672**	**$ 1,367**	**$ 1,461**	**$ 1,668**	**$ 10,367**
STATE								
RTSGP	594	-	-	-	-	-	-	594
STAF	69	69	69	69	69	69	69	481
Subtotal	**$ 663**	**$ 69**	**$ 69**	**$ 69**	**$ 69**	**$ 69**	**$ 69**	**$ 1,075**
FEDERAL								
5309	-	-	139	-	-	-	-	139
5310	-	-	-	72	111	-	-	183
5311	227	132	136	140	144	148	153	1,079
5311(f)	340	66	43	-	-	-	-	450
Subtotal	**$ 567**	**$ 198**	**$ 318**	**$ 212**	**$ 255**	**$ 148**	**$ 153**	**$ 1,851**
TOTAL	**$ 2,859**	**$ 1,583**	**$ 1,640**	**$ 1,953**	**$ 1,691**	**$ 1,678**	**$ 1,890**	**$ 13,293**

FUNDING SOURCES

The following is a discussion of all funding sources available for transit needs that may be available for rural transportation systems:

Federal Sources

Federal Transit Administration (FTA) Section 5309

The Federal Transit Administration offers a Capital Investment Grant and Loan Program to provide transit capital assistance for new fixed guideway systems and extensions to existing fixed systems, fixed guideway modernization, and bus and related facilities. Funding under this program is primarily earmarked by Congress, thereby limiting its use for projects within Lake County. Furthermore, much of the funding is devoted to fixed guideway projects, which have no short-term or long-term applicability to Lake Transit Authority's transit development scheme.

Federal Transit Administration (FTA) Section 5310

The Federal Transit Administration provides assistance to non-profit corporations that provide transit services to the elderly and/or persons with disabilities when transportation services are unavailable, insufficient, or inappropriate. It is a capital assistance program that requires a 20% local match. Historically, it has been used for vehicle replacement and expansion projects, but other capital items, such as computerized dispatching systems, are also eligible. Public agencies that provide programs primarily for the elderly and disabled may also be eligible under Section 5310 if there are no service area conflicts with private, non-profit corporations. In California, the California Transportation Commission administers this annual competitive program.

Approximately $8 million is available statewide. Lake Transit Authority may be eligible to acquire vehicles under this program, but as the general public component of the ridership increases, the value of the FTA Section 5310 program as a source of capital will likely decline.

Federal Transit Administration (FTA) Section 5311

The Federal Transit Administration makes funds available to non-urbanized area such as rural small towns/cities under Section 5311 of the FTA program. These funds are generally available on both a formula and discretionary basis. However, in recent years, the amount available for discretionary purposes has declined and become unstable. FTA Section 5311 funds used for operating have a 50% match requirement, whereas capital grants require a 20% local match. Approximately $9.5 million is provided annually to California for this program.

Federal Transit Administration (FTA) Section 5311(f)

The Federal Transit Administration created the FTA Section 5311(f) Intercity Bus Program in response to an Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). In California, the Intercity Bus program has been designed to address the intercity travel needs of residents in non-urban areas of the state by funding services that provide them access to the intercity bus and transportation networks in California. Currently, a minimum of 15% of each year's State apportionment of Section 5311 funds is set aside for the Intercity Bus Program. The intent of the program is to fund discrete new intercity service, on a start-up basis. It is not intended to be a continuing source of operating revenue. Priority is given to capital projects, although operating projects are also eligible. The emphasis of this program is connectivity between non-urbanized and urbanized areas, not service circulation within an urbanized area, or in a non-urbanized area. This program may have limited applicability for LTA's transit needs in the short-term, as current intercity needs are within (Lakeport-Ukiah) a non-urbanized area. Long-term intercity connections to Santa Rosa may qualify under Section 5311(f).

Federal Transit Administration (FTA) Section 5313

The Federal Transit Administration annually provides discretionary funding for transit planning assistance. This program, which is administered in California by Caltrans, requires a 20% local match. Typical projects that have been funded include transit development plans, capital plans, and transit employee training programs. Lake Transit Authority's Fleet and Facility Needs Assessment & Financing Plan (TRANSIT Maintenance Consultants, 1999) was funded under this program.

Regional Surface Transportation Program (RSTP) Funds

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) created the Regional Surface Transportation Program. It was extended by the enactment of TEA-21 in 1998. RSTP funding is made available annually to counties and to regional transportation planning agencies. In California, rural counties and regional transportation planning agencies may exchange RSTP funds for State funds. Although RSTP funds may be used for transit capital projects, at the discretion of the regional agency, state funding is subject to Article XIX of the State Constitution, severely limiting their usefulness as a source of transit funding. The Area Planning

Council historically has exchanged RSTP funds for State dollars and distributed to the county and cities for local highway projects.

Job Access and Reverse Commute Grant Program

The Job Access and Reverse Commute (JARC) grant program is administered by the Federal Transit Administration and is part of the Welfare to Work initiative. The program was authorized under TEA 21 from 1999 through 2003 and is anticipated to be included in a new transportation bill in 2005. JARC provides funding for development of new or expanded transportation services that connect welfare recipients and other low income persons to jobs and other employment related services. Job access projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs for welfare recipients and low income persons. Reverse commute projects provide transportation services to suburban employment centers from urban, rural and other suburban locations for all populations.

Potential JARC applicants include local government agencies and nonprofit organizations. The program requires a 50% match, however, other Federal funds can be used as part of the local match. For areas with populations under 200,000, the Caltrans Division of Mass Transportation acts as the consolidated grant proposal applicant to the Federal Transit Administration.

State Sources

State General Fund

The Traffic Congestion Relief Act of 2000 provided over $5 billion in General Fund revenues for 141 projects throughout California. Funding from this act, enabled by AB 2928 and SB 1662, flows into the Traffic Congestion Relief Program. Although many of the 141 projects are transit, there are no transit projects identified in rural areas of California. The budge crisis that ensued shortly after establishment of this program has resulted in little progress in this program.

State Transit Assistance (STA)

The Transportation Development Act of 1971 established the State Transit Assistance account. Funding is derived from the statewide sales tax on gasoline and diesel fuel. The State Controller appropriates these revenues to regional transportation planning agencies for transit uses. The allocation formula distributes funds 50% by population and 50% according to the operator's revenues from the prior fiscal year. Approximately $300 million is available for distribution statewide, but this figure varies with the price of fuel.

Local Sources

Regional Transportation Improvement Program (RTIP)

Regional transportation planning agencies may program capital projects through the regional share of the State Transportation Improvement Program (STIP). Since there are Article XIX limitations on the State Highway Account component of the STIP, a transit project must either be converted to a Federal Transit Administration project, or funded with Public Transit Account

(PTA) funding in the STIP. The process to convert to an FTA project is cumbersome and time-consuming. Programming of PTA dollars for a transit capital project is preferred, but PTA funding has often been unavailable in recent years. Although STIP funding (through the RTIP) remains an option for Lake Transit capital projects, prospects for programming are marginal.

Transportation Development Act (TDA)

The Transportation Development Act of 1971 established the Local Transportation Fund (LTF). One quarter cent of the State sales tax (generally 7.25%) generated in each county is returned to the regional transportation planning agency for deposit in the Local Transportation Fund. These funds are to be used for agency administration, optional bicycle and pedestrian projects, transportation planning, transit, and local streets and roads projects in accordance with priorities established by TDA. Local Transportation Funds generated through TDA have been the single largest funding source available for transit services provided through Lake Transit Authority.

Farebox Revenues

Transit systems funded with Transit Development Act funds are required to establish and maintain certain minimum level of local farebox returns. Urban systems are required to maintain a 20% farebox return; rural areas are required to maintain at least a 10% farebox return. Farebox revenues are an important component of local transit system funding.

Recommended Sources of Funding

Public transit in California is essentially a function of local government. The State's role is generally limited to administration of Federal transit programs and coordination between agencies. As such, local transit systems are expected to function within available resources. However, rural transit systems actually have fewer funding sources than their urban counterparts. For rural systems, operations and capital remain largely dependent on the Local Transportation Fund. The Rural Transit System Grant Program, approved under Senate Bill 787 in 2001, significantly improved the imbalance by providing capital grants program for rural transit systems. A continuing funding program, similar to SB 787, is needed to ensure the long term stability of rural transit in California.

ENVIRONMENTAL CONSIDERATIONS

A separate environmental document will be prepared for the Regional Transportation Plan. The majority of projects discussed in the Action Plan of the Transit System Element are very likely to produce positive environmental effects. In fact, most of these projects are expected to be categorically exempt. For this reason, there are no foreseeable environmental issues.

V. AVIATION SYSTEM ELEMENT

SYSTEM DEFINITION

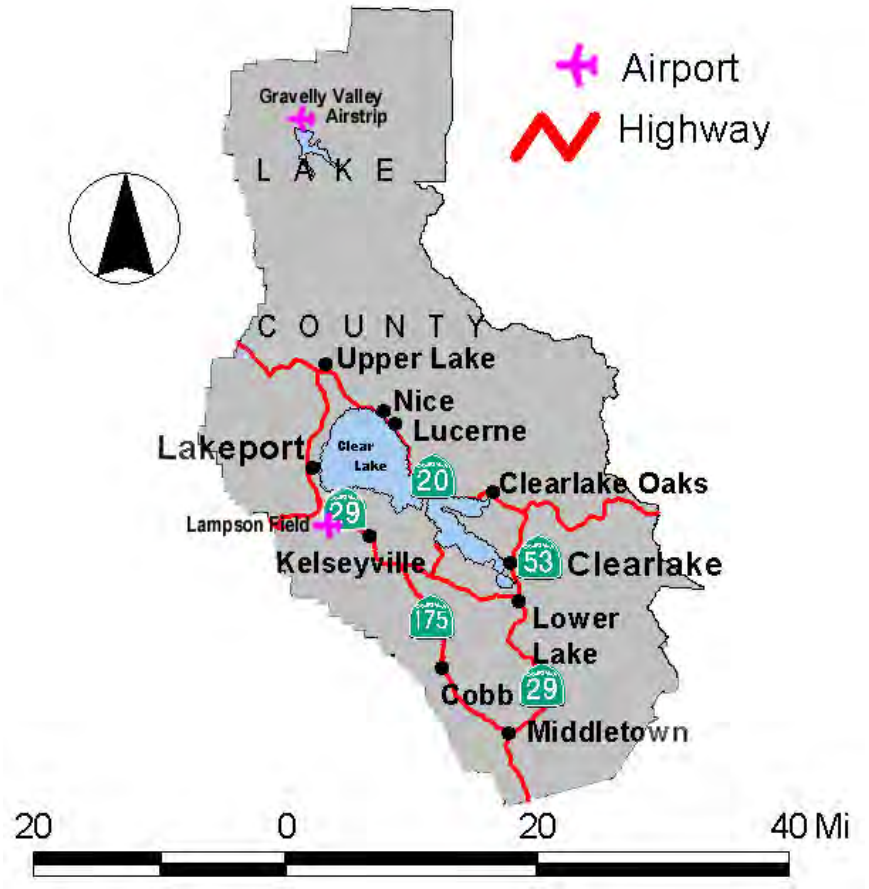


Figure V-1 - Airport locations in Lake County

The Lake County aviation system is comprised entirely of two general service airports. Lampson Field is the primary airport serving the county, while Gravelly Valley Airport, located in a sparsely populated section of the county, primarily serves the U. S. Forest Service and occasionally recreational uses.

Lampson Field

Lampson Field is owned and operated by the County of Lake, with ownership dating back to 1955. The airport provides a critical link between local general aviation and other facilities in the North Coast area as well as the broader regional airport system. Lampson Field provides the community a wide range of opportunities in the areas of commerce, business development, travel, recreation and emergency services. The airport's location in relation to access routes and the surrounding area is shown in Figure V-1.

Lampson Field Airport is classified as a regional airport by the California Department of Transportation, providing services for general aviation, having a 60-foot wide runway with a length of 3,600 feet. The facility is in excellent condition, in that the runway and taxiway were completely seal-coated in 1999 through a project funded by FAA, State Division of Aeronautics and local sources. Services provided by the Fixed Base Operators (FBO) located at Lampson Field include aircraft fueling, certified mechanical repairs and pilot training and flight lessons. Other activities at the airport include general aviation operations, recreation, emergency services, aircraft sales and repair, and business related activities. The number of based aircraft is currently approximately 103. Growth at the airport over the past few years has remained essentially flat.

Ground access to Lampson Field is provided by State Route 29, which is a high quality, all weather highway and Highland Springs Road, which connects the airfield to the State Highway. Both facilities are in good repair and provide excellent access to other County routes that serve the population in Lake County. The Airport is located centrally to the majority of the population in Lake County, near the community of Finley, and the excellent access combined with development opportunities on adjacent properties (zoned for industrial uses) will make the airport desirable for a wide range of transportation-related uses.

Gravelly Valley Airstrip

Gravelly Valley Airstrip is a rural airfield classified as a limited use-recreational access airport owned, operated and maintained by the U.S. Forest Service, and located within Mendocino National Forest. The airstrip provides a staging area for aircraft responding to emergencies in the Forest. The runway is 200-foot wide with a length of 4,050 feet, gravel covered, and designed to handle aircraft used in fighting forest fires. Aside from the runway, no other services or facilities are provided.

While it is open for use by the general public, the airstrip does not have refueling facilities, rest rooms, facilities for storage or maintenance of aircraft, or other services for occasional users. Use of the field has diminished to approximately 150 to 200 aircraft operations per year, generally by recreationalists destined for Lake Pillsbury. The airfield location in relationship to Lake Pillsbury is shown in Figure V-1.

The Forest Service has limited funds for continued maintenance and operation of the airstrip, and has determined to keep the airstrip open for an indefinite amount of time.

As the Gravelly Valley Airstrip plays such a minor role in aviation activities in the Lake County region, the remainder of this element will focus solely on Lampson Field.

NEEDS ASSESSMENT: OPPORTUNITIES AND CONSTRAINTS

Scheduled Air Passenger Service

Lampson Field does not provide commercial airline passenger service, but focuses on meeting the needs of private charter, corporate, and cargo/courier flight operations. In its current configuration, the airfield can meet these needs only on a limited basis. The lack of commercial air passenger service in Lake County creates real barriers to the use of air transport for local residents. In order to access air transportation service, residents must travel to Sacramento, San Francisco or Oakland airports, adding an additional 2 to 3 hours each way to a trip. The economic climate in Lake County is beginning to recover from the recession of the early 2000's and air transportation service access is more relevant to County travel needs than in previous years. However, the added time and cost of traveling to one of these airports still pose a significant barrier to air passenger travel. Meeting air passenger demand will become a growing concern for Lake County, but actual air passenger demand is not known at this time.

Air Cargo Forecast Trends

Lampson Field provides no direct facilities for the transfer or storage of air cargo. However, it does provide viable courier and small package delivery support facilities. There is no expectation for Lampson Field to see expanded cargo service in the near future due to limited facilities. Current small package and courier services are under the control of private operators using facilities located on private property adjacent to the County-owned airfield. With the acquisition of the parcels immediately north and south of the landing strip, expansion of County-operated facilities will be possible. The need for small package delivery for local businesses will increase due to the recent upturn in the County's economy and to much shorter delivery times associated with air courier service in comparison with conventional highway travel.

General Aviation Forecast and Trends

Lampson Field Airport was designated in 1998 as a "regional" general aviation airport classification by the State of California Department of Transportation. The facility serves a multitude of uses providing service to a spectrum of general aviation customers.

While the airport is accessible throughout the year, the ability to serve the region is constrained until Lake County is able to expand basic services at the terminal. Annual aircraft operations currently exceed 75,000 and are projected by the Division of Aeronautics to grow at a rate of 1.75% in the next 20 years to over 100,000 annually. This growth is contingent on expansion of the facilities serving the airfield.

Lampson Field serves a variety of non-jet engine aircraft types, including single engine, multi-engine, helicopter and ultra-light units. As mentioned in the previous sections, the airfield also provides small package and courier service as well as emergency transport. The economic impact of this facility on the community is extremely positive. While activity has remained steady at the field, any substantial increase in use will depend on the ability of the field to expand. A continuing commitment to the growth of the Lampson Field facility is a priority to serve based and transient aircraft.

Aviation Capacity Issues

Lampson Field is the principal airport serving Lake County. This airport is unique in that it was privately owned until the County acquired it in 1955, at which time the County was only able to acquire the land containing the runway. A comprehensive plan for the future use of Lampson Field was prepared in 1992-93 and adopted by the Lake County Board of Supervisors on June 15, 1993. The *Lampson Field Master Plan Report* recommended that the County expand its current facility to include additional property for runway protection zones, safety areas and other airfield functions. The two most critical areas with regards to future expansion at Lampson Field are:

1. Property along the north side of the airport should be acquired for a clear zone as a first priority. The property is encumbered with walnut trees and is closer to the runway than is acceptable under current FAA Flight Standards Guidelines. The property consists of approximately 14 acres.

2. The property on the south side of the runway is currently part of a proposed airport development project and is key to any future expansion of the airport. The property is approximately 15 acres in size and has existing County roadway access and access to the new airstrip taxiway.

In February 1995, the Lake County Board of Supervisors authorized the Department of Public Works to submit a Grant application to the FAA for the subject property acquisitions. In January 1997, the FAA advised Lake County that funds had been allocated for property acquisition. After reaching an agreement with the property owners, the County is now in possession of the subject properties. (See Exhibits 3 and 4 from the Airport Development Plan.)

Although additional land has been acquired, nearly all of the existing buildings and facilities abutting the airport are on private property. This has served most of the needs of general aviation use in the past, but has significant limitations with regard to safety and self-sufficiency. One of the most significant variables affecting annual capacity is the extent of off-peak versus peak-period usage. At present, Lampson Field tends to have fairly pronounced peak activity periods in the late afternoons and on weekends. Given the physical and operational constraints associated with Lampson Field, for peak period activity the airfield's calculated capacity is approximately 70 Visual Flight Rule (VFR) aircraft operations per hour, or 4 Instrument Flight Rule (IFR) operations per hour. The VFR operation capacity 70 Operations Per Hour (OPH) is based on the majority of operations consisting of takeoffs and full-stop landings. If the majority of operations change to touch-and-go activities, the capacity can be increased to 100 OPH. The present annual capacity of the airfield is approximately 180,000 to 200,000 operations. The facility has a Class "G" airspace category designation with a non-precision approach. Class G airspace is uncontrolled airspace where there are no restrictions on aircraft flying through the airspace around the airport or landing at the airport.

In April 2000, the County acquired the property to the south, and in January 2001, acquired property to the north. This will allow the County to proceed with urgently needed transient aircraft parkway construction. Other immediate requirements include construction of the first increment of additional aircraft hanger space. Lake County Airport Management for Lampson Field is committed to maintaining the appropriate airspace clearances to protect the facility for future use and expansion. A continued aggressive policy toward land acquisition will be pursued within the constraints of available resources.

GUIDING GOALS, POLICIES, AND OBJECTIVES

The goals, policies, and objectives of this element document aviation planning and programming in Lake County. The guiding policies for the Aviation System Element will be implemented within the framework of existing planning documents, regulations and general environmental guidelines.

This segment of the Aviation System Element is composed of three separate components:

Goals. Define the guiding aviation goals determined by the County, as the owner/operator of Lampson Field.

Policies. Define the policy direction statements prepared by the County and the Lake County/City Area Planning Council which impact the airport facility and will guide future decisions (and specific actions).

Objectives. Define specific short and long-term objectives that the County has identified for Lampson Field.

Goals

- Provide an Aviation System with physical and operational facilities that meet the regional and interregional general aviation needs of Lake County.

- Provide opportunities for the establishment and expansion of commercial aviation services at Lampson Field.

- Encourage and enhance economic development in Lake County through improved airport facilities where County government has fiscal, administrative and programming capability.

Policies and Objectives

Policy 5.01 Implement improvement program for airport facilities at Lampson Field and adjacent building area, consistent with the adopted Master Plan.

Objective 5.01.1 Implement the planning and programming for development of building area expansion on newly acquired adjacent property, south of the airport off of Sky Park Road.

Objective 5.01.2 Plan, program and construct an Airport Terminal Area, including a terminal building, transient aircraft apron, fueling facilities, and automobile parking.

Objective 5.01.3 Prepare feasibility analysis and cost estimates to provide sewer services to the airport and the surrounding commercial properties to meet existing and future development needs at Lampson Field.

Objective 5.01.4 Survey off-site development projects, as they are proposed, for impact on airfield operation or expansion.

Objective 5.01.5 Implement program for enhancement of supplemental instrument approach capability at Lampson Field.

Objective 5.01.6 Acquire necessary aviation easements along the north side of airport to prevent excessive encroachment of trees into Clear Zone (transitional).

Objective 5.01.7 Establish operational policies to deal with safety and noise issues specifically related to helicopter use of Lampson Field.

Objective 5.01.8 Continue to establish Airport Access Agreements that provide for increased regulation of the airport-related uses on private property.

Objective 5.01.9 Develop facilities and acquire building area and properties in order to provide a public facility alternative to the current private property ownership configuration.

Policy 5.02. Implement land use and environmental compatibility measures at Lampson Field consistent with achievement of a self-sufficient and economically viable airport as defined in the adopted Master Plan.

Objective 5.02.1 Preserve the option for runway extension at Lampson Field by implementation of protection easements east of the existing runway.

Objective 5.02.2 Adopt appropriate zoning and regulations to prohibit the development of incompatible land uses near the Lampson Field.

Policy 5.03. Develop and implement financial and management strategies/actions to provide a revenue stream and assure future expansion of Lampson Field.

Objective 5.03.1 Regulate commercial business through the development of Airport Access Agreements.

Objective 5.03.2 Prepare a Business Development Plan for Lampson Field focusing on the following elements: (1) creation of an income stream to cover the cost of airport operations; (2) identification and implementation of services needed to enhance airport operations and future growth; (3) provision of opportunities for the creation and expansion of airport related businesses.

Objective 5.03.3 Consider establishing airport fees for adjacent property/businesses that reflect airport access benefits.

Policy 5.04. Provide on-going long-range planning and programming for expanded regional air transportation facilities and services for Lake County.

Objective 5.04.1 Continue airport planning and program development to solve airport related land use problems as they arise.

Objective 5.04.2 Maintain adequate public road access for vehicles, as well as access for bicycle, pedestrians, and transit users, to existing and planned airports in Lake County.

Objective 5.04.3 Continue efforts to establish scheduled air service in Lake County.

Objective 5.04.4 Continue long-term effort to acquire and develop an airfield to replace Pearce Field in south Lake County.

Objective 5.04.5 Continue the operation of Gravelly Valley Airstrip as a public use airfield.

Objective 5.04.6 Provide timely updates to the Capital Improvement Program (CIP) to ensure countywide aviation needs are met.

ACTION PLAN: MAJOR ISSUES AND PROPOSED ACTIONS

Lake County as owner and operator of the Airport has, over the years, been concerned with its ability to plan and program improvements which would directly address aviation issues related to the field's operation. The key problem has been the lack of direct ownership of anything at the Airport site except for the runway. Those facilities that currently exist, i.e., hangers, repair shops, aircraft tie-downs, fueling facilities, restaurants and parking are on private property adjacent to the Field. With the successful acquisition of nearly 16 acres of adjacent property, using grant funds from the FAA, Lake County is now in a position to take an active leadership role in resolving aviation issues at Lampson Field. The various sections of the County General Plan that deal with airport planning and operation, the Airport Zoning Ordinance and Overlay Zone Amendment, and the Airport Land Use Compatibility Plan are scheduled to be reviewed and updated to guide future airport planning and development.

This Action Plan identifies aviation issues and needs in accordance with State and Federal requirements, and implements concepts identified in the Guiding Goals, Policies and Objectives section of this Element. The primary documents used in developing this Action Plan were the Lampson Field Master Plan Report (June 1993), the 2001 Lake County Regional Transportation Plan, the 2005-2010 Capital Improvement Program prepared by the State Division of Aeronautics, and Memoranda from the Airport Manager, Lake County Public Works Department, February 2, 2000.

Short Range Plan (1-10 years)

This section identifies the short-term projects which the County has determined to be necessary and of the highest priority. These projects serve to implement the objectives associated with the policies recommended in the Aviation Policies Element for Lake County. These specific projects may, or may not, have the funding necessary in order to be completed. Where Federal and State funding has not been secured, the County intends to pursue every reasonable avenue in order to have funding programmed by the action year identified in the Capital Improvement Program (CIP). As is true with most actions identified in this RTP, completion of these projects within the specified timeframes is contingent on availability of funding. Lack of sufficient funds can push projects identified in the Short Range Plan into a long range timeframe. The starting point for the action plan is the 2005-2010 State Division of Aeronautics CIP and Aeronautics Program budget allocations.

Table V-1 lists projects that have been identified as priorities for airport development. Top priorities have changed from those identified in the Lampson Field Master Plan Report, June 1993, as a result of the recent property acquisition by Lampson Field. All projects in this table will utilize both State and Federal funding.

Table V-1
Caltrans-Division of Aeronautics
Capital Improvement Program List

Lampson Field Airport-Lake County 2005-2010						
Project Description (Funding Year in Priority Order)	**Proposed Completion**	**Federal Funds**	**State Funds**	**Local Funds**	**Other**	**Total**
Construct Drainage Improvement	2005	319,950	15,998	19,552	0	355,500
Crack seal, paint and stripe runway towing area	2005	22,500	1,125	1,375	0	25,000
Engineer and design building area	2005	135,000	6,750	8,250	0	150,000
Design and construct sewer system airport-*new project*	2006	700,000	35,000	42,800	0	777,800
Update layout and building area plans	2006	15,000	820	680	0	16,500
Construct roadway taxiway system-new building area	2006	1,620,000	81,000	99,000	0	1,800,000
Construct new building access road	2007	250,000	11,250	13,750	0	275,000
Slurry seal runway and taxiway	2007	100,000	4,500	5,500	0	110,000
Build Phase I Hanger-*new project*	2008	150,000	6,750	8,250	0	165,000
Build Phase II Hanger-*new project*	2009	150,000	6,750	8,250	0	165,000
Terminal building and fuel farm-*new project*	2010	850,000	38,250	46,750	0	935,000
Update Master Plan and Land Use Compatibility Plan	2010	150,000	6,750	8,250	0	165,000
Totals:		**4,462,450**	**214,943**	**262,407**	**0**	**4,939,800**

There are other projects which will be pursued within the short range timeframe. These projects are not listed in the Capital Improvement Program List due to ineligibility for grant funding, or utilization of alternative funding sources. These additional projects are as follows:

- Implement Phase I Water/Waste Water/Sewer Services to airport area. This will establish the infrastructure necessary in order to develop future airport facilities. This project is estimated to cost at least $1.2 million and is ineligible for grant funding. Due to the costliness of this project, it is unknown if it will be accomplished within the short range timeframe, however, it will be pursued if funding is available. (Also listed in Table V-2, Proposed Airport Improvements.)

- Aircraft Hangar Phase I, 12 Units. Costs for this project are estimated at $300,000. This project is also ineligible for grant funding, and therefore will only be pursued in the short range timeframe if funding becomes available. It is possible that this project could utilize loans available through the State Division of Aeronautics. (Also listed in Table V-2, Proposed Airport Improvements.)

Long Range Plan (11-20 years)

The completion of projects identified in the 1993 Master Plan for Lampson Field will require a significant commitment of resources and an aggressive approach in meeting aviation system requirements in Lake County. This section identifies projects necessary for the full

implementation of the Lampson Field Master Plan. The projects reflect a progression of actions that lead to construction of a fully operational regional airport. Several improvements listed in the Master Plan have already been completed, including installation of automated weather observing station, installation of tiedowns, and property acquisition. Table V-2 lists remaining projects identified in the Master Plan that are not included in the Short Range Plan of this Element. The Master Plan divided these improvements into short term, mid-range, and long term timeframes. However, it is reasonable to include all these projects in the long range timeframe. The complete project list from the Master Plan can be found in Appendix I. This total list of projects is still valid for the eventual implementation of Lampson Field as a viable regional airport.

Table V-2
Proposed Airport Improvements at Lampson Field *

	Estimated Costs (In 1992 $ values)			
Project Description	**Total [a]**	**Federal [b]**	**County**	**Private**
Implement Phase 1: Water/Waste Water/Sewer Services to Airport Area**	$1,200,000			
Aircraft Hanger Phase I: 12 Units**	300,000			
Install fencing around existing private building area property; including 2 controlled access gates and new-driveway	78,000	0[c]	0	78,000
Construct fire protection system; including wells, water storage, and hydrants	200,000	0[c]	200,000	0[d]
Construct terminal building (7,000 to 10,000 square feet)	1,000,000	0	500,000[f]	500,000
Construct terminal area auto parking lot and access road	130,000	60,000[g]	70,000	0
Install fuel island and storage tanks	250,000	0	0[e]	250,000
Construct aircraft wash rack and drainage	40,000	0[c]	40,000	0
Install fencing along new building area property line; including controlled access gate	65,000	58,000	7,000	0
Construct/install additional T-hangars/portables (second phase— 24 units)	610,000	0	0[e]	610,000
Construct remainder of terminal area apron and hangar area taxilanes	220,000	198,000	22,000	0
Extend box culvert, apron edge taxilane, and apron area between old and new building areas (after expiration of existing tease in 2009)	200,000	180,000	20,000	0
Overlay runway and taxiways for maintenance purposes	290,000	261,000	29,000	0
Construct additional T-hangar and executive hangar buildings (third phase — 39 units)	900,000	0	0[e]	900,000

***** *Adapted from the Lampson Field Master Plan Report, June 1993*

****** *These projects ineligible for grant funding.*

Notes

[a] Estimated land costs based upon actual 1989-90 acquisition costs plus escalation factor, administrative costs, and contingencies. Estimated engineering costs based upon preliminary engineering designs: actual costs will depend upon detailed designs and specifications; engineering costs and contingencies included.

[b] Federal funding for eligible projects calculated at 90% based upon current legislation. Local share equals 10%. State funds could be used (but are not expected to be) on many of the projects in lieu of Federal funds.

[c] The County should pursue prospect of obtaining federal funding for a portion of these projects.

[d] Fire protection system could be upgraded to also serve adjacent private property with private funding paying for the added costs.

[e] County development and operation of hangars and fuel facility Is an alternative to the private development and operation assumed here.

[f] County funding terminal building structure and public-use areas is assumed, although entire building could be privately financed. Federal funding for a portion of the project also may be possible.

[g] Access road portion of project Is FAA grant eligible; automobile parking lot portion is not.

PROJECTS COMPLETED SINCE THE LAST ADOPTED RTP

Table V-3 lists projects completed, or programmed to be completed, at Lampson Field during the last five years.

Table V-3
Federal and State Funded Projects Completed
Lampson Field - 2001-2005

Project Description	Source of Funds	Amount
Perimeter Fence	FAA/State	n/a
Clear Zone Tree Clearing Northwest of Runway	FAA/State	n/a
Airport Business Development Plan	APC	8,500

FINANCING

The project costs are estimates based on costs of similar improvement projects at other airports and infrastructure improvements. The sources of project funding are relatively limited and include local, State, and Federal sources discussed below. It is important to note that certain projects, such as hangar installation and waste water disposal systems, are ineligible for grant funding and must be procured through local funding sources or loans. Lake County staff has aggressively pursued funding from all sources, and is constantly monitoring the implementation of improvements that will increase the viability of air transportation in the County.

Local Sources

The primary source of funds for operation of the County maintained Lampson Field is the General Fund of Lake County. General fund monies are supplemented by revenue from leases, tie-downs, and permits.

California Aid to Airports

Regular funding is also available through the California Aid to Airports Program (CAAP). The CAAP provides State funds for publicly owned airports in California. A tax on aviation gas used by general aviation aircraft is the source of funding for this program. The CAAP provides a

grant of $10,000 per year to each airport which meets eligibility requirements. These funds have traditionally been used for capital improvements.

Other Sources

Additional funds may be available from the State through the Acquisition and Development Program, but funds are discretionary based on individual needs. Federal funds are available on a competitive basis through the Airport Improvement Program (AIP). The AIP provides funding for improving operational characteristics of publicly owned airports, but is not a regular source of funding. Large projects are generally funded through this program, which requires a local match. There is also limited availability of loans from the State Division of Aeronautics.

ENVIRONMENTAL CONSIDERATIONS

The low-volume, mostly single-engine airplane character of airfield operations at Lampson Field, together with the predominantly agricultural nature of the surrounding land uses, has reduced environmental capacity restraints to a minimal level. Measures to minimize noise-related conflicts between the Airport and its surroundings are important and are incorporated into the planning criteria for Airport expansion.

VI. TRIBAL TRANSPORTATION SYSTEM

OVERVIEW

Improvements have been made over the past few years to develop government-to-government relations between the Federally Recognized Tribal Governments in Lake County and the Area Planning Council. As the regional transportation planning agency, the Area Planning Council remains committed to cooperating and coordinating with tribes and their designated representatives concerning planning and decision-making matters relating to the transportation system in Lake County.

Coordination and consultation efforts regarding the regional transportation planning process were briefly discussed in the Executive Summary of the 2001 Regional Transportation Plan. The Area Planning Council (APC) has committed to increase the level of transportation planning efforts in subsequent RTPs. As a result, Reservation/Rancheria lands, census data and transportation needs are included in this document to facilitate the ongoing efforts to increase transportation planning consultation and coordination with the seven tribes in Lake County. As mentioned in the Executive Summary, all correspondence to the tribes relating to the 2005 Regional Transportation Plan update is included as Appendix A.

SYSTEM DEFINITION

The Bureau of Indian Affairs (BIA) Road System is comprised of existing and proposed Indian Reservation Roads (IRR) for which the BIA has or plans to obtain legal right-of-way. The BIA has the primary responsibility to improve and maintain the roads on this system. To be included in the BIA Road System, the road must provide primary access to the reservation, serve commercial or industrial uses on trust land, connect arterial roads as part of the public road network, must be open to the public at all times, serve at least four Indian homes, or serve as public use to clinics, tribal administration buildings, community centers, schools.

The BIA IRR Inventory is composed of all public road systems on the reservation/rancheria that provide access to or through tribal lands and are important to the tribal members. Such roads may include tribal roads, BIA roads, county roads, city streets, all BIA roads off reservation necessary for primary access to trust lands, and other public roads which are contiguous to, originate on, or pass through tribal trust lands or tribal fee lands for a distance of not more than five miles or until they intersect another road of equal or higher functional classification.

Roads are classified into integrated systems by the functions they perform with regard to moving traffic and providing property access. Each road is ranked by its relative importance and the function it is intended to serve.

Within the IRR system there are two types of road classification systems: State Highway Classifications and BIA Road Classifications. Both the state and the BIA use functional classification as the basis for classifying their roads. However, the criteria used to determine specific classifications differ between the two systems.

Functional classification of roads has been used by state highway departments for many years for a variety of important highway functions. Functional classification identifies the role each street or highway plays in channeling traffic through a rural and/or urban environment in a logical and efficient manner. There are three general functional classification categories: Arterials, Collectors, and Local Roads.

There are four classes of roads in the BIA functional classification system:

Class 2: Major or minor arterial roads providing an integrated network having characteristics of serving traffic between larger population centers, generally without stub connections. May also link smaller towns and communities to major resort areas which attract travel over long distances and generally provide for relatively high overall travel speeds with minimum interference to through traffic movement. Generally provide for at least intercounty or interstate service and are spaced at intervals consistent with population density.

Class 3: Streets/roads which are located within communities serving residential and other urban type settings.

Class 4: Section line and/or stub type roads which collect traffic for arterial type roads, or make connections within the grid of the Indian Reservation Road Inventory. May serve areas around villages, or provide access to farming areas, schools, tourist attractions or various small enterprises. Also includes roads and vehicular trails for administration of forest, grazing, mining, oil, recreation, or other utilization purposes. This classification encompasses all those public roads not falling inter either Class 2 or 3 definitions set for above.

Class 5: Non-road type paths, trails, walkways or other designated types of routes for public use by foot traffic, bicycles, trail bikes, or other uses.

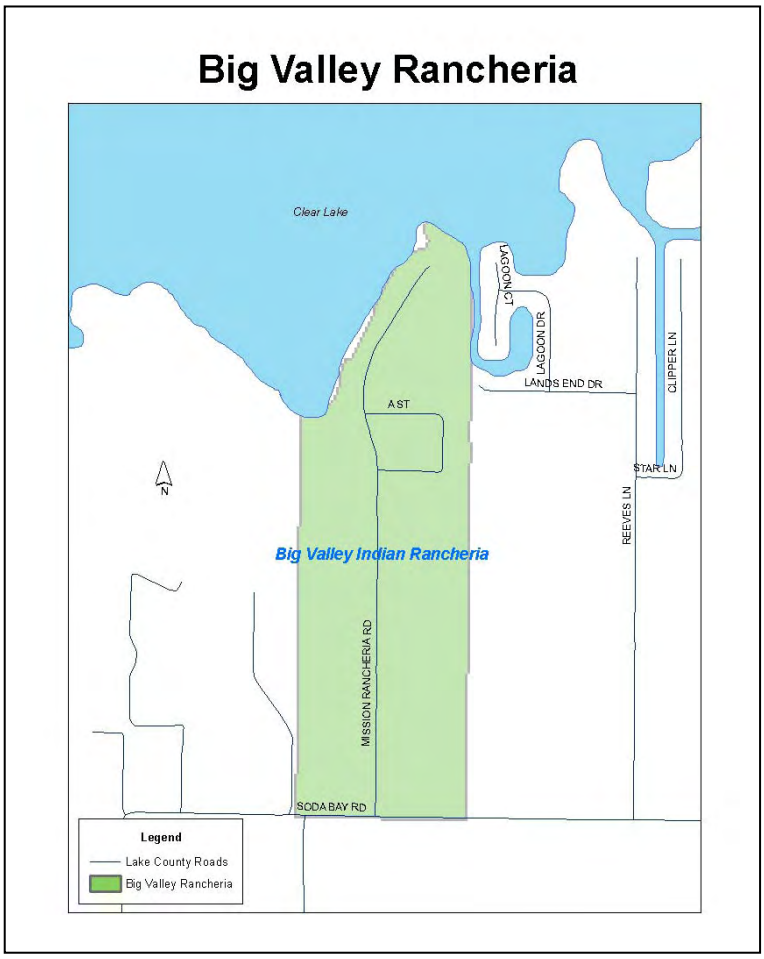
NEEDS ASSESSMENT

Big Valley Rancheria

The Big Valley Rancheria is comprised of 53.04 acres of flat bottomland on the southwest shore of Clear Lake in Lake County. The predominant land use is rural residential. A casino has been constructed on the west side of Mission Rancheria Road. The balance of the land is either in orchard crops or undeveloped. Other recreational, educational, and agricultural development is also anticipated, but no specific plans exist.

The U.S. Census Bureau Profile, 2000 General Demographic Characteristics, identified the total population at the Big Valley Rancheria to be 225. A total of 55 households are currently occupied on the Rancheria, of which 31 are owner-occupied and 24 are renter-occupied. The average household size is 5.77, with the median age being 15.4 years old.

Figure VI-1



According to the Bureau of Indian Affairs Roads Inventory (December 1997), the BIA Reservation Roads Inventory is composed of 3.25 miles, of which 1.20 is on the BIA Road System, and 2.05 miles are on county roads. The principal access road which forms the south boundary of the Rancheria is Soda Bay Road. Mission Rancheria Road, a county road, is the main north-south road through the Rancheria. The road has no signing and is in poor condition. The northern 0.1 mile of this road serves a potential residential subdivision with no homes built to date. Mission Way, a tribal road, loops to the east of Mission Rancheria Road and serves residential homes. The road is 15 feet wide, paved and in fair condition. Of the 3.25 miles in the BIA IRR Inventory of the Big Valley Rancheria, 1.20 miles are Class 3, and 2.05 (Soda Bay Road) are Class 4.

Elem (Sulphur Bank) Rancheria

The Elem Indian Colony lies on a gently sloping point on the lake front at the east end of Clear Lake in Lake County just north of the community of Clearlake Oaks. The Rancheria comprises 50 acres.

The U.S. Census Bureau (Profile of General Demographics Characteristics: 2000) found the total population of the Rancheria to be 69, of which 87% are under 62 years of age. The median age of the Rancheria is 21.2. Of the 15 housing units located on the Elem Rancheria, only three are owner-occupied, and the average household size is 4.50.

According to the BIA Roads Inventory (September 1996), the Elem Indian Colony is composed of 1.40 miles of BIA Roads (Functional Class 3), of which all are on the BIA Road System.

Elem Drive (BIA Route 120) provides the main access into the colony via an easement through private land. The 24-foot wide paved road continues through the colony past the tribal center then intersects with the west leg of Pomo Street. Pomo Street forms a loop serving several homes and is bisected by Elem Drive.

Figure VI-2

In the southeast corner of the colony, off Pomo Street, is a small cul-de-sac. Both Pomo Street and the cul-de-sac are paved in fair condition and are signed and marked. Elem Drive has a stop sign at its intersection with Sulpher Bank Road. Both Pomo Street and the Rancheria portion of Elem Drive are posted with 25 mph limits. Marked school crossings on Elem Drive are the only pavement markings on the Rancheria.

Lower Lake Rancheria (The Koi Nation)

Though a federally recognized Indian tribe, the Lower Lake Rancheria Koi Nation remains landless. The Lower Lake Rancheria was officially sold in 1956 when the County offered to acquire 99 acres of the rancheria to build an airport. The majority of Koi tribal members relocated to cities throughout the Bay Area.

In October 2004, the Koi Nation announced plans to build a tribal government gaming facility, resort and spa near Oakland International Airport in the city of Oakland (*www.koination.com*), however the entertainment resort has received opposition from the Oakland City Council. The tribal government continues to seek a land base on which to launch a program of economic development to provide a variety of services to its members, including adequate housing, healthcare, educational and vocational opportunities, and proper care for tribal elders.

Middletown Rancheria

Middletown rancheria is located two miles south of Middletown, south of the intersection of State Highway 175 and 29 approximately halfway between Calistoga and Clear Lake, thus the name “Middletown”. The rancheria encompasses 108.7 acres of tribal trust land.

Figure VI-3

With the exception of a community center, a cemetery, and the Twin Pines Casino, the remaining land use is rural residential. Census 2000 determined that 73 people live on the rancheria, and 51 of the residents are Native American. The average age is 23.5 for all residents, none of whom are older than 54. There are 19 housing units, of which 12 are owner-occupied. Residential development is mostly concentrated in the center of the rancheria along Rancheria Road. Housing is also sparsely scattered in the eastern portion of the rancheria.

Existing Roadway System

The existing 2.1 miles of public roads on the rancheria are constructed and maintained primarily by the BIA, Rancheria, and Department of Transportation (Caltrans). An additional 1.4 miles of BIA roadways are proposed for the next five to twenty years. Table VI-1 summarizes the surface conditions, ownership, and lengths of the current and proposed Middletown Roadway System.

Table VI-1
Middletown Rancheria Roadway System

Road Mileage by Surface Type				
Jurisdiction	**Paved**	**Gravel**	**Unimproved**	**Total Miles**
BIA Roads	1.3	0.4	0.4	2.1
Federal Roads	0.0	0.0	0.0	0.0
State Roads*	0.7	0.0	0.0	0.7*
County Roads	0.0	0.0	0.0	0.0
Proposed BIA Roads	1.4	0.0	0.0	1.4
Tribal Roads	0.3	0.2	1.7	2.2
TOTAL	3.0	0.6	2.1	5.7
% BIA Roads	43%	67%	19%	37%

** Highway 29 road mileage is calculated in the totals of both the BIA Roads and the State Roads totals. The Total does not duplicate this mileage.*

A traffic study was performed by PAIKI, a Native American Architecture, Engineering and Planning firm, in August 2002 to determine the average daily traffic (ADT) on main routes traveled within the Rancheria. ADT data was used in conjunction with inventory data to update the road inventory files, determine capacity deficiencies, and identify potential roadway improvement projects. Table VI-2 identifies current and 20-year projected ADTs for BIA Route 0220 and State Route 29.

Table VI-2
Middletown Rancheria
Average Daily Traffic Counts

BIA/State Route	Month	Current ADT	20-Year Projected ADT
0220	August	176	260
SR 29	August	8,649	12,844

Proposed Transportation Projects

A Reservation Transportation Improvement Plan was developed in the Middletown Rancheria 20-year Transportation Plan (October 2003) to provide a prioritized listing of projects road and other transportation-related improvement projects. Project costs are listed below in Table VI-3.

Table VI-3
Middletown Rancheria
Prioritized Project List

Project #	Project Name	Improvement	Length (mi.)	Cost Estimate	Responsible Agency
Phase 1					
1	Highway 29	Add acceleration and deceleration lanes	N/A	Cost not yet determined	CalTrans
2	Rancheria Rd.	Resurface and stripe Rancheria Road	0.3	$292,594	BIA
3	BIA 105	Construct	0.3	$567,606	BIA
4	Casino	Grade, drain and pave parking lot	N/A	Cost not yet determined	Rancheria
Phase 2					
5	BIA 104 (1)	Grade, drain and pave	0.1	$189,202	BIA
6	BIA 106	Construct	0.6	$1,135,212	BIA
Phase 3					
7	BIA 104 (2)	Construct	0.2	$378,404	BIA
8	BIA 107	Construct	0.3	$567,606	BIA
9	BIA 108	Grade, drain, and pave	0.2	$169,431	BIA

Future Developments

Middletown Rancheria is embarking on development projects that will generate a significant amount of traffic. The existing casino is currently being expanded to include a hotel and restaurants. There will also be significant residential development and construction of a variety

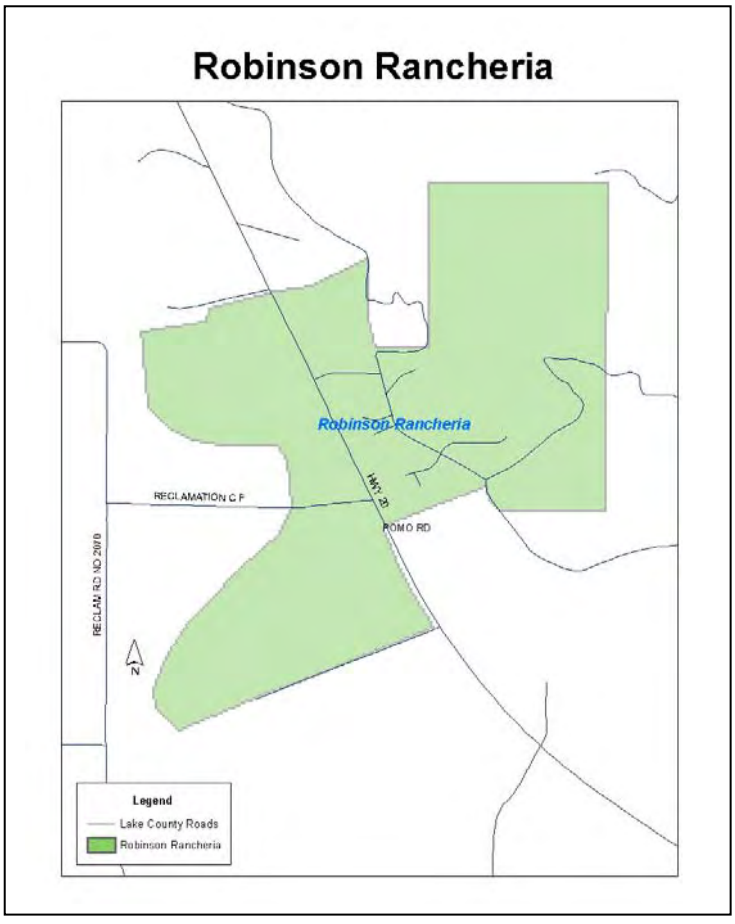
of public facilities, all which will generate more traffic than presently exists. The Middletown Rancheria Transportation Plan will assist the Rancheria and other agencies over the next 20 years to plan and prioritize necessary transportation improvement projects to meet increased traffic demands.

Robinson Rancheria

The Robinson Rancheria consists of 1,040 acres at six locations: 1) The original Rancheria located approximately two miles south of Upper Lake on State Route 29; 2) The new site consisting of the casino, tribal and administrative offices, and residential areas, located approximately 2.5 miles west of Nice on State Route 20; 3) The eastern site consisting of the Aurora RV Park and marina on Lakeshore Boulevard, located near the intersection of State Route 20, 4&5) Two sites consisting of approximately 51 acres are located along the old Nice Lucerne Cutoff Road; and 6) A 20 acre parcel located approximately 0.2 miles east of State Route 29 on Scotts Valley Road in Lakeport.

There are currently 137 people living on the rancheria, of which 118 are Native American. Less than 11% of the population is over 62 years of age, and the median age of the population is 19 years. A total of 39 houses are located on the rancheria, of which 25 are owner-occupied (U.S. Census Bureau-General Demographic Characteristics: 2000).

Figure VI-4



Existing Conditions

Access to the rancheria is primarily from State Route 20 and State Route 29. State Route 20 is a major highway that connects State Route 101 to the west and to Interstate 5 to the east. State Route 29 connects to the southern community of Lakeport along the western shore of Clear Lake. Other parcels of the Rancheria are accessible from Lakeshore Boulevard and old Nice Lucerne Cutoff Road. The tribal administrative office is located on Shigom Road near the casino on State Route 20.

Existing roads within the Rancheria are primarily in good condition; however some are still in need of paving. A field survey was conducted to determine the condition of all roads on the Rancheria. Each road was divided into individual segments that provided a greater level of detailed information

such as length, surface type, and general condition. Results of each segment can be found in the Traffic Circulation Report, prepared by the California Department of Transportation (Caltrans) in November 2002.

Future Developments

The Rancheria is in the process of expanding the casino which will result in additional traffic that will have minimal impact to State Route 20 and to Pomo Way. Details of the traffic impacts can be found in the Robinson Rancheria Expansion Traffic Impact Study, Whitlock & Weinberger Transportation Inc. (September 2002).

Two parcels located between the Nice Lucerne Cutoff Road and Stokes Avenue are being considered for the establishment of a Discovery Center. This Center will include culture, history, tourist information, environmental programs, nature walks and a wildlife area. The Nice Lucerne Cutoff Road will be upgraded from its dilapidated condition to accommodate only pedestrians and bicycles.

Additional homes are proposed along the eastern side of Acorn Road, which is located east of State Route 20 and serves as the main interior road for the northern parcel. This road is partially paved, and should be fully developed and upgraded by the year 2020. Homes may also be added to Flicker Circle and Meadow Lark Lane in the future. Future housing developments will result in very little additional traffic impacts to adjacent roads. The current Level of Service (LOS) for State Route 20 is "C" and will remain at this level for at least the next twenty years in the vicinity of Pomo Way.

Traffic on State Route 20 and 29 will increase as developments occur and as general population increases in the region. For future traffic volumes and road characteristics on all roads within the Rancheria for the years 2005, 2010, and 2020 can be found in Appendix A of the *Traffic Circulation Report (November 2002)*.

Deferred Maintenance Program

The Tribe has assumed the maintenance responsibility for roads on the Robinson Rancheria. Currently, BIA Route 232 is the only BIA road on the Rancheria. The total length of road is 0.8 miles. The rancheria is proposing to add the northern and southern remaining sections of Acorn Drive, Water Tank Access Road, and Pyle Road to the Indian Reservation Road (IRR) maintenance system.

Scotts Valley Band of Pomo Indians (of the Sugar Bowl Rancheria)

The Scott's Valley rancheria was re-established in 1992 after the Federal Government determined the tribe had been improperly dissolved. Although the original 56-acre parcel had been lost to the tribe in 1958, a 35-acre parcel was purchased with grant funding on Red Hills Road in Kelseyville in 1997.

Figure VI-5

Preliminary plans have been developed for possible development scenarios of the Red Hills property. If such plans come to fruition, the developed property will include approximately 35 homes, an apartment complex, retirement facility, restaurant, museum/cultural center, park and heli-pad. Approximately 250' of paved roadway currently exists to access residential housing, however additional infrastructure will be necessary to support development plans.

Upper Lake Rancheria

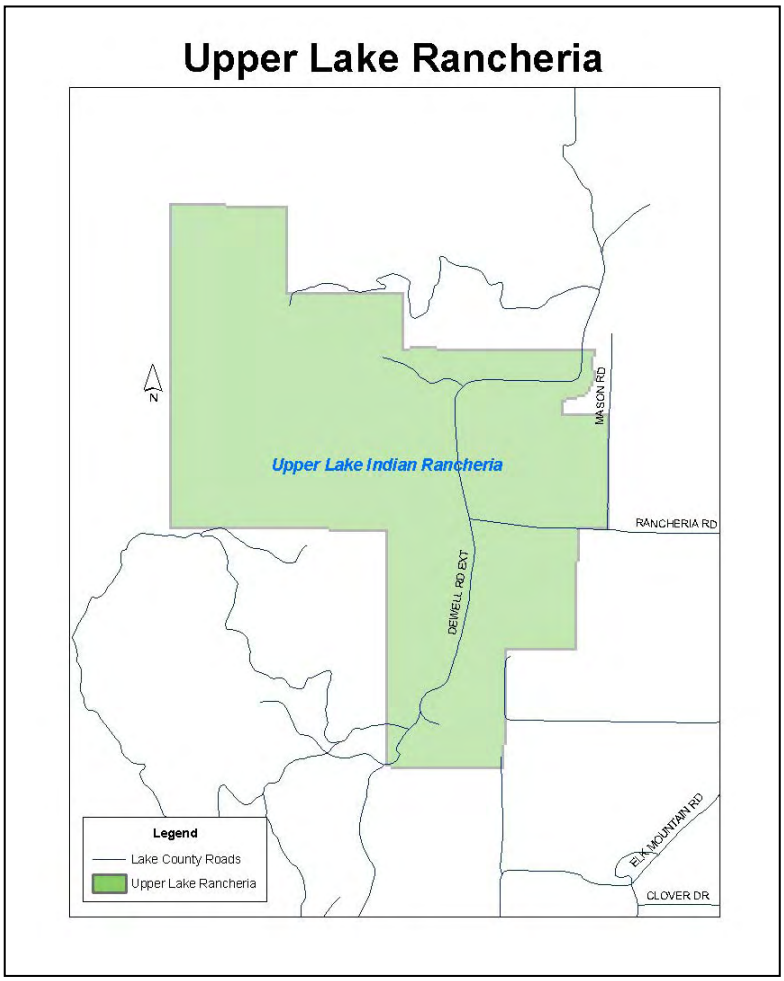
The Upper Lake Rancheria lies just north of the community of Upper Lake in Lake County and is comprised of approximately 600 acres. Most of the rancheria lies on flat bottom land, though this turns into rolling hills on a portion of Rancheria Road.

The land use is a mix of rural residences with pasture and some orchard crops. A center for itinerant farmworkers is located at the south end of Dewell Road Extention.

Current population of the Rancheria is 82, of which approximately 50% are Native American. There are a total of 34 housing units, of which at the time of the 2000 U.S. Census, only 24 were occupied. Sixteen of the occupied homes are owner-occupied, and the average household size is 3.13.

The BIA IRR Inventory serving the Upper Lake Rancheria is composed of 2.15 miles of county roads. The majority of the road system (2.05 mi.) is functional class 3, and the remainder (.10) is functional class 4. Since the Rancheria is comprised solely of county roads, it is not responsible for maintenance and/or construction needs of the roadway system.

Figure VI-6



Rancheria Road provides the main access into the Rancheria. The 36-foot wide paved road is in good condition. The road runs west from Elk Mountain Road, crosses Middle Creek, and then turns north at a T-Intersection with Dewell Road Extension. Rancheria Road then becomes an 18-22 foot wide paved road as it extends to the north boundary of the rancheria. This section of road serves 18 homes. North of the Rancheria it changes to 16-foot wide earth road. A 20' x 175' concrete bridge spans Middle Creek on Rancheria Road just east of the Dewell Road Extension intersection.

Dewell Road Extension runs south from Rancheria Road and provides access to five-homes and the farmworker center. The road is 18-22 feet wide, paved, and in fair/good condition. An unnamed 22-foot wide parcel road runs south to the labor camp building.

Mason Street runs north of Rancheria Road on the extreme northeastern boundary of the Rancheria and dead ends just before Middle Creek. The 30-foot wide road is paved and in poor condition.

Future development plans of the tribe are unknown.

GUIDING GOALS, POLICIES, AND OBJECTIVES

Goal

For tribal residents within Lake County to have safe, effective, functional transportation systems, including streets, roads, pedestrian and bicycle facilities, and transit.

Policies

Implement activities in a knowledgeable, sensitive manner respectful of tribal sovereignty.

Establish and maintain government-to-government relationships with the tribes in order to establish clear and open, ongoing communication between APC and the tribes.

Objectives

Consult with and involve the tribes in the development of planning documents. Routinely, this applies to development of the Regional Transportation Plan, the biennial State Transporttaion Improvement Program, and may also include the Regional Bikeway Plan.

Provide the tribes with information regarding various Federal, State, and local transportation grant programs for which they may qualify.

Routinely transmit APC's policy and program recommendations, actions, and information having potential effects on the tribes' land or resources to the tribes.

Meet with the tribes to review the status of the government-to-government relationships and exchange information.

ACTION PLAN

The Area Planning Council is committed to consulting and communicating with the seven tribes in Lake County on a government-to-government level concerning tribal transportation planning. Each of the tribes shall be considered sovereign nations and therefore actions to coordinate and promote the tribal transportation systems within the jurisdictions will be coordinated independently.

To further strengthen planning efforts, in addition to the public outreach process, individual contact will be made with each of the tribes during the development of short-range and long-range planning documents such as the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP).

FINANCING

Funding is available to the Area Planning Council from which the tribes within Lake County may benefit. Some of these funding sources are controlled directly by the APC, while some are awarded and administered by either State or Federal government agencies, such as Caltrans. Unfortunately, in some cases due to the current structure of many of the funding programs, the tribes themselves cannot be direct recipients of funds. A tribal project can, however, be eligible for the funds with another agency, such as a city, county or state agency, acting as the project sponsor and administering the project on behalf of the tribe.

Capital Funding Programs

State Transportation Improvement Program (STIP)

The STIP is the source of the majority of transportation related funding within the Lake County region. At the State level, these funds are divided into two programs—the Regional Improvement Program (RIP) and the Interregional Improvement Program (IIP). Regional transportation planning agencies (RTPAs) are given the authority to decide how to program the county share of RIP funds, subject to STIP eligibility guidelines. Categories for potential projects include Highways/Streets/Roads, Bicycle and Pedestrian and Transit. At this time, tribes are not eligible to be direct recipients of STIP funds, but could have an eligible project with a qualified project sponsor.

Normally, the APC receives an estimate of new STIP funding available for the region every two years. Unfortunately, as a result of the ongoing State fiscal crisis, no new STIP funds have been available to the region since 2002. It is unlikely that this situation will improve anytime in the near future.

A more complete discussion of the STIP funding can be found in the Backbone Circulation and Local Roads Element of this document.

Transportation Enhancements (TE)

The Transportation Enhancement (TE) Program is a Federal funding source that provides for projects that creatively and sensitively integrate surface transportation facilities into their surrounding communities. Projects must be over and above required mitigation and normal transportation projects. Projects must fall within one of twelve categories including bicycle and pedestrian facilities, landscaping and beautification, and historic rehabilitation.

The TE program is authorized by the federal government in 6-year cycles corresponding with the federal transportation bill. When regional TE funds are available, the Area Planning Council conducts a competitive application process in order to select projects for funding.

Federal Transit Administration 5311(f)

The Federal Transit Administration (FTA) Section 5311(f) Intercity Bus Program in California is designed to address the intercity travel needs of the residents in non-urbanized areas of the state, by funding services that provide them access to the intercity bus and transportation networks in California.

Section 5311(f) requires each state to spend fifteen percent of its annual Section 5311 apportionment "to carry out a program to develop and support intercity bus transportation," unless the Governor certifies that "the intercity bus service needs of the state are being met adequately." Assistance under Section 5311(f) must support intercity bus service in rural and small urban areas. Section 5311(f) specifies eligible intercity bus activities to include "planning and marketing for intercity bus transportation, capital grants for intercity bus shelters, joint-use stops and depots, operating grants through purchase-of-service agreements, user-side subsidies

and demonstration projects, and coordination of rural connections between small transit operations and intercity bus carriers."

This listing does not preclude other capital and operating projects for the support of rural intercity bus service. For example, the state may provide operating assistance to a public or private nonprofit organization for the direct operation of intercity service after appropriate consideration of participation by private for-profit service providers. Capital assistance may be provided to purchase vehicles or vehicle related equipment such as wheelchair lifts for use in intercity service. Charter and tour services are generally not eligible for FTA.

Emergency Relief Program

The Emergency Relief (ER) program is a special program from the Highway Trust fund for the repair and reconstruction of Federal-aid highways and roads on Federal lands; which have suffered serious damage as a result of natural disasters. Projects funded through the ER program must be located on a Federal-aid highway. FHWA has set a minimum ER funding threshold of $700,000 per disaster. In order for work to be eligible for the ER program, the local governing body must declare that a “local emergency” exists within its jurisdictional boundaries. The declaration must be submitted to the Office of Emergency Services within 10 days of the disaster. Once projects are approved by the Federal Highway Administration, they are administered by Caltrans.

Highway Bridge Replacement and Rehabilitation (HBRR)

The Highway Bridge Replacement and Rehabilitation (HBRR) Program is authorized by the Federal Transportation Equity Act for the 21st Century (TEA21). The purpose of the Program is to replace or rehabilitate bridges on public roads when the State and the Federal Highway Administration determine that a bridge is significantly important and is unsafe because of structural deficiencies, physical deterioration, or functional obsolescence.

About $160 million of Federal funds are made available to local agencies annually. The Federal reimbursement rate is 80% (88.53% for bridge railing replacement) of the eligible participating project costs. Candidate projects are submitted directly to Caltrans for review on an annual basis. Successful projects are included in the HBRRP multiyear plan.

Hazard Elimination Safety Program

The Hazard Elimination Safety Program (HES) is a Federal safety program that provides funds for safety improvements on all public roads and highways. Local agencies compete statewide for HES funds by submitting candidate safety projects to Caltrans for review and analysis.

Typically, the applicant must be an incorporated city or a county within the State of California. Exceptions to this requirement will be reviewed on a case by case basis. Applicants that do not represent a city or county must provide written justification for the exception and attach it to the application.

Environmental Enhancements and Mitigation

The Environmental Enhancement and Mitigation (EEM) Program provides funding for environmental enhancement and mitigation projects which are directly or indirectly related to the environmental impact of modifying existing transportation facilities, or for the design, construction or expansion of new transportation facilities. Projects must be over and above the required mitigation for the related transportation project and must fall into one of the following three categories: Highway Landscaping and Urban Forestry, Resource Lands, and Roadside Recreation.

The Legislature is authorized to allocate ten million dollars annually for the program. Applications are accepted annually by the California State Resources Agency in Sacramento. No matching funds are required, however, projects that include the greatest proportion of other monetary sources of funding will be rated highest. Grants are generally limited to $250,000.

BIA Indian Reservation Roads (IRR) Program

The purpose of the IRR Program is to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, and communities for Native Americans, visitors, recreationalists, resource users and others while contributing to economic development, self-determination, and employment of Native Americans.

The IRR Program funds are authorized as part of the surface transportation authorization acts (currently TEA-21) as part of the Federal Lands Highway Program (FLHP). The program is administered by the BIA Department of Transportation and the Federal Land Highway Office of the FHWA. From the annual program funding amounts, funding is deducted from the top to pay for operating expenses, administration, and the Tribal Technical Assistance Program (TTAP) centers for Tribal Governments. An additional 2% is set-aside for transportation planning by Tribal Governments.

The remaining funds (approximately 85%) are distributed by the BIA Department of Transportation to the 12 BIA Regional Offices for construction projects. Funds are allocated based on a "Relative Needs" formula.

Indian Reservation Roads Maintenance Program

These funds are intended for maintenance activities on roads serving the tribes. Unfortunately, the funding levels of the program are exceedingly inadequate for the work needed. Nationally, BIA receives about $26 million per year, with only $700,000 of that earmarked for the entire State of California.

Bridges on Indian Reservation Roads

This program is authorized under the HBRR Program and provides funding for rehabilitation or replacement of bridges or culverts on public roads meeting the definition of an IRR. Each BIA Regional Office works with Tribal, State, and local governments to develop a priority list of bridge projects and identify sources for the 20% matching funds required by the program.

Transportation Planning Programs

Tribal Technical Assistance Program

The Tribal Technical Assistance Program (TTAP) was created by the Federal Highway Administration (FHWA) in 1991 in order to help develop a sound transportation system through training, technical assistance, and technology transfer. It is funded by FHWA and Bureau of Indian Affairs. The mission of program is to support tribal workforce development and enhance tribal administrative capacity to manage and maintain transportation infrastructure, recreational travel and tourism, related tribal training and education needs. The TTAP centers assist tribal governments in developing intergovernmental coordination, transportation planning, and project selection.

Caltrans Transportation Planning Grants

Caltrans administers six different transportation planning grant programs. With the exception of the Environmental Justice Program, Tribal governments must have a project sponsor, such as a city or county, in order to participate in these grant programs. Grants applications are accepted annually by Caltrans and compete on a statewide level.

- Environmental Justice - Promotes context sensitive planning in diverse communities and provides means to help low-income, minority and Native American communities, including community based organizations (CBOs) become active stakeholders in transportation planning and project development.

- Community Based Transportation Planning - The CBTP grant program is primarily used to seed planning activities that encourage livable communities. CBTP grants assist local agencies to better integrate land use and transportation planning, to develop alternatives for addressing growth and to assess efficient infrastructure investments that meet community needs.

- Partnership Planning – Provides funding for RTPAs to perform transportation planning studies jointly with Caltrans that have a statewide or multi regional significance. Benefits of the program may include (1) improved public involvement efforts, *including government-to-government relations*, (2) enhanced ability to plan, collect data, and provide information on transportation systems, and (3) improve ability to plan and implement services, systems, and projects. Tribal governments may apply for a grant as a subrecipient.

Federal Transit Administration 5313(b)

The Section 5313(b) program provides financial assistance to States for Statewide planning and other technical assistance activities, planning support for nonurbanized areas, research, development and demonstration projects, fellowships for training in the public transportation field, university research, and human resource development.

Funds are allocated by a formula that is based on information received from the latest census and the State's urbanized area as compared to the urbanized area of "all" states. Tribal governments may apply for a grant as a subrecipient.

GLOSSARY OF TERMS AND ACRONYMS

AB 2928 Assembly Bill 2928 is part of the State's Traffic Congestion Relief Program and provides money to cities and counties for preservation of the local road system through 2006.

AB 69 State legislation (Chapter 1253, Statutes of 1972) created the multi-modal California Department of Transportation and required State and Regional Transportation Plans to address transportation issues and assist local and state decision makers shape California's transportation infrastructure.

Action Element Identifies programs and actions to implement the Regional Transportation Plan.

ADA Americans with Disabilities Act

APC See LC/CAPC

BTA Bicycle Transportation Account

Caltrans California Department of Transportation. This Department is primarily responsible for the planning, design, construction, maintenance, and operation of the State's Transportation System. The Department also provides technical assistance to local and regional governments.

CASP California Aviation System Plan: Prepared by Caltrans every five years as required by the PUC. The CASP integrates regional aviation system planning on a statewide basis.

CEQA California Environmental Quality Act: A state-mandated process in which the environmental effects associated with the implementation of a project is fully disclosed.

CIP Capital Improvement Program

COATS California Oregon Advanced Transportation Systems

CTC California Transportation Commission, a decision-making entity established by AB 402 of 1977 to advise and assist the Secretary of Transportation and the legislature in formulating and evaluating state policies and plans for transportation programs.

EIR Environmental Impact Report

Financial Element Summarizes the cost of implementing the projects in the Regional Transportation Plan considering a financially constrained environment.

FTA Federal Transit Administration, a component of the U.S. Department of Transportation, responsible for administering the federal transit program under the Federal Transit Act, as amended, and the Intermodal Surface Transportation Enhancement Act (ISTEA) of 1991.

FTIP Federal Transportation Improvement Program: a three-year list of transportation projects proposed for federal funding within the RTPA.

Goal A desired end-result toward which effort is directed. They are expressed in general terms and are timeless.

Goods A product of agriculture or mining or an article of commerce.

IIP Interregional Improvement Program, funded from 25% of new STIP funding.

ISTEA Intermodal Surface Transportation Efficiency Act of 1991, superceded by TEA 21, mandated planning requirements and created funding programs for transportation projects.

ITIP Interregional Transportation Improvement Program, funds capital improvements, on a statewide basis. Projects are nominated by Caltrans and submitted to the California Transportation Commission for inclusion in the STIP. The ITIP has a four-year planning horizon and is updated every two years by the CTC.

ITS Intelligent Transportation Systems is the advanced sensor, computer, electronics and communication technologies and management strategies to increase the safety and efficiency of the surface transportation system.

LOS Level of Service, a qualitative measure of the effect of a number of factors, which for roads, streets, and highways include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LTA Lake Transit Authority

LC/CAPC Lake County/City Area Planning Council: formed as a joint powers agency in 1972, as mandated by state law, the Transportation Development Act (TDA). Acting as the Regional Transportation Planning Agency in Lake County, LC/CAPC programs and allocates various types of state and federal transportation funds to Caltrans, the County of Lake and the two incorporated cities in Lake County.

Mode A particular form of transportation. Examples include, automobiles, railroads, bicycles, trucks, buses and ships. Multi-Modal refers to a grouping of these transportation forms.

NEPA National Environmental Protection Act: Federal Legislation which created an environmental review process, but pertains only to projects having federal involvement through financing, permitting, or Federal land ownership.

Objective A broadly defined management course intended to guide decision-making towards the attainment of goals. An objective may also set the limits within which effort toward goal achievement must stay.

OWP Overall Work Program: Is adopted annually to identify and program transportation planning tasks for the coming fiscal year.

PMP Pavement Management Program

Policy A measurable, attainable and desired level of achievement of a goal including the time span within which it is to be achieved, reflecting established priorities and falling within constraints set by policy.

Proposition 42 California ballot measure passed in March 2002 which permanently dedicated all sales tax on gasoline for transportation purposes to be divided as follows: 20% for city streets; 20% for county roads; 20% for transit; and 40% for the STIP.

RIP Regional Improvement Program, funded through 75% of new STIP funding and subdivided by formula into county shares.

RTIP Regional Transportation Improvement Program: a list of proposed transportation projects submitted to the California Transportation Commission by Regional Transportation Planning Agencies for state funding. The current RTIP has a five-year planning horizon (future RTIPs will have four-year horizon) and is updated every two years by the RTPA.

RTP Regional Transportation Plan: Planning documents developed by RTPAs in cooperation with Caltrans and other stakeholders. They are required to be developed every four years per State legislation and are designed to provide a clear vision of the regional transportation goals, policies, objectives and strategies.

RTPA Regional Transportation Planning Agency: Programs or allocates state and federal transportation funds to Caltrans, the County of Mendocino and the four incorporated cities in Mendocino County (Ukiah, Fort Bragg, Willits, and Point Arena).

SAFE Service Authority for Freeway Emergencies: Administers callbox program.

SB 45 State Bill 45 (Kopp), mandated major transportation reform legislation impacting many areas of transportation planning, funding and development.

SB 1435 State Legislation (Kopp) implementing ISTEA in California.

SB 787 State Legislation (Chesbro) passed in 2001 which established the Rural Transit System Grant Program.

SHOPP State Highway Operation and Protection Program, a program created by state legislature, which includes projects needed to maintain the integrity of the state highway system, primarily associated with safety and rehabilitation without increasing roadway capacity. SHOPP is a four -year program of projects, approved by the CTC separately from the STIP cycle.

STIP A four-year list of transportation projects proposed in RTIPs and PSTIPs, which are approved by the CTC. Those projects that have federal funding components will also appear in the FTIP and FSTIP.

TAC Technical Advisory Committee: Advises LC/CAPC Board of Directors on technical matters.

TDA Transportation Development Act

TEA Transportation Enhancement Activities Program: Federal funding source to be used for transportation-related capital improvement projects that enhance quality-of-life, in or around transportation facilities.

TEA-21 Transportation Equity Act for the 21st Century, which was signed into law and amended in 1998. This law made a number of changes in the metropolitan transportation planning process. These changes reflect the evolution and maturing of the nation's transportation planning process since the passage of ISTEA.

TCRP Traffic Congestion Relief Program

TIP Transportation Improvement Program

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APPENDICES

A. Functional Classification System, State and Local Routes in Lake County, Regional Transportation Plan, Lake County 1994 Update

B. Outreach Efforts in Developing 2005 Regional Transportation Plan

C. Roadway and Intersection Traffic Volume Projections and Capacity Analysis, Lake Countywide Roadway Needs Study, Whitlock & Weinberger, December 2000

D. Two Lane Highways Levels of Service Description, Regional Transportation Plan, Lake County 1994 Update

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APPENDIX A

Functional Classification System

State and Local Routes in Lake County

Functional Classification System
State and Local Routes in Lake County

Functional classification is a process whereby highways are grouped into classes according to the character of service they provide. The hierarchy which is established is indicative of the relative importance of each highway within the State and the Region.

In Lake County, the roadways within the highway system are classified into a system of arterials, collectors and local roads. Arterials in Lake County are limited to State Routes. At the lower end of the State system, there are two routes which are classified as collectors. It is at the collector level where the State system merges with the higher classes of the County highway system. The County highway system is generally composed of major and minor collectors and local roads. The cities of Clearlake and Lakeport each have a separate classification system of arterials, collectors, and local streets. These municipal classification systems are not significant on a Statewide or regional basis and are not considered in the regional classification system presented below:

Principal Arterials

This network of highways services statewide and interstate travel. They are a part of a continuous statewide network which links virtually all urbanized areas. In Lake County, Principal Arterial routes include: Route 20 from the Mendocino County link to Upper Lake and from the junction of Route 20/Route 53 to the Colusa County link, Route 29 from Lower Lake to Upper Lake, and Route 53.

Minor Arterials

Minor Arterials link cities and towns to form an integrated network of interstate and intercounty service. They are generally spaced so that developed areas are within a reasonable distance from an arterial highway. State Route 29 from the Napa County line to Lower Lake, State Route 20 between Upper Lake and the junction of State Route 53, and the Hopland Grade segment of State Route 175 are Minor Arterials in Lake County.

Major Collectors

Urban areas and other traffic generators of intracounty importance which are not served by higher systems are often served by Major Collectors. The more important intra-regional travel corridors are served by Major Collectors. State Route 175 between Middletown and State Route 29 near Kelseyville is the only Major Collector in the State system within Lake County. Approximately fifteen percent (15%) of the County highway system consists of Major Collectors. These represent the highest level of the County Road system.

Minor Collectors

Traffic from local roads is collected by this system. Minor Collectors are often spaced at intervals so that all developed areas are within a reasonable distance from a collector road. Minor Collectors serve small communities which are unserved by higher systems and connect locally important traffic generators with less developed parts of the Region. There are no State routes of this status in the Region. About ten percent (10%) of the County highway system consists of Minor Collectors.

Local Roads

Access to adjacent land use is the primary function of the Local Road System. These roads provide for travel over relatively short distances except in very remote areas. Approximately seventy-five percent (75%) of the County highway system falls into this category.

APPENDIX B

Outreach Efforts in Developing

2005 Regional Transportation Plan

LAKE COUNTY/CITY AREA PLANNING COUNCIL

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January 13, 2003

Mr. Anthony Jack, Chairperson
Big Valley Rancheria
2726 Mission Rancheria Road
Lakeport, CA 95453-4030

Honorable Chairperson Jack:

State law requires that regional transportation planning agencies adopt a Regional Transportation Improvement Program (RTIP) each odd year and submit the document to the California Transportation Commission (CTC) by December 15. However, this year, the Commission has delayed the RTIP submittal date to April 12, 2004. The primary reason for this delay was to be able to provide Caltrans and the regional transportation planning agencies with the best possible estimate of funding expected to be available. Fund estimates are usually available approximately four months prior to completion of the RTIP.

The California Transportation Commission adopted the 2004 Fund Estimate at their meeting December 11, 2003. As expected, there is very little capacity available in the regional share available to the Area Planning Council for programming new projects in the 2004 Regional Transportation Improvement Program. In fact, many projects programmed in 2002 must be pushed out into later years due to the statewide funding shortfall. APC staff will be working with our Technical Advisory Committee over the next two months to develop a draft RTIP that is in line with new revenue projections. We expect to have the RTIP adopted at the March 10, 2004 APC meeting.

Perhaps the only positive news to share is that there may be approximately $917,000 in Transportation Enhancement (TE) funding may be available for programming by APC over the next several years. Enhancement projects are those that are typically considered to be above and beyond what is normally funded through the transportation program. In Lake County we have in the past decided to use TE funding solely for bicycle and pedestrian improvements. Continuing this policy may be more problematic this cycle since TE projects require a match and the County and cities are struggling just to maintain their existing systems. The APC Board may choose to keep these funds available for street and road improvements in the future.

The APC will keep your Tribe informed of Board decisions regarding implementation of the TE program in Lake County.

Looking ahead to 2004, we will be again updating the Regional Transportation Plan. It is our intent to include more specific information regarding your tribe's transportation needs and priorities in the new plan. We expect to begin work on the update in late summer and adopt the new plan by June, 2005.

Please contact APC Staff Consultant Phil Dow if there are any questions regarding the 2004 Regional Transportation Improvement Program or the upcoming Regional Transportation Plan process.

Sincerely,

William C. Kranz
Executive Director

cc: Dick Lamkin, APC Chair
Cheryl Willis, Caltrans, District 1

* Note: This letter was sent to all Tribal Chairs & Administrators

Update of Pavement Management Program and GIS Linkage

by Nephele Barrett

The Area Planning Council has included in its 2004/2005 Work Program a project to update the pavement management programs (PMP) for the County of Lake, City of Lakeport, and City of Clearlake. Also included in the work element is a linkage between the pavement management program and geographic information system (GIS).

A PMP provides for a systematic method of determining roadway pavement maintenance, rehabilitation and reconstruction needs. The PMP used in Lake County is a computerized system which includes a database of road conditions and a reporting system capable of providing various information including recommended maintenance and cost estimates.

As part of this project, the street and roadway sections throughout the County will be examined and given a score between 0 and 100, called a pavement condition index, or PCI. A newly constructed street would have a PCI of 100, while a failed street would have a PCI of 10 or less. Pavement conditions are classified according to PCI ranges as follows: Excellent (90-100), Very Good (70-89), Good (50-69), Poor (25-49) and Very Poor (0-24). By determining the current condition of streets, the program can determine the most cost effective expenditure of available funds.

Pavement maintenance follows the old colloquial saying of "pay me now, or pay me later." History has shown that it costs less to maintain streets in good condition than to repair streets that have failed. By allowing pavements to deteriorate, streets that once cost only $1.75/sq. yd. to slurry seal may soon cost $15.00/sq. yd. to overlay and upwards of $47.00/sq. yd. to reconstruct.

Based on the principle that it costs less to maintain streets in good condition than bad, the Pavement Management System strives to develop a maintenance strategy that will first improve the overall condition of the network to an optimal PCI somewhere in the neighborhood of 80 to 90, and then sustain it at that level.

Unfortunately, many of the streets and roads in the area are already at the point of needing reconstruction. With current levels of funding for street rehabilitation and maintenance, only a small portion of the needed work can be done. In order to achieve even a mediocre overall network condition, additional sources of revenue will be needed.

Continued on Page 4

Transportation In And Around Your County...What Do You Think?

by Lisa Davey-Bates

The Lake County/City Area Planning Council (APC) has incorporated in its 2004/2005 Regional Transportation Planning Work Program an element to update the 2001 Regional Transportation Plan.

The Regional Transportation Plan (RTP) is the long-range planning document for Lake County's transportation system through the year 2025. It is multi-modal, meaning it looks at all types of transportation such as the State highway system, the local road system, transit, aviation, bicycling and walking. It assesses current transportation, identifies needs and problems, and suggests actions to solve these problems and improve transportation throughout the region. The plan also considers financing options in relation to projects discussed within the plan. The Regional Transportation Plan area encompasses all of Lake County, including the incorporated cities of Clearlake and Lakeport.

RTPs are required to be updated every four years. Since the revision of the 2001 Regional Transportation Plan was extensive and funding has been significantly reduced/delayed for transportation-related projects, only minor changes are anticipated.

The Lake County/City Area Planning Council staff will focus primarily on interagency coordination, public involvement, Native American involvement and private sector involvement on the update to the 2005 Regional Transportation Plan. Several input methods such as public meetings, surveys, press releases, and circulation of the draft 2005 Regional Transportation Plan may be implemented to meet this goal. For more information on the RTP process or specific projects, please call Lisa Davey-Bates, Dow & Associates, 463-1806.

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Phillip J. Dow, Staff Consultant
367 N. State Street, Suite 206
Ukiah, CA 95482
Phone 707-463-1806
Fax 707-463-2212

September 7, 2004

Donald Arnold, Chairperson
Scotts Valley Rancheria
9700 Soda Bay Road
Kelseyville, CA 95451

Honorable Chairman Arnold:

During Fiscal Year 2004/05, the Lake County/City Area Planning Council (APC) will be conducting an update of the 2001 Regional Transportation Plan (RTP). Although the RTP was adopted only last year, we are required to update the plan for 2005. All rural transportation planning agencies are required to update their plans on four-year cycles.

The California Department of Transportation (Caltrans) has prepared and the California Transportation Commission has adopted Regional Transportation Plan Guidelines as well as supplements to these guidelines. Based on our review of the supplemental guidelines adopted last December, we intend to strengthen the following areas of the Lake County Regional Transportation Plan:

- **Interagency Coordination and Public Involvement**. More information regarding interagency coordination will be included. Specifically, our recent efforts with the Wine Country Inter-Regional Partnership (IRP) will be summarized.
- **Tribal Government Issues**. We intend to add a new section of the plan that identifies each of the seven Lake tribes, their reservation/rancheria lands, and transportation issues.
- **Private Sector Involvement.** Relationships with trucking firms, major employers, and businesses need to be strengthened and documented.
- **Financially Unconstrained Projects.** We will be adding a list of needed projects that are beyond our revenue resources for the 20-year period encompassed by the plan.

There will undoubtedly be other issues that will be identified during the course of the update this year, but we would expect that this list of issues will be relatively short since a comprehensive update was completed just last year.

* Sent to all tribes.

I will be available to consult with your tribal council regarding the 2005 Regional Transportation Plan to ensure tribal transportation issues are properly identified in the updated plan. Please let me know if you would like me to address your tribal council early in the regional transportation plan process. If you would like such a presentation, the months of October or November would be best.

We expect to produce a draft regional transportation plan early in 2005. Regardless of whether your tribe would like to consult with the Area Planning Council, a copy of the draft 2005 plan will be sent to you for comment.

The APC is aware that the Bureau of Indian Affairs several years ago prepared tribal transportation plans for many tribes. If the BIA prepared a plan for your tribe, or if you have a more current transportation plan, please provide us with a copy so that we can include accurate information into the update.

Sincerely,

Phillip J. Dow
APC Staff Consultant

cc: Dick Lamkin, APC Chair
William C. Kranz, Executive Director

/pd

AGENDA
LAKEPORT CITY COUNCIL
REGULAR MEETING
Wednesday, January 26, 2005
City Council Chambers, 225 Park Street, Lakeport, California

Any person may speak for three (3) minutes on any agenda item; however, total public input per item is not to exceed 15 minutes, extended at the discretion of the City Council. This rule does not apply to public hearings. Non-timed items may be taken up at any unspecified time.

I. CALL TO ORDER: **6:00 p.m.**
II. ROLL CALL:
III. PLEDGE OF ALLEGIANCE:

IV. ACCEPTANCE OF AGENDA: Move to accept agenda as posted, or move to add or delete items.

Urgency Items: If to add item, Council is required to make a majority decision that an urgency exists (as defined in the Brown Act) and a 2/3rds determination that the need to take action arose subsequent to the Agenda being posted.

V. COMMUNICATIONS:

A. Citizen Input: *Any person may speak for 3 minutes about any subject within the authority of the City Council, provided that the subject is not already on tonight's agenda. Persons wishing to address the City Council are required to complete a Citizen's Input form and submit it to the City Clerk prior to the meeting being called to order. While not required, please state your name and address for the record.*

B. Presentations:

1. Presentation of Service Award Pins to the following employees:

Rose Ingham, Police Department	20 year
Bill Mooney, Police Department	10 year
Tom Carlton, Community Development Dept.	5 year

2. Presentation by Phil Dow, for Lake County/City Area Planning Council regarding update of 2001 Regional Transportation Plan.

C. Correspondence:

1. Consideration of letter from City of Fortuna regarding legislation that would amend the Americans with Disabilities Act to require notice prior to filing a lawsuit.

2. Consideration of letter from Sue Stiles, Lakeport Yoga Center regarding utility billing for her business at 422 Lakeport Blvd.

VI. CONSENT CALENDAR: *The following Consent Agenda items are expected to be routine and noncontroversial. They will be acted upon by the Council at one time without any discussion. Any Council Member may request that any item be removed from the Consent Agenda for discussion under the regular Agenda.*

A. Ordinances: Waive reading except by title, of any ordinances under consideration at this meeting for either introduction or passage per Government Code Section 36934.

B. Warrants: Approval of warrants as listed on Warrant Register dated January 26, 2005.

LAKE COUNTY/CITY AREA PLANNING COUNCIL

William C. Kranz, Executive Director
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Phillip J. Dow, Staff Consultant
367 N. State Street, Suite 206
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Phone 707-463-1806
Fax 707-463-2212

April 14, 2005

Anthony Jack, Chairperson
Big Valley Rancheria
2726 Mission Rancheria Road
Lakeport, CA 95453

Honorable Chairperson Jack:

State law requires regional transportation planning agencies (RTPAs) develop Regional Transportation Plans (RTP) every four years in rural areas. RTPs are planning documents to assist in defining the county's goals for the transportation system. Modes of transportation such as highways/local roads, bicycle, pedestrian and aviation are addressed in the Plan. RTPs include the following components:

- Policy Element – reflects the mobility goals, policies and objectives of the region
- Action Element – identifies programs and actions to implement the RTP
- Financial Element – summarizes the cost of implementing the projects in the RTP considering a financially constrained environment

The California Department of Transportation (Caltrans) prepared a supplement to the adopted 1999 Regional Transportation Plan guidelines. Based on a review of the supplement to the guidelines, the Lake County/City Area Planning Council (APC), the regional transportation planning agency in Lake County, determined tribal government issues needed to be strengthened in the 2005 Regional Transportation Plan Update.

Attached please find a copy of the *Draft* Tribal Transportation System to be included in the 2005 Regional Transportation Plan Update. Please pay particular attention to information pertaining to your tribe. There are certainly areas of this tribal section that will need updating since much of the material incorporated into the document was nearly a decade old.

Please review the Tribal Transportation System portion of the 2005 Regional Transportation Plan and respond with comments no later than May 6th, 2005. I will be on vacation until April 25th, 2005, however I would be happy to answer any questions or concerns that you may have regarding the RTP after that date. If you would like assistance in the interim, please contact Phillip Dow at the office of Dow and Associates, at 707-463-1806.

Sincerely,

Lisa Davey-Bates

Lisa Davey-Bates, Associate Planner

/ladb

Enclosure

Cc: William Kranz, Executive Director
Phillip J. Dow, Staff Consultant
Gene Preston, Tribal Administrator

* This letter was sent to all six of the tribal chairpeople & administrators in Lake Co.

Lake County
Business Outreach & Response Team (BORT)

Friday, May 20, 2005
8:30 a.m.

Sutter Lakeside Hospital Wellness Center
(Located on the lower level of the Administration Bldg. which is across from the Emergency Dept. The entrance is in the back of the bldg. Follow the posted signs around the parking lot)

AGENDA

Call to Order / Introductions
Chuck Doty, Executive Director, BORT

Sutter Lakeside Hospital Presentation
Administrative Staff Member TBA

2005 Regional Transportation Update
Phillip Dow, Staff Consultant – LC/APC

Local Economic Development Project Updates
Chuck Doty

Adjournment

Next Meeting: July 29, 2005
7:30 a.m.
Location TBA

LAKE COUNTY/CITY AREA PLANNING COUNCIL

William C. Kranz, Executive Director
160 Fifth Street
Lakeport, CA 95453
(707) 263-1600/Fax 263-1826
www.lakeapc.org

Phillip J. Dow, P.E., Staff Consultant
367 N. State Street, Suite 206
Ukiah, CA 95482
(707) 463-1806/Fax 463-2212

July 18, 2005

Redbud Library
14785 Burns Valley Road
Clearlake, CA 95422

RE: 2005 Lake County Regional Transportation Plan and Draft Negative Declaration

To Whom It May Concern:

Enclosed, you will find a copy of the Draft 2005 Lake County Regional Transportation Plan, Draft Negative Declaration, and Notice of Public Meeting. We would like these documents made available for public review at the library, however, they do not need to be entered into the library system. We will be sending a copy of these documents directly to each library branch in Lake County. The 30 day public review period for the documents will begin on Monday, August 1, 2005, and end on Wednesday, August 31, 2005.

Thank you very much for your assistance. If you have any questions, please feel free to call me at 707-463-1806.

Sincerely,

COPY

Lisa A. Davey-Bates
Associate Planner

/ladb

Enclosures

(Sent to all four libraries in L.C.)

Lake County/City Area Planning Council

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Phillip J. Dow, P.E., Staff Consultant
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(707) 463-1806/Fax 463-2212

July 18, 2005

NOTICE OF PUBLIC MEETING AND AVAILABILITY
OF 2005 REGIONAL TRANSPORTATION PLAN AND DRAFT NEGATIVE DECLARATION
FOR PUBLIC REVIEW

NOTICE IS HEREBY GIVEN THAT staff to the Lake County/City Area Planning Council will conduct two public meetings on the Draft 2005 Lake County Regional Transportation Plan. The purpose of the meetings is to receive public comments and input prior to preparation of the final Plan. The following is a schedule of meeting dates, times, and locations:

August 3, 2005 / 3:00-6:00pm
Lamkin-Sanchez Transit Operations Center
9240 Highway 53
Lower Lake, California

August 4, 2005 / 3:30-6:00 pm
Lakeport Senior Center
527 Konocti Avenue
Lakeport, California

Project Description: The Regional Transportation Plan (RTP) is a transportation planning document prepared by the Lake County/City Are Planning Council. The Plan provides a vision of regional transportation goals, policies and objectives. The RTP considers all modes of travel, including local streets and roads, State Highways, public transit, bicycle, pedestrian and aviation. It assesses current transportation, identifies needs and problems, and suggests actions to solve these problems and improve transportation throughout the region. The plan also considers financing options in relation to projects discussed within the plan. Prior to adoption of the final Plan, the Lake County/City Area Planning Council will hold a public hearing(s) on the Plan and a corresponding environmental document evaluating the impacts of the Plan.
Project Location: The Regional Transportation Plan area encompasses all of Lake County, including the incorporated cities of Lakeport and Clearlake.
Environmental Determination: The Lake County/City Area Planning Council has prepared a Draft Negative Declaration for the above project (no significant environmental impacts are anticipated which cannot be adequately mitigated).
Public Review Period: August 1, 2005 through August 31, 2005.

Your comments regarding the Draft Regional Transportation Plan and/or environmental impacts are invited. Written comments should be submitted to the Lake County/City Area Planning Council, 367 N. State Street, Ste. 206, Ukiah, CA, 95482 prior to the public meetings. Oral comments may be presented during the meetings.

For additional information, please contact Phil Dow or Lisa Davey-Bates at the Lake County/City Area Planning Council, 707-463-1806.

PHILLIP J. DOW
Staff Consultant

COPY

LAKE COUNTY/CITY AREA PLANNING COUNCIL

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www.lakeapc.org

Phillip J. Dow, P.E., Staff Consultant
367 N. State Street, Suite 206
Ukiah, CA 95482
(707) 463-1806/Fax 463-2212

Transmittal:

To: News Media of Lake County

From: Lisa Davey-Bates, Associate Planner
Lake County/City Area Planning Council

Re: PUBLIC SERVICE ANNOUNCEMENT:
2005 Regional Transportation Plan
Public Meeting Schedule

Date: July 20, 2005

☐ Urgent ☒ For Your Use ☐ Please Complete ☐ Please Reply ☐ Please Sign ☐ Please Pay

Comments:

Please release the following public service announcement at your earliest convenience, with the ending date of August 4th, 2005. If you have questions, please call me at 463-1806.

Thank you.

Public Meetings to be held on
Draft 2005 Lake County Regional Transportation Plan

The Draft 2005 Regional Transportation Plan has recently been completed, and staff to the Lake County/City Area Planning Council (APC) will hold two public meetings to receive comments and input prior to the preparation of the final Plan. A Draft Negative Declaration, an environmental document to the Plan, is also available for review and discussion.

The Regional Transportation Plan (RTP) is a long-term transportation planning document which provides a vision of regional transportation goals, policies and objectives. The RTP considers all types of travel. It evaluates transportation needs and suggests actions to solve the problems to improve transportation throughout the region. The plan also considers financing options for identified projects.

Public meetings will be held on August 3rd, from 3:00-6:00pm at the Lamkin-Sanchez Transit Operations Center located at 9240 Highway 53 in Lower Lake, and on August 4th, from 3:30-6:00 pm at the Lakeport Senior Center located at 527 Konocti Avenue in Lakeport.

A copy of the 2005 Lake County Regional Transportation Plan and Draft Negative Declaration are available for review at each of the libraries in Lake County. Written comments should be submitted to the Lake County/City Area Planning Council, 367 N. State Street, Suite 206, Ukiah, CA, 95482 no later than August 31, 2005. The 30-day public review period shall officially begin on August 1, 2005 and end on August 31, 2005.

For further questions call Phil Dow or Lisa Davey-Bates at the office of Dow & Associates, 707-463-1806.

Lake County/City Area Planning Council

William C. Kranz, Executive Director
160 Fifth Street
Lakeport, CA 95453
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www.lakeapc.org

Phillip J. Dow, P.E., Staff Consultant
367 N. State Street, Suite 206
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July 18, 2005

NOTICE OF PUBLIC MEETING AND AVAILABILITY
OF 2005 REGIONAL TRANSPORTATION PLAN AND DRAFT NEGATIVE DECLARATION
FOR PUBLIC REVIEW

NOTICE IS HEREBY GIVEN THAT staff to the Lake County/City Area Planning Council will conduct two public meetings on the Draft 2005 Lake County Regional Transportation Plan. The purpose of the meetings is to receive public comments and input prior to preparation of the final Plan. The following is a schedule of meeting dates, times, and locations:

August 3, 2005 / 3:00-6:00pm
Lamkin-Sanchez Transit Operations Center
9240 Highway 53
Lower Lake, California

August 4, 2005 / 3:30-6:00 pm
Lakeport Senior Center
527 Konocti Avenue
Lakeport, California

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Project Location: The Regional Transportation Plan area encompasses all of Lake County, including the incorporated cities of Lakeport and Clearlake.
Environmental Determination: The Lake County/City Area Planning Council has prepared a Draft Negative Declaration for the above project (no significant environmental impacts are anticipated which cannot be adequately mitigated).
Public Review Period: August 1, 2005 through August 31, 2005.

Your comments regarding the Draft Regional Transportation Plan and/or environmental impacts are invited. Written comments should be submitted to the Lake County/City Area Planning Council, 367 N. State Street, Ste. 206, Ukiah, CA, 95482 prior to the public meetings. Oral comments may be presented during the meetings.

For additional information, please contact Phil Dow or Lisa Davey-Bates at the Lake County/City Area Planning Council, 707-463-1806.

PHILLIP J. DOW
Staff Consultant

LAKE COUNTY/CITY AREA PLANNING COUNCIL

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Lakeport, CA 95453
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www.lakeapc.org

Phillip J. Dow, P.E., Staff Consultant
367 N. State Street, Suite 206
Ukiah, CA 95482
(707) 463-1806/Fax 463-2212

Transmittal:

To: Lake County Record Bee
Clear Lake Observer*American

From: Lisa Davey-Bates, Associate Planner
Lake County/City Area Planning Council

Re: Legal Meeting Notice
2005 Regional Transportation Plan
Public Meeting Schedule

Date: August 29, 2005

☒ Urgent ☒ For Your Use ☐ Please Complete ☐ Please Reply ☐ Please Sign ☐ Please Pay

Comments:

Please print the attached legal notice of a public hearing to be held regarding the 2005 Regional Transportation Plan and Draft Negative Declaration. A 30-day notice must be provided in order to meet requirements for the environmental document; therefore this notice must be published on, or before, September 1, 2005. Please note that we would like this notice published in both the Lake County Record Bee and Clear Lake Observer American.

Please send an invoice to:

Lake County/City Area Planning Council
Attn: Bill Kranz
160 Fifth Street
Lakeport, CA 95453

If you have questions, please call me at 463-1806.

Thank you.

LAKE COUNTY/CITY AREA PLANNING COUNCIL

William C. Kranz, Executive Director
160 Fifth Street
Lakeport, CA 95453
(707) 263-1600/Fax 263-1826
www.lakeapc.org

Phillip J. Dow, P.E., Staff Consultant
367 N. State Street, Suite 206
Ukiah, CA 95482
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NOTICE OF PUBLIC HEARING AND ADOPTION OF
2005 REGIONAL TRANSPORTATION PLAN
AND
DRAFT NEGATIVE DECLARATION

NOTICE IS HEREBY GIVEN that the Lake County/City Area Planning Council (APC) will meet on Wednesday, October 14, 2005, at 10:00 a.m. or as soon thereafter as possible, at the City of Lakeport, City Council Chambers, 225 Park Street, Lakeport, CA to conduct a public hearing on the following project and the Draft Negative Declaration.

Project Description: The 2005 Lake County Regional Transportation Plan (RTP) provides a vision of regional transportation goals, policies and objectives for all modes of travel, including local streets, State highways, transit, bicycle, pedestrian and aviation. It assesses current transportation, identifies needs, and suggests actions. The plan also considers financing options for projects discussed within the plan.
Location: All of Lake County, including the cities of Lakeport and Clearlake.
Environmental Determination: The APC has prepared a Draft Negative Declaration for the above project (no significant environmental impacts are anticipated which cannot be adequately mitigated).
Review Period: The public review period shall begin on September 2, 2005 and end on October 3, 2005.

The RTP and Draft Negative Declaration may be reviewed at the Lake County Library, 1425 North High Street, Lakeport; at the Redbud Library, 14785 Burns Valley Road, Clearlake; at the Middletown Library, Highway 29 and Callayomi, Middletown; and at the Upper Lake Library, 310 2nd Street, Upper Lake. Both documents are also available for review on the APC website at www.lakeapc.org

Comments regarding the RTP and Negative Declaration are welcomed and should be sent to: 367 N. State Street, #206, Ukiah, CA, or emailed to Lisa Davey-Bates, Associate Planner, at lisadavey@sbcglobal.net Oral comments are also invited at the public hearing to be held on October 14th.

For additional information, please contact Phil Dow or Lisa Davey-Bates at the APC, 707-463-1806.

PHILLIP J. DOW, APC Staff Consultant

COPY

LAKE COUNTY/CITY AREA PLANNING COUNCIL

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Phillip J. Dow, P.E., Staff Consultant
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Ukiah, CA 95482
(707) 463-1806/Fax 463-2212

August 29, 2005

TO: Clerk of the Board
255 North Forbes Street, Lakeport, CA 95453

FROM: Lisa Davey-Bates, Associate Planner

SUBJECT: Posting of Notice for Public Review regarding
2005 Lake County Regional Transportation Plan &
Draft Negative Declaration

Please post the attached *Notice of Public Hearing and Adoption of Draft 2005 Regional Transportation Plan and Draft Negative Declaration* no later than September 2, 2005. The notice should remain posted through the public review period which ends October 3, 2005. Thank you very much for your assistance. If you have any questions, please feel to contact me at 707-463-1806.

/ldb

Enclosure

Concerned with the streets in the City of Lakeport, voters passed Measure I at the general election held November 2, 2004. Measure J, accompanied by Measure I, earmarked funds to be used to repair and maintain the City streets, park and community service facilities and to expand public services and programs. The City of Lakeport expects to receive $400,000 annually, however only $200,000 will be allocated for street maintenance and rehabilitation. PCI projections would have been much worse in the year 2014 if the City of Lakeport did not have the sales tax revenues to rely upon.

Residents throughout Lake County had a similar opportunity to vote on a retail transactions and use tax at the rate of one-half cent on taxable sales during a special election held on June 3, 2003. At least 85% of funds generated by the sales tax would have been used for rehabilitation and maintenance of streets and roads. Revenues were anticipated to be approximately $2 million during the first year and over $48 million over the 20-year life of the sales tax measure. The County of Lake would have received 45% of the revenues, City of Clearlake 24%, and City of Lakeport 31%. Unfortunately, this measure received only 50.2% of the two-thirds votes required to pass the measure.

Voters in the state of California, however, overwhelmingly passed Proposition 42 in March 2002. This new funding source permanently dedicates sales taxes on gasoline to transportation maintenance and improvement projects. However, language in the law permits the Governor and Legislature to suspend Proposition 42 during state fiscal emergencies. Because California has been in fiscal crisis since voters passed the initiative, local streets and roads have received little benefit from this legislation.

The inability to maintain and rehabilitate streets and roads because of the lack of transportation funds flowing into Lake County has contributed to the poor PCI results in the recent Pavement Management Program update. Recommendations were made by Harris & Associates as a result of the PMP Update to begin to turn this scenario around.

At a minimum, the annual budget for asphalt pavement work alone in the unincorporated area of Lake County needs to be increased to $1.3 million, which would begin to improve the overall pavement condition while slowing the growth of the deferred maintenance backlog. At that budget, the overall PCI would increase from 51 in the year 2005 to a PCI of 52 in 2009.

By raising the City of Clearlake's annual budget from $100,000 to $450,000 the overall pavement condition would improve from the current PCI of 38 to 40 after treatments are applied in the year 2014.
Harris & Associates also recommended increasing the City of Lakeport's annual budget from the current $200,000 to $450,000. At this budget level, the overall PCI would increase from 43 in 2005 to 70 in the year 2014. With the anticipated increase in annual revenues generated from Measures I and J, the challenges facing the City of Lakeport are sure to be less than those facing the City of Clearlake and the unincorporated areas of Lake County.

2005 Regional Transportation Plan Goes on Tour

Lake County/City Area Planning Council (APC) staff is eager to hear from residents interested in the future of the transportation system in Lake County. The draft 2005 Regional Transportation Plan (RTP), a long-range transportation planning document, is currently being circulated throughout the county to give individuals the opportunity for review and comment prior to its final adoption in September 2005.

Regional transportation plans incorporate all forms of transportation such as the State highway system, the local road system, transit, aviation, bicycling and pedestrian means of travel. Both short and long-term transportation needs are identified in the document, and suggested actions to solve such needs are included. Since the 2001 Regional Transportation Plan included major revisions, staff focused primarily on interagency coordination and public, Native American, and private sector involvement during the 2005 RTP update.

If you are interested in reviewing the draft 2005 Regional Transportation Plan, please visit www.lakeapc.org. Copies will also be available in all libraries throughout Lake County. Although several opportunities have previously been offered for public comment, two workshops will be held during the first week of August at the following locations to provide a final comment and answer period relating to the 2005 Regional Transportation Plan:

August 3, 2005 / 3:00-6:00pm
Lamkin-Sanchez Transit Operations Center
9240 Highway 53
Lower Lake, California

August 4, 2005 / 3:30-6:00 pm
Lakeport Senior Center
527 Konocti Avenue
Lakeport, California

If you have questions regarding the 2005 RTP, please call Lisa Davey-Bates at Dow & Associates, (707) 463-1806.

LAKE COUNTY/CITY AREA PLANNING COUNCIL

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2005 Lake County Regional Transportation Plan

The Draft 2005 Lake County Regional Transportation Plan (RTP) was completed in June 2005 and is currently being circulated to various agencies, businesses, and the public for review and comment prior to the proposed adoption date of September 14, 2005. The RTP is a long-term transportation planning document, which incorporates all modes of transportation such as the State highway system, local roads and streets, transit, aviation, bicycling and pedestrian travel. Since the 2001 Regional Transportation Plan included major revisions, staff focused primarily on interagency coordination, and public, Native American, and private sector involvement for the update.

Copies of the complete Draft 2005 Regional Transportation Plan and Draft environmental document, known as the Negative Declaration, can be viewed at each of the library branches throughout Lake County. You may also visit the Lake County/City Area Planning Council website www.lakeapc.org for a complete copy of the Plan.

The following are highlights of changes incorporated in the Draft 2005 Regional Transportation Plan:

- Executive Summary: Discussion of interagency coordination, which involved the development of working relationships in multiple regions, and outreach to the private sector by meeting with the Lake County Business Outreach and Response Team.

- Introduction: Included the focus of revisions made to the 2005 RTP and updates to projects completed.

- State Highway System: Discussion of the Highway 20 Northshore Traffic Calming and Beautification Plan, Origin & Destination Study within Lake, Mendocino, Napa and Sonoma Counties, State Route 29 environmental milestones, and updates to the funding sources including the State Transportation Improvement Program, and Proposition 42 funds.

- Backbone Circulation and Local Roads: Discussion of the recently updated Pavement Management Program, updated projects in the action plan for the County of Lake and cities of Lakeport and Clearlake, discussion of the Transportation Enhancements (TE) program, and updated proposed funding sources available for local road improvements.

- Non-Motorized Transportation Element: Included table of projects constructed by funds other than Proposition 116 funds, and updated proposed projects list for County of Lake, City of Lakeport, and City of Clearlake for both pedestrian and bicycle facilities,

- Transit System Element: Updated description of existing services and route changes, Lake Transit Authority's Goals, Objectives, and Policies, proposed projects in both short and long range plan of the Action Plan, Capital Improvement Program and the Financing section according to the recently adopted 2004-2011 Transit Development Plan.

- Aviation Element: Updated Capital Improvement Program List for Lampson Field Airport and projects completed since last RTP.

- Tribal Transportation System: Included new section addressing tribal transportation needs for seven tribes located throughout Lake County.

* Handout at public meetings - august 2005

APPENDIX C

Roadway and Intersection Traffic Volume Projections and Capacity Analysis

Lake Countywide Roadway Needs Study

Table G-1
Road Segment Volumes - By Name
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration Volume	Model Year 2005 Volume	Model Year 2005 % Increase	Model Year 2010 Volume	Model Year 2010 % Increase	Model Year 2020 Volume	Model Year 2020 % Increase
11TH ST E OF 29	77	78		13,848	16,020	15.7%	18,712	35.1%	21,905	58.2%
11TH ST W OF MAIN	78	79		9,574	11,065	15.6%	12,917	34.9%	15,132	58.0%
6TH ST FR MANZANITA TO MAIN	85	83		530	562	5.9%	621	17.2%	724	36.5%
ARGONAUT FR 29 TO BIG VY RD	140	141		1,528	1,616	5.7%	1,747	14.3%	2,037	33.3%
ARGONAUT FR HISPGSRD TO 29	143	140		300	300	0.0%	300	0.0%	300	0.0%
BARTLETT SPGS RD E/O SR 20	40	37		1,204	1,272	5.6%	1,380	14.7%	1,577	30.9%
BARTLETT SPGS RD	46	36	30	30	26	-13.2%	26	-12.9%	30	0.7%
BELL HILL RD.	157	155		1,000	1,050	5.0%	1,050	5.0%	1,170	17.0%
BELL HILL RD. W/O 29	149	175		90	94	4.7%	94	4.7%	105	16.9%
BIG CYN RD	300	288		865	750	-13.3%	743	-14.1%	862	-0.4%
BIG CYN RD	288	301		158	208	31.1%	211	33.5%	229	44.8%
BIG CYN RD N/O SR 175	313	319		1,223	1,531	25.2%	1,533	25.4%	1,562	27.7%
BIG CYN RD S/O ED 119	311	313		166	208	25.0%	211	27.3%	229	38.1%
BIG CYN RD S/O SEIGLER CYN R	250	298		158	208	31.1%	211	33.5%	229	44.8%
BIG VY RD	132	136		5,774	6,383	10.5%	7,153	23.9%	8,618	49.3%
BIG VY RD	136	137		1,510	2,009	33.0%	2,141	41.8%	2,377	57.4%
BIG VY RD	137	141		3,585	4,260	18.8%	4,579	27.7%	5,181	44.5%
BIG VY RD ARGONAUT TO MERRITT	141	144		2,057	2,645	28.6%	2,832	37.7%	3,144	52.9%
BIG VY RD/HILAND SPGS RD MAIN	129	130		3,286	3,645	10.9%	4,097	24.7%	4,863	48.0%
BOTL ROCK RD SULFCRKRD/SR 175	287	296		3,460	3,890	12.4%	4,229	22.2%	5,019	45.1%
BOTTLE RCK RD N/O SULFUR CRK	233	287		4,652	5,143	10.6%	5,567	19.7%	6,561	41.0%
BOTTLE ROCK RD S/O SR 29	229	233		6,704	7,396	10.3%	7,967	18.8%	9,311	38.9%
BUTTS CYN RD	328	326		2,500	3,275	31.0%	3,388	35.5%	3,620	44.8%
BUTTS CYN RD E/O SR 29	317	318		1,817	750	-58.7%	743	-59.1%	862	-52.6%
BUTTS CYN RD W/O CO. LINE	326	327	894	1,817	750	-58.7%	743	-59.1%	862	-52.6%
COUNTRY CLUB DR E/O SR 20	94	96		1,052	1,341	27.4%	1,580	50.1%	1,850	75.8%
COUNTRY CLUB DRIVE (MIDDLE)	44	94		2,606	3,210	23.2%	3,821	46.6%	4,712	80.8%
Crystal Lake E of Hill Rd East	63	65		400	438	9.5%	482	20.5%	548	37.0%
Dam Rd E of 53	260	261		1,327	1,726	30.0%	1,709	28.8%	1,639	23.5%
Diener btw Sieg Spr & Low Lk	243	241		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
Diener Dr E of Seigler Springs	245	243		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
Diener Dr W of Lowr Lk	241	270		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
DRY CRK CUTOFF	316	324		1,900	1,920	1.0%	2,257	18.8%	3,239	70.5%
Elk Mtn Rd.	5	6		378	326	-13.7%	331	-12.5%	380	0.5%
Elk Mtn Rd. -north Upper Lake	6	7	400	2,500	2,500	0.0%	2,500	0.0%	2,500	0.0%
Elk Mtn Rd.	7	15		3,270	3,825	17.0%	4,516	38.1%	5,505	68.4%
FOOTHILL DR (LU) E/O SR 20	43	44		3,831	4,661	21.7%	5,571	45.4%	6,951	81.5%
GADDY LN. (KV)	161	167		2,635	2,764	4.9%	3,255	23.5%	3,921	48.8%
HARBIN SPRINGS N OF B CANYON	313	312		1,087	1,362	25.3%	1,359	25.0%	1,365	25.6%
HARBIN SPRINGS RD N END	312	303		1,087	1,362	25.3%	1,359	25.0%	1,365	25.6%
HIGH ST S OF LAKESHORE	65	70		3,812	4,526	18.7%	5,373	40.9%	6,431	68.7%
HIGH STREET BTW 20 & 16	79	74		11,890	13,674	15.0%	15,959	34.2%	18,756	57.7%
HIGHLAND FR ARGONAUT TO MERRIT	143	148		1,600	1,600	0.0%	1,670	4.4%	1,891	18.2%

Table G-1
Road Segment Volumes - By Name
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration Volume	Model Year 2005 Volume	Model Year 2005 % Increase	Model Year 2010 Volume	Model Year 2010 % Increase	Model Year 2020 Volume	Model Year 2020 % Increase
HIGHLAND SPGS RD	148	152		800	800	0.0%	835	4.4%	946	18.3%
HIGHLAND SPGS RD	152	156		3,264	3,645	11.7%	4,097	25.5%	4,863	49.0%
HIGHLAND SPGS RD 29 TO MATHEWS	135	139		2,315	2,346	1.3%	2,402	3.8%	2,688	16.1%
HIGHLAND SPGS RD BIG VY RD TO 29	130	135		3,389	3,777	11.4%	4,204	24.1%	5,069	49.6%
HIGHLAND SPGS RD MATHEWS TO ARGONT	139	143		105	106	0.6%	111	5.8%	126	20.2%
Hill Rd EAST	49	69		1,482	1,571	6.0%	1,779	20.1%	1,984	33.9%
Hill Rd East S of Crystal Lk	63	66		223	244	9.2%	268	20.3%	305	36.6%
Hill Rd N of Riggs	76	69		1,553	1,651	6.3%	1,871	20.5%	2,092	34.7%
Hill Rd N of Scotts Vly	69	66		223	244	9.2%	268	20.3%	305	36.6%
LAKE ST (CO) E/O LAKELAND ST	197	113		2,758	3,356	21.7%	4,144	50.2%	4,880	76.9%
LAKE ST (CO) S/O SR 20	108	197		1,420	1,645	15.9%	1,925	35.6%	2,462	73.4%
LAKE ST. (LL) N/O MORGAN VY RD	261	267		2,000	2,306	15.3%	2,314	15.7%	2,338	16.9%
LAKEPORT BLVD. E/O 29 FWY	89	87		9,131	10,507	15.1%	12,623	38.2%	14,767	61.7%
LAKEPORT BLVD W OF MAIN ST	87	86		9,000	10,183	13.1%	12,068	34.1%	14,628	62.5%
LAKESHORE BL ASHE ST TO HIGH ST	64	65		2,898	3,466	19.6%	4,112	41.9%	5,067	74.9%
LAKESHORE BL NR LANGE ST	58	64		2,898	3,466	19.6%	4,112	41.9%	5,067	74.9%
LAKESHORE BLVD N/O PARK WAY	32	58	5,167	6,286	7,606	21.0%	9,022	43.5%	10,739	70.8%
LAKESHORE BLVD S/O N-L CUTOF	28	29		3,849	4,627	20.2%	5,637	46.5%	6,897	79.2%
LAKESHORE DR n. of Olympic	215	209	6,876	14,240	17,819	25.1%	18,358	28.9%	19,860	39.5%
LAKESHORE DR OLD ST SR/SR 53	225	224	11,518	12,101	15,738	30.1%	16,107	33.1%	17,154	41.8%
LAKESHORE DR S/O OLYMPIC	215	221		9,996	13,274	32.8%	13,431	34.4%	13,960	39.7%
LAKESHORE DR W/O OLD ST SR	221	225		11,676	15,200	30.2%	15,438	32.2%	16,234	39.0%
LAKEVW DR N (W/O ED 63 CC)	23	35		3,778	4,332	14.7%	4,977	31.7%	6,196	64.0%
LAKEVW DR. (E/O CC)	35	38		1,234	1,428	15.7%	1,688	36.8%	2,013	63.1%
LOCH LOMOND RD W/O SEIGLER SPG	280	251		1,297	1,578	21.6%	1,574	21.3%	1,565	20.7%
LOCH LOMOND RD. W/O 175	283	285		1,297	1,578	21.6%	1,574	21.3%	1,565	20.7%
MAIN ST	79	83		4,643	5,263	13.3%	6,104	31.5%	7,362	58.6%
MAIN ST (KV) N/O SR 29	174	177	3,165	4,000	4,840	21.0%	5,680	42.0%	6,800	70.0%
MAIN ST (KV) S/O STATE ST.	173	174		4,733	9,971	110.7%	11,768	148.6%	13,994	195.7%
MAIN ST N/O LAKEPORT BL	83	86		12,000	13,464	12.2%	15,589	29.9%	18,816	56.8%
MAIN St S of LKEPRT BL	86	92		10,000	11,091	10.9%	12,803	28.0%	15,470	54.7%
MARTIN E OF KECK	52	85		706	752	6.5%	828	17.3%	962	36.3%
MARTIN S OF RIGGS	51	52		706	752	6.5%	828	17.3%	962	36.3%
MATHEWS RD.	138	139		380	381	0.1%	406	6.9%	610	60.5%
MORGAN VY RD SR 53 TO LAKE ST	266	267		2,000	2,306	15.3%	2,314	15.7%	2,338	16.9%
NICE-LUCERNE CUTOFF	22	28		5,000	5,825	16.5%	7,035	40.7%	8,285	65.7%
NORTH DRIVE (CO)	186	183		258	386	49.4%	401	55.6%	438	69.8%
OLD 53	214	225		1,630	1,939	19.0%	1,991	22.2%	2,140	31.3%
OLD 53 LKSHR DR/CRAWFD(CL)	225	253	5,345	3,583	4,581	27.9%	4,632	29.3%	4,670	30.3%
OLD 53 N/O CRAWFORD AV(CL)	253	257		3,564	4,799	34.7%	4,744	33.1%	4,651	30.5%
OLD 53 SR W/O SR 53 (CL)	257	260	6,142	5,584	7,561	35.4%	7,541	35.0%	7,542	35.1%
OLYMPIC DR W OF OLD 53	216	214		5,962	6,470	8.5%	6,952	16.6%	8,213	37.8%
Olympic E of Lakeshore	215	216	7,318	4,608	4,879	5.9%	5,279	14.6%	6,305	36.8%

Table G-1
Road Segment Volumes - By Name
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
OLYMPIC E OF OLD 53	214	210		4,332	4,531	4.6%	4,960	14.5%	6,073	40.2%
PARK WAY W/O LAKESHORE (LP)	57	58		6,690	7,941	18.7%	9,273	38.6%	11,219	67.7%
PARK WY E/O SR 29	56	57		6,690	7,941	18.7%	9,273	38.6%	11,219	67.7%
PT LAKEVIEW RD E/O SR 281	195	237		639	644	0.8%	710	11.0%	791	23.7%
PT LAKEVIEW RD N/O SR 29	258	265		1,023	1,192	16.5%	1,252	22.3%	1,306	27.7%
PT LAKEVW RD BETW ED 86 & 113	237	258		1,023	1,192	16.5%	1,252	22.3%	1,306	27.7%
RED HILLS RD BTW 175 & SIEGLER	232	240		1,000	1,017	1.7%	1,058	5.8%	1,077	7.7%
RENFRO	146	147		619	2,645	327.2%	2,832	357.5%	3,144	407.9%
RSSL/CMPTN/SPRR N OF MARTIN	80	85		174	190	9.3%	207	19.0%	239	37.0%
SAN JOAQUIN AVE ED111 TO 94	192	193		-	2,201	N/A	2,201	N/A	2,215	N/A
SAN JOAQUIN AVE SOUTH	207	209		1,431	3,835	168.0%	3,908	173.1%	4,147	189.8%
SAN JOAQUIN AVE SOUTH	193	207		2,947	7,897	168.0%	7,942	169.5%	8,164	177.0%
SAN JOAQUIN AVE.	188	192		281	386	37.4%	401	43.1%	438	56.1%
SCHINDLER ST. (CO)	113	112		500	615	23.0%	730	46.0%	865	73.0%
SCOTTS VALLEY RD W OF 29	77	76		4,768	7,420	55.6%	8,154	71.0%	9,222	93.4%
SCOTTS VY RD (DUE N/S SEGMENT)	47	48		6,715	1,571	-76.6%	1,779	-73.5%	1,984	-70.5%
SCOTTS VY RD NORTH	12	47		1,482	403	-72.8%	514	-65.3%	628	-57.6%
SCOTTS VY RD W/O 29	51	76		-	7,140	N/A	7,922	N/A	9,058	N/A
SCOTTS VY RD. S/O SR 20	11	12		6,489	403	-93.8%	514	-92.1%	628	-90.3%
SEIGLER CYN RD S/O SR 29	271	268		400	1,350	237.6%	1,353	238.4%	1,359	239.6%
SEIGLER CYN RD W/O SEIGLR SPG	251	250		1,112	1,558	40.1%	1,565	40.7%	1,588	42.8%
SEIGLER CYRN RD NE BIG CYN RD	274	250		1,277	1,350	5.7%	1,353	6.0%	1,359	6.4%
SEIGLER CYRN RD NO.	272	271		1,112	1,350	21.4%	1,353	21.7%	1,359	22.2%
SEIGLER SPGS N RD N/O LOCHLMD	245	248		1,439	435	-69.8%	432	-70.0%	436	-69.7%
SEIGLER SPGS NO. RD	240	245		351	666	89.6%	688	96.1%	718	104.5%
SEIGLER SPGS RD S/O SR 29	239	240		535	744	39.0%	770	43.9%	801	49.6%
SO MAIN 175 TO HIGHLAND SPGS	122	129		10,000	11,090	10.9%	12,470	24.7%	14,800	48.0%
SO. MAIN LP BLVD TO 175	92	122		9,000	10,170	13.0%	11,403	26.7%	13,680	52.0%
SO. MAIN W/O 29	127	122		2,930	3,349	14.3%	3,735	27.5%	4,605	57.2%
SODA BAY RD E/O GADDY LN	161	162	6,261	5,612	6,291	12.1%	7,239	29.0%	8,875	58.1%
SODA BAY RD NR HENDERSON PT	165	160		1,866	2,050	9.9%	2,275	21.9%	2,596	39.1%
SODA BAY RD. W/O GADDY LN.	126	161		4,459	4,656	4.4%	5,277	18.3%	6,456	44.8%
SR 175 BIG CYN RD TO SR 29	319	320		3,008	3,694	22.8%	3,728	23.9%	3,687	22.6%
SR 175 EMRFRD RD TO SUMMIT DR	289	293		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
SR 175 FR 29 TO MATHEWS	127	138	2,830	1,536	1,564	1.8%	1,776	15.6%	2,656	72.9%
SR 175 LLOMOND/SULFUR CRK RD	282	286		1,381	1,656	19.9%	1,655	19.8%	1,648	19.3%
SR 175 N/O BIG CYN RD.	316	319	8,227	4,106	4,575	11.4%	4,944	20.4%	5,851	42.5%
SR 175 N/O LOCH LOMOND RD	232	282		2,400	2,441	1.7%	2,544	6.0%	2,592	8.0%
SR 175 S/O BOTLE CRK RD	296	307		-	4,179	N/A	4,541	N/A	5,423	N/A
SR 175 S/O SUMMIT DR.	293	295		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
SR 175 SULFR CRK RD TO EMERFD	286	289		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
SR 175 W/O MATHEWS	142	138	1,070	1,915	1,945	1.6%	2,182	13.9%	3,266	70.5%
SR 175/BOTTLE ROCK RD	295	296		1,875	2,175	16.0%	2,224	18.6%	2,370	26.4%

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(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration Volume	Model Year 2005 Volume	Model Year 2005 % Increase	Model Year 2010 Volume	Model Year 2010 % Increase	Model Year 2020 Volume	Model Year 2020 % Increase
SR 20 BURPEE DR/BARTLETT SPGS	38	40		10,186	11,919	17.0%	13,958	37.0%	17,643	73.2%
SR 20 E/O JCT SR 53	200	114	5,057	5,636	6,207	10.1%	6,983	23.9%	9,663	71.5%
SR 20 e/o Scotts Vy Rd	11	9	8,900	10,016	11,034	10.2%	12,855	28.3%	18,215	81.9%
SR 20 e/o SR 29	14	15	7,700	6,604	7,543	14.2%	8,338	26.2%	11,558	75.0%
SR 20 e/o Upper Lake	15	16		4,868	5,507	13.1%	5,924	21.7%	8,574	76.1%
SR 20 FOOTHILL DR/CC DR (LU)	43	96		4,290	5,155	20.2%	5,714	33.2%	7,369	71.8%
SR 20 FR LKVW DR TO N-L CUTOF	23	24		8,949	10,491	17.2%	12,271	37.1%	15,631	74.7%
SR 20 FR REC CUTOF TO LKVW DR	22	23	9,300	12,705	14,824	16.7%	17,248	35.8%	21,827	71.8%
SR 20 Mendo to Scotts Vy Rd	1	11	6,979	10,415	11,437	9.8%	13,369	28.4%	18,843	80.9%
SR 20 N/O FOOTHILL DR	42	43		8,121	9,816	20.9%	11,286	39.0%	14,320	76.3%
SR 20 NR COLUSA CO. LINE	116	227	5,600	5,636	6,207	10.1%	6,983	23.9%	9,663	71.5%
SR 20 nr Witter Spgs Rd	9	10		10,016	11,034	10.2%	12,855	28.3%	18,215	81.9%
SR 20 S/O BARTLET SPGS RD	40	42	8,402	9,551	11,232	17.6%	13,271	39.0%	16,846	76.4%
SR 20 S/O COUNTRY CLUB DR	96	97		5,342	6,496	21.6%	7,294	36.5%	9,219	72.6%
SR 20 SCHINDLER TO SULFR BNK	112	115		10,454	12,800	22.4%	14,387	37.6%	16,876	61.4%
SR 20 W/O ED63	101	103		5,342	6,496	21.6%	7,294	36.5%	9,219	72.6%
SR 20 W/O SCHINDLER ST.	108	112		7,110	8,544	20.2%	9,306	30.9%	11,015	54.9%
SR 20 w/o SR 29	3	14	8,700	10,864	12,043	10.9%	14,043	29.3%	19,192	76.7%
SR 20 W/O WIDGEON WY	105	109	5,200	5,812	7,070	21.6%	7,932	36.5%	9,853	69.5%
SR 20 w/o Witter Spgs Rd	10	3		10,072	11,140	10.6%	13,008	29.1%	18,225	80.9%
SR 20 WIDGEON WY/LAKE ST (CO)	111	108	4,181	6,449	7,877	22.1%	8,869	37.5%	10,909	69.2%
SR 281	164	185		1,284	1,572	22.4%	1,693	31.8%	1,859	44.7%
SR 281 PT LAKEVIEW RD/SR 29	196	239	5,097	1,735	1,959	12.9%	2,118	22.1%	2,334	34.5%
SR 29 BTL RCK RD TO S JCT 175	229	231		9,201	11,548	25.5%	12,093	31.4%	13,435	46.0%
SR 29 BUTTS CYN RD TO SR 175	317	320		7,100	9,007	26.9%	9,353	31.7%	10,875	53.2%
SR 29 CENTRAL MIDDLETOWN	322	324		5,180	6,383	23.2%	7,085	36.8%	9,686	87.0%
SR 29 E/O JCT SR 175	230	239	9,200	9,201	11,548	25.5%	12,093	31.4%	13,435	46.0%
SR 29 E/O SEIGLER SPGS RD	239	270		9,402	11,817	25.7%	12,394	31.8%	13,790	46.7%
SR 29 FR 175 TO MATHEWS RD	127	135	11,200	20,351	23,662	16.3%	26,287	29.2%	31,406	54.3%
SR 29 FR ARGONAUT TO MERRITT	140	146		18,311	21,922	19.7%	24,286	32.6%	28,870	57.7%
SR 29 FR LP BLVD TO JCT 175	89	127	11,700	18,102	21,015	16.1%	23,395	29.2%	28,032	54.9%
SR 29 FR MARTIN TO LP BLVD	82	89		22,077	25,524	15.6%	29,260	32.5%	34,880	58.0%
SR 29 FR N-L CUT TO PARK WY	27	53	7,900	13,147	14,988	14.0%	18,212	38.5%	22,102	68.1%
SR 29 FR SR 20 TO WESTLKE RD	14	17	5,424	7,897	8,790	11.3%	10,779	36.5%	13,598	72.2%
SR 29 FR WLKE TO N-L CUTOFF	17	20		7,897	8,790	11.3%	10,779	36.5%	13,598	72.2%
SR 29 HIGHLAND TO ARGONAUT	135	140		17,776	20,887	17.5%	23,195	30.5%	27,756	56.1%
SR 29 MERRITT TO BELL HILL RD	170	175		14,676	21,922	49.4%	24,286	65.5%	28,870	96.7%
SR 29 MIDDLETOWN/LOWER LAKE	299	304		6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 29 N OF SCOTTS VLY RD	60	77		17,916	20,760	15.9%	24,921	39.1%	29,815	66.4%
SR 29 N/O BUTTS CYN RD	314	317		7,055	8,953	26.9%	9,383	33.0%	10,920	54.8%
SR 29 N/O ED 62 CC	16	21		4,868	5,507	13.1%	5,924	21.7%	8,574	76.1%
SR 29 N/O ED117	304	306		6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 29 N/O MAIN ST/KV	176	177	8,947	14,244	21,532	51.2%	23,824	67.3%	28,098	97.3%

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(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
SR 29 NORTH MIDDLETOWN	320	322		7,414	10,214	37.8%	10,622	43.3%	12,141	63.8%
SR 29 PT LAKEVW RD TO SIEGLER	270	269		10,306	13,101	27.1%	13,645	32.4%	14,962	45.2%
SR 29 PT LKVW RD 2 SIEGLER CY	269	268	1,579	11,274	14,228	26.2%	14,831	31.5%	16,205	43.7%
SR 29 S OF SCOTTS VLY RD	77	82		22,077	25,524	15.6%	29,260	32.5%	34,880	58.0%
SR 29 S. MIDDLETOWN/NAPA CO.	324	329	6,856	6,459	7,218	11.7%	8,351	29.3%	12,225	89.3%
SR 29 S/O BELL HILL RD/ED75CC	175	176	11,900	14,768	22,016	49.1%	24,380	65.1%	28,976	96.2%
SR 29 S/O ED116	273	299	8,712	6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 29 S/O ED117	306	314		6,629	8,509	28.4%	8,920	34.6%	10,388	56.7%
SR 29 S/O MAIN ST. KV	177	228		14,772	17,616	19.3%	18,699	26.6%	21,317	44.3%
SR 29 S/O PARK WY	56	60		17,916	20,760	15.9%	24,921	39.1%	29,815	66.4%
SR 29 SEIGLER CY RD TO SR 53	268	266	9,500	14,535	18,735	28.9%	19,245	32.4%	20,425	40.5%
SR 29 W/O BOTTLE ROCK RD	228	229	9,308	14,772	17,616	19.3%	18,699	26.6%	21,317	44.3%
SR 53 E/O CLRLK OAKS TO HY 53	115	200		10,451	12,695	21.5%	14,195	35.8%	16,549	58.4%
SR 53 LAKE ST TO OLD ST SR	260	263		21,306	27,729	30.1%	28,489	33.7%	30,396	42.7%
SR 53 N/O LAKESHORE DR (CL)	218	224		10,148	12,757	25.7%	13,804	36.0%	15,694	54.7%
SR 53 N/O OLD ST SR (CL)	256	260		18,842	25,851	37.2%	26,671	41.6%	28,545	51.5%
SR 53 N/O OLYMPIC (CL)	206	210		11,647	13,864	19.0%	15,263	31.0%	18,120	55.6%
SR 53 N/O SR 29 (LL)	263	266	15,359	19,898	24,586	23.6%	25,401	27.7%	27,604	38.7%
SR 53 S/O JCT SR 20	201	206	7,300	11,647	13,864	19.0%	15,263	31.0%	18,120	55.6%
SR 53 S/O LAKESHORE DR (CL)	224	256		18,415	24,750	34.4%	25,738	39.8%	27,803	51.0%
SR 53 S/O LOWER LAKE	273	266		8,364	10,827	29.4%	11,178	33.6%	12,438	48.7%
SR 53 S/O OLYMPIC	210	218	9,917	9,340	11,533	23.5%	12,634	35.3%	14,622	56.6%
STATE ST. (KV)	167	173		3,000	3,630	21.0%	4,290	43.0%	5,100	70.0%
STONE DR S OF SODA BAY	124	132		1,200	1,320	10.0%	1,464	22.0%	1,728	44.0%
SULFUR BANK DR S/O SR 20	115	199		1,000	1,293	29.3%	1,373	37.3%	1,493	49.3%
SULFUR BANK DR.	186	203		200	263	31.5%	270	35.0%	283	41.5%
SULFUR BANK DR.	203	199		721	1,118	55.1%	1,172	62.6%	1,249	73.3%
SULFUR CRK RD E/O BOTTLE CRK R	287	284		1,192	1,253	5.2%	1,338	12.2%	1,541	29.3%
SULFUR CRK RD W/O SR 175	284	286		1,328	1,470	10.7%	1,516	14.2%	1,650	24.2%
WIDGEON WAY	106	111		1,193	1,480	24.1%	1,743	46.1%	2,084	74.7%

Table G-2
Road Segment Volumes - By Volume
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration Volume	Model Year 2005 Volume	Model Year 2005 % Increase	Model Year 2010 Volume	Model Year 2010 % Increase	Model Year 2020 Volume	Model Year 2020 % Increase
SR 29 FR MARTIN TO LP BLVD	82	89		22,077	25,524	15.6%	29,260	32.5%	34,880	58.0%
SR 29 S OF SCOTTS VLY RD	77	82		22,077	25,524	15.6%	29,260	32.5%	34,880	58.0%
SR 29 FR 175 TO MATHEWS RD	127	135	11,200	20,351	23,662	16.3%	26,287	29.2%	31,406	54.3%
SR 53 LAKE ST TO OLD ST SR	260	263		21,306	27,729	30.1%	28,489	33.7%	30,396	42.7%
SR 29 N OF SCOTTS VLY RD	60	77		17,916	20,760	15.9%	24,921	39.1%	29,815	66.4%
SR 29 S/O PARK WY	56	60		17,916	20,760	15.9%	24,921	39.1%	29,815	66.4%
SR 29 S/O BELL HILL RD/ED75CC	175	176	11,900	14,768	22,016	49.1%	24,380	65.1%	28,976	96.2%
SR 29 FR ARGONAUT TO MERRITT	140	146		18,311	21,922	19.7%	24,286	32.6%	28,870	57.7%
SR 29 MERRITT TO BELL HILL RD	170	175		14,676	21,922	49.4%	24,286	65.5%	28,870	96.7%
SR 53 N/O OLD ST SR (CL)	256	260		18,842	25,851	37.2%	26,671	41.6%	28,545	51.5%
SR 29 N/O MAIN ST/KV	176	177	8,947	14,244	21,532	51.2%	23,824	67.3%	28,098	97.3%
SR 29 FR LP BLVD TO JCT 175	89	127	11,700	18,102	21,015	16.1%	23,395	29.2%	28,032	54.9%
SR 53 S/O LAKESHORE DR (CL)	224	256		18,415	24,750	34.4%	25,738	39.8%	27,803	51.0%
SR 29 HIGHLAND TO ARGONAUT	135	140		17,776	20,887	17.5%	23,195	30.5%	27,756	56.1%
SR 53 N/O SR 29 (LL)	263	266	15,359	19,898	24,586	23.6%	25,401	27.7%	27,604	38.7%
SR 29 FR N-L CUT TO PARK WY	27	53	7,900	13,147	14,988	14.0%	18,212	38.5%	22,102	68.1%
11TH ST E OF 29	77	78		13,848	16,020	15.7%	18,712	35.1%	21,905	58.2%
SR 20 FR REC CUTOF TO LKVW DR	22	23	9,300	12,705	14,824	16.7%	17,248	35.8%	21,827	71.8%
SR 29 S/O MAIN ST. KV	177	228		14,772	17,616	19.3%	18,699	26.6%	21,317	44.3%
SR 29 W/O BOTTLE ROCK RD	228	229	9,308	14,772	17,616	19.3%	18,699	26.6%	21,317	44.3%
SR 29 SEIGLER CY RD TO SR 53	268	266	9,500	14,535	18,735	28.9%	19,245	32.4%	20,425	40.5%
LAKESHORE DR n. of Olympic	215	209	6,876	14,240	17,819	25.1%	18,358	28.9%	19,860	39.5%
SR 20 w/o SR 29	3	14	8,700	10,864	12,043	10.9%	14,043	29.3%	19,192	76.7%
SR 20 Mendo to Scotts Vy Rd	1	11	6,979	10,415	11,437	9.8%	13,369	28.4%	18,843	80.9%
MAIN ST N/O LAKEPORT BL	83	86		12,000	13,464	12.2%	15,589	29.9%	18,816	56.8%
HIGH STREET BTW 20 & 16	79	74		11,890	13,674	15.0%	15,959	34.2%	18,756	57.7%
SR 20 w/o Witter Spgs Rd	10	3		10,072	11,140	10.6%	13,008	29.1%	18,225	80.9%
SR 20 e/o Scotts Vy Rd	11	9	8,900	10,016	11,034	10.2%	12,855	28.3%	18,215	81.9%
SR 20 nr Witter Spgs Rd	9	10		10,016	11,034	10.2%	12,855	28.3%	18,215	81.9%
SR 53 N/O OLYMPIC (CL)	206	210		11,647	13,864	19.0%	15,263	31.0%	18,120	55.6%
SR 53 S/O JCT SR 20	201	206	7,300	11,647	13,864	19.0%	15,263	31.0%	18,120	55.6%
SR 20 BURPEE DR/BARTLETT SPGS	38	40		10,186	11,919	17.0%	13,958	37.0%	17,643	73.2%
LAKESHORE DR OLD ST SR/SR 53	225	224	11,518	12,101	15,738	30.1%	16,107	33.1%	17,154	41.8%
SR 20 SCHINDLER TO SULFR BNK	112	115		10,454	12,800	22.4%	14,387	37.6%	16,876	61.4%
SR 20 S/O BARTLET SPGS RD	40	42	8,402	9,551	11,232	17.6%	13,271	39.0%	16,846	76.4%
SR 53 E/O CLRLK OAKS TO HY 53	115	200		10,451	12,695	21.5%	14,195	35.8%	16,549	58.4%
LAKESHORE DR W/O OLD ST SR	221	225		11,676	15,200	30.2%	15,438	32.2%	16,234	39.0%
SR 29 PT LKVW RD 2 SIEGLER CY	269	268	1,579	11,274	14,228	26.2%	14,831	31.5%	16,205	43.7%
SR 53 N/O LAKESHORE DR (CL)	218	224		10,148	12,757	25.7%	13,804	36.0%	15,694	54.7%
SR 20 FR LKVW DR TO N-L CUTOF	23	24		8,949	10,491	17.2%	12,271	37.1%	15,631	74.7%
MAIN St S of LKEPRT BL	86	92		10,000	11,091	10.9%	12,803	28.0%	15,470	54.7%
11TH ST W OF MAIN	78	79		9,574	11,065	15.6%	12,917	34.9%	15,132	58.0%
SR 29 PT LAKEVW RD TO SIEGLER	270	269		10,306	13,101	27.1%	13,645	32.4%	14,962	45.2%

Table G-2
Road Segment Volumes - By Volume
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
SO MAIN 175 TO HIGHLAND SPGS	122	129		10,000	11,090	10.9%	12,470	24.7%	14,800	48.0%
LAKEPORT BLVD. E/O 29 FWY	89	87		9,131	10,507	15.1%	12,623	38.2%	14,767	61.7%
LAKEPORT BL W OF MAIN ST	87	86		9,000	10,183	13.1%	12,068	34.1%	14,628	62.5%
SR 53 S/O OLYMPIC	210	218	9,917	9,340	11,533	23.5%	12,634	35.3%	14,622	56.6%
SR 20 N/O FOOTHILL DR	42	43		8,121	9,816	20.9%	11,286	39.0%	14,320	76.3%
MAIN ST (KV) S/O STATE ST.	173	174		4,733	9,971	110.7%	11,768	148.6%	13,994	195.7%
LAKESHORE DR S/O OLYMPIC	215	221		9,996	13,274	32.8%	13,431	34.4%	13,960	39.7%
SR 29 E/O SEIGLER SPGS RD	239	270		9,402	11,817	25.7%	12,394	31.8%	13,790	46.7%
SO. MAIN LP BLVD TO 175	92	122		9,000	10,170	13.0%	11,403	26.7%	13,680	52.0%
SR 29 FR SR 20 TO WESTLKE RD	14	17	5,424	7,897	8,790	11.3%	10,779	36.5%	13,598	72.2%
SR 29 FR WLKE TO N-L CUTOFF	17	20		7,897	8,790	11.3%	10,779	36.5%	13,598	72.2%
SR 29 BTL RCK RD TO S JCT 175	229	231		9,201	11,548	25.5%	12,093	31.4%	13,435	46.0%
SR 29 E/O JCT SR 175	230	239	9,200	9,201	11,548	25.5%	12,093	31.4%	13,435	46.0%
SR 53 S/O LOWER LAKE	273	266		8,364	10,827	29.4%	11,178	33.6%	12,438	48.7%
SR 29 S. MIDDLETOWN/NAPA CO.	324	329	6,856	6,459	7,218	11.7%	8,351	29.3%	12,225	89.3%
SR 29 NORTH MIDDLETOWN	320	322		7,414	10,214	37.8%	10,622	43.3%	12,141	63.8%
SR 20 e/o SR 29	14	15	7,700	6,604	7,543	14.2%	8,338	26.2%	11,558	75.0%
PARK WAY W/O LAKESHORE (LP)	57	58		6,690	7,941	18.7%	9,273	38.6%	11,219	67.7%
PARK WY E/O SR 29	56	57		6,690	7,941	18.7%	9,273	38.6%	11,219	67.7%
SR 20 W/O SCHINDLER ST.	108	112		7,110	8,544	20.2%	9,306	30.9%	11,015	54.9%
SR 29 N/O BUTTS CYN RD	314	317		7,055	8,953	26.9%	9,383	33.0%	10,920	54.8%
SR 20 WIDGEON WY/LAKE ST (CO)	111	108	4,181	6,449	7,877	22.1%	8,869	37.5%	10,909	69.2%
SR 29 BUTTS CYN RD TO SR 175	317	320		7,100	9,007	26.9%	9,353	31.7%	10,875	53.2%
LAKESHORE BLVD N/O PARK WAY	32	58	5,167	6,286	7,606	21.0%	9,022	43.5%	10,739	70.8%
SR 29 S/O ED117	306	314		6,629	8,509	28.4%	8,920	34.6%	10,388	56.7%
SR 29 MIDDLETOWN/LOWER LAKE	299	304		6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 29 N/O ED117	304	306		6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 29 S/O ED116	273	299	8,712	6,599	8,540	29.4%	8,916	35.1%	10,256	55.4%
SR 20 W/O WIDGEON WY	105	109	5,200	5,812	7,070	21.6%	7,932	36.5%	9,853	69.5%
SR 29 CENTRAL MIDDLETOWN	322	324		5,180	6,383	23.2%	7,085	36.8%	9,686	87.0%
SR 20 E/O JCT SR 53	200	114	5,057	5,636	6,207	10.1%	6,983	23.9%	9,663	71.5%
SR 20 NR COLUSA CO. LINE	116	227	5,600	5,636	6,207	10.1%	6,983	23.9%	9,663	71.5%
BOTTLE ROCK RD S/O SR 29	229	233		6,704	7,396	10.3%	7,967	18.8%	9,311	38.9%
SCOTTS VALLEY RD W OF 29	77	76		4,768	7,420	55.6%	8,154	71.0%	9,222	93.4%
SR 20 S/O COUNTRY CLUB DR	96	97		5,342	6,496	21.6%	7,294	36.5%	9,219	72.6%
SR 20 W/O ED63	101	103		5,342	6,496	21.6%	7,294	36.5%	9,219	72.6%
SCOTTS VY RD W/O 29	51	76		-	7,140	N/A	7,922	N/A	9,058	N/A
SODA BAY RD E/O GADDY LN	161	162	6,261	5,612	6,291	12.1%	7,239	29.0%	8,875	58.1%
BIG VY RD	132	136		5,774	6,383	10.5%	7,153	23.9%	8,618	49.3%
SR 20 e/o Upper Lake	15	16		4,868	5,507	13.1%	5,924	21.7%	8,574	76.1%
SR 29 N/O ED 62 CC	16	21		4,868	5,507	13.1%	5,924	21.7%	8,574	76.1%
NICE-LUCERNE CUTOFF	22	28		5,000	5,825	16.5%	7,035	40.7%	8,285	65.7%
OLYMPIC DR W OF OLD 53	216	214		5,962	6,470	8.5%	6,952	16.6%	8,213	37.8%

Table G-2
Road Segment Volumes - By Volume
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
SAN JOAQUIN AVE SOUTH	193	207		2,947	7,897	168.0%	7,942	169.5%	8,164	177.0%
OLD 53 SR W/O SR 53 (CL)	257	260	6,142	5,584	7,561	35.4%	7,541	35.0%	7,542	35.1%
SR 20 FOOTHILL DR/CC DR (LU)	43	96		4,290	5,155	20.2%	5,714	33.2%	7,369	71.8%
MAIN ST	79	83		4,643	5,263	13.3%	6,104	31.5%	7,362	58.6%
FOOTHILL DR (LU) E/O SR 20	43	44		3,831	4,661	21.7%	5,571	45.4%	6,951	81.5%
LAKESHORE BLVD S/O N-L CUTOF	28	29		3,849	4,627	20.2%	5,637	46.5%	6,897	79.2%
MAIN ST (KV) N/O SR 29	174	177	3,165	4,000	4,840	21.0%	5,680	42.0%	6,800	70.0%
BOTTLE RCK RD N/O SULFUR CRK	233	287		4,652	5,143	10.6%	5,567	19.7%	6,561	41.0%
SODA BAY RD. W/O GADDY LN.	126	161		4,459	4,656	4.4%	5,277	18.3%	6,456	44.8%
HIGH ST S OF LAKESHORE	65	70		3,812	4,526	18.7%	5,373	40.9%	6,431	68.7%
Olympic E of Lakeshore	215	216	7,318	4,608	4,879	5.9%	5,279	14.6%	6,305	36.8%
LAKEVW DR N (W/O ED 63 CC)	23	35		3,778	4,332	14.7%	4,977	31.7%	6,196	64.0%
OLYMPIC E OF OLD 53	214	210		4,332	4,531	4.6%	4,960	14.5%	6,073	40.2%
SR 175 N/O BIG CYN RD.	316	319	8,227	4,106	4,575	11.4%	4,944	20.4%	5,851	42.5%
Elk Mtn Rd.	7	15		3,270	3,825	17.0%	4,516	38.1%	5,505	68.4%
SR 175 S/O BOTLE CRK RD	296	307		-	4,179	N/A	4,541	N/A	5,423	N/A
BIG VY RD	137	141		3,585	4,260	18.8%	4,579	27.7%	5,181	44.5%
STATE ST. (KV)	167	173		3,000	3,630	21.0%	4,290	43.0%	5,100	70.0%
HIGHLAND SPGS RD BIG VY RD TO 29	130	135		3,389	3,777	11.4%	4,204	24.1%	5,069	49.6%
LAKESHORE BL ASHE ST TO HIGH ST	64	65		2,898	3,466	19.6%	4,112	41.9%	5,067	74.9%
LAKESHORE BL NR LANGE ST	58	64		2,898	3,466	19.6%	4,112	41.9%	5,067	74.9%
BOTL ROCK RD SULFCRKRD/SR 175	287	296		3,460	3,890	12.4%	4,229	22.2%	5,019	45.1%
LAKE ST (CO) E/O LAKELAND ST	197	113		2,758	3,356	21.7%	4,144	50.2%	4,880	76.9%
HIGHLAND SPGS RD	152	156		3,264	3,645	11.7%	4,097	25.5%	4,863	49.0%
BIG VY RD/HILAND SPGS RD MAIN	129	130		3,286	3,645	10.9%	4,097	24.7%	4,863	48.0%
COUNTRY CLUB DRIVE (MIDDLE)	44	94		2,606	3,210	23.2%	3,821	46.6%	4,712	80.8%
OLD 53 LKSHR DR/CRAWFD(CL)	225	253	5,345	3,583	4,581	27.9%	4,632	29.3%	4,670	30.3%
OLD 53 N/O CRAWFORD AV(CL)	253	257		3,564	4,799	34.7%	4,744	33.1%	4,651	30.5%
SO. MAIN W/O 29	127	122		2,930	3,349	14.3%	3,735	27.5%	4,605	57.2%
SAN JOAQUIN AVE SOUTH	207	209		1,431	3,835	168.0%	3,908	173.1%	4,147	189.8%
GADDY LN. (KV)	161	167		2,635	2,764	4.9%	3,255	23.5%	3,921	48.8%
SR 175 BIG CYN RD TO SR 29	319	320		3,008	3,694	22.8%	3,728	23.9%	3,687	22.6%
BUTTS CYN RD	328	326		2,500	3,275	31.0%	3,388	35.5%	3,620	44.8%
SR 175 W/O MATHEWS	142	138	1,070	1,915	1,945	1.6%	2,182	13.9%	3,266	70.5%
DRY CRK CUTOFF	316	324		1,900	1,920	1.0%	2,257	18.8%	3,239	70.5%
BIG VY RD ARGONAUT TO MERRITT	141	144		2,057	2,645	28.6%	2,832	37.7%	3,144	52.9%
RENFRO	146	147		619	2,645	327.2%	2,832	357.5%	3,144	407.9%
HIGHLAND SPGS RD 29 TO MATHEWS	135	139		2,315	2,346	1.3%	2,402	3.8%	2,688	16.1%
SR 175 FR 29 TO MATHEWS	127	138	2,830	1,536	1,564	1.8%	1,776	15.6%	2,656	72.9%
SODA BAY RD NR HENDERSON PT	165	160		1,866	2,050	9.9%	2,275	21.9%	2,596	39.1%
SR 175 N/O LOCH LOMOND RD	232	282		2,400	2,441	1.7%	2,544	6.0%	2,592	8.0%
Elk Mtn Rd. -north Upper Lake	6	7	400	2,500	2,500	0.0%	2,500	0.0%	2,500	0.0%
LAKE ST (CO) S/O SR 20	108	197		1,420	1,645	15.9%	1,925	35.6%	2,462	73.4%

Table G-2
Road Segment Volumes - By Volume
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
BIG VY RD	136	137		1,510	2,009	33.0%	2,141	41.8%	2,377	57.4%
SR 175/BOTTLE ROCK RD	295	296		1,875	2,175	16.0%	2,224	18.6%	2,370	26.4%
LAKE ST. (LL) N/O MORGAN VY RD	261	267		2,000	2,306	15.3%	2,314	15.7%	2,338	16.9%
MORGAN VY RD SR 53 TO LAKE ST	266	267		2,000	2,306	15.3%	2,314	15.7%	2,338	16.9%
SR 281 PT LAKEVIEW RD/SR 29	196	239	5,097	1,735	1,959	12.9%	2,118	22.1%	2,334	34.5%
SAN JOAQUIN AVE ED111 TO 94	192	193		-	2,201	N/A	2,201	N/A	2,215	N/A
OLD 53	214	225		1,630	1,939	19.0%	1,991	22.2%	2,140	31.3%
Hill Rd N of Riggs	76	69		1,553	1,651	6.3%	1,871	20.5%	2,092	34.7%
WIDGEON WAY	106	111		1,193	1,480	24.1%	1,743	46.1%	2,084	74.7%
ARGONAUT FR 29 TO BIG VY RD	140	141		1,528	1,616	5.7%	1,747	14.3%	2,037	33.3%
LAKEVW DR. (E/O CC)	35	38		1,234	1,428	15.7%	1,688	36.8%	2,013	63.1%
Hill Rd EAST	49	69		1,482	1,571	6.0%	1,779	20.1%	1,984	33.9%
SCOTTS VY RD (DUE N/S SEGMENT)	47	48		6,715	1,571	-76.6%	1,779	-73.5%	1,984	-70.5%
HIGHLAND FR ARGONAUT TO MERRIT	143	148		1,600	1,600	0.0%	1,670	4.4%	1,891	18.2%
SR 281	164	185		1,284	1,572	22.4%	1,693	31.8%	1,859	44.7%
COUNTRY CLUB DR E/O SR 20	94	96		1,052	1,341	27.4%	1,580	50.1%	1,850	75.8%
STONE DR S OF SODA BAY	124	132		1,200	1,320	10.0%	1,464	22.0%	1,728	44.0%
SULFUR CRK RD W/O SR 175	284	286		1,328	1,470	10.7%	1,516	14.2%	1,650	24.2%
SR 175 LLOMOND/SULFUR CRK RD	282	286		1,381	1,656	19.9%	1,655	19.8%	1,648	19.3%
Dam Rd E of 53	260	261		1,327	1,726	30.0%	1,709	28.8%	1,639	23.5%
SEIGLER CYN RD W/O SEIGLR SPG	251	250		1,112	1,558	40.1%	1,565	40.7%	1,588	42.8%
BARTLETT SPGS RD E/O SR 20	40	37		1,204	1,272	5.6%	1,380	14.7%	1,577	30.9%
LOCH LOMOND RD W/O SEIGLER SPG	280	251		1,297	1,578	21.6%	1,574	21.3%	1,565	20.7%
LOCH LOMOND RD. W/O 175	283	285		1,297	1,578	21.6%	1,574	21.3%	1,565	20.7%
BIG CYN RD N/O SR 175	313	319		1,223	1,531	25.2%	1,533	25.4%	1,562	27.7%
SULFUR CRK RD E/O BOTTLE CRK R	287	284		1,192	1,253	5.2%	1,338	12.2%	1,541	29.3%
SULFUR BANK DR S/O SR 20	115	199		1,000	1,293	29.3%	1,373	37.3%	1,493	49.3%
SR 175 EMRFRD RD TO SUMMIT DR	289	293		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
SR 175 S/O SUMMIT DR.	293	295		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
SR 175 SULFR CRK RD TO EMERFD	286	289		1,222	1,415	15.8%	1,428	16.8%	1,476	20.8%
HARBIN SPRINGS N OF B CANYON	313	312		1,087	1,362	25.3%	1,359	25.0%	1,365	25.6%
HARBIN SPRINGS RD N END	312	303		1,087	1,362	25.3%	1,359	25.0%	1,365	25.6%
SEIGLER CYN RD S/O SR 29	271	268		400	1,350	237.6%	1,353	238.4%	1,359	239.6%
SEIGLER CYRN RD NE BIG CYN RD	274	250		1,277	1,350	5.7%	1,353	6.0%	1,359	6.4%
SEIGLER CYRN RD NO.	272	271		1,112	1,350	21.4%	1,353	21.7%	1,359	22.2%
PT LAKEVIEW RD N/O SR 29	258	265		1,023	1,192	16.5%	1,252	22.3%	1,306	27.7%
PT LAKEVW RD BETW ED 86 & 113	237	258		1,023	1,192	16.5%	1,252	22.3%	1,306	27.7%
SULFUR BANK DR.	203	199		721	1,118	55.1%	1,172	62.6%	1,249	73.3%
Diener btw Sieg Spr & Low Lk	243	241		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
Diener Dr E of Seigler Springs	245	243		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
Diener Dr W of Lowr Lk	241	270		904	1,285	42.1%	1,251	38.4%	1,172	29.6%
BELL HILL RD.	157	155		1,000	1,050	5.0%	1,050	5.0%	1,170	17.0%
RED HILLS RD BTW 175 & SIEGLER	232	240		1,000	1,017	1.7%	1,058	5.8%	1,077	7.7%

Table G-2
Road Segment Volumes - By Volume
(Average Daily Traffic)

Road Name	Node to Node		Base Yr Ground Count	Existing Model Calibration	Model Year 2005		Model Year 2010		Model Year 2020	
				Volume	Volume	% Increase	Volume	% Increase	Volume	% Increase
MARTIN E OF KECK	52	85		706	752	6.5%	828	17.3%	962	36.3%
MARTIN S OF RIGGS	51	52		706	752	6.5%	828	17.3%	962	36.3%
HIGHLAND SPGS RD	148	152		800	800	0.0%	835	4.4%	946	18.3%
SCHINDLER ST. (CO)	113	112		500	615	23.0%	730	46.0%	865	73.0%
BIG CYN RD	300	288		865	750	-13.3%	743	-14.1%	862	-0.4%
BUTTS CYN RD E/O SR 29	317	318		1,817	750	-58.7%	743	-59.1%	862	-52.6%
BUTTS CYN RD W/O CO. LINE	326	327	894	1,817	750	-58.7%	743	-59.1%	862	-52.6%
SEIGLER SPGS RD S/O SR 29	239	240		535	744	39.0%	770	43.9%	801	49.6%
PT LAKEVIEW RD E/O SR 281	195	237		639	644	0.8%	710	11.0%	791	23.7%
6TH ST FR MANZANITA TO MAIN	85	83		530	562	5.9%	621	17.2%	724	36.5%
SEIGLER SPGS NO. RD	240	245		351	666	89.6%	688	96.1%	718	104.5%
SCOTTS VY RD NORTH	12	47		1,482	403	-72.8%	514	-65.3%	628	-57.6%
SCOTTS VY RD. S/O SR 20	11	12		6,489	403	-93.8%	514	-92.1%	628	-90.3%
MATHEWS RD.	138	139		380	381	0.1%	406	6.9%	610	60.5%
Crystal Lake E of Hill Rd East	63	65		400	438	9.5%	482	20.5%	548	37.0%
NORTH DRIVE (CO)	186	183		258	386	49.4%	401	55.6%	438	69.8%
SAN JOAQUIN AVE.	188	192		281	386	37.4%	401	43.1%	438	56.1%
SEIGLER SPGS N RD N/O LOCHLMD	245	248		1,439	435	-69.8%	432	-70.0%	436	-69.7%
Elk Mtn Rd.	5	6		378	326	-13.7%	331	-12.5%	380	0.5%
Hill Rd East S of Crystal Lk	63	66		223	244	9.2%	268	20.3%	305	36.6%
Hill Rd N of Scotts Vly	69	66		223	244	9.2%	268	20.3%	305	36.6%
ARGONAUT FR HISPGSRD TO 29	143	140		300	300	0.0%	300	0.0%	300	0.0%
SULFUR BANK DR.	186	203		200	263	31.5%	270	35.0%	283	41.5%
RSSL/CMPTN/SPRR N OF MARTIN	80	85		174	190	9.3%	207	19.0%	239	37.0%
BIG CYN RD	288	301		158	208	31.1%	211	33.5%	229	44.8%
BIG CYN RD S/O ED 119	311	313		166	208	25.0%	211	27.3%	229	38.1%
BIG CYN RD S/O SEIGLER CYN R	250	298		158	208	31.1%	211	33.5%	229	44.8%
HIGHLAND SPGS RD MATHEWS TO ARGONT	139	143		105	106	0.6%	111	5.8%	126	20.2%
BELL HILL RD. W/O 29	149	175		90	94	4.7%	94	4.7%	105	16.9%
BARTLETT SPGS RD	46	36	30	30	26	-13.2%	26	-12.9%	30	0.7%

Table G-3
Intersection Volumes - By Volume
(Average Daily Traffic)

	Existing Model Calibration			Model Year 2005				Model Year 2010				Model Year 2020			
Intersection (A Street/B Street)	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase
11th St-Scotts Vly Rd/SR 29	10300	22175	32475	11720	25524	37244	14.7%	13433	29260	42693	31.5%	15564	34880	50444	55.3%
Lakeshore Dr/SR 53	12089	14301	26390	15738	18753	34492	30.7%	16107	19771	35878	36.0%	17154	21748	38902	47.4%
Park Wy/SR 29	6666	15656	22323	7941	17874	25815	15.6%	9273	21566	30839	38.2%	11219	25958	37177	66.5%
Dam Rd-Old State Hwy/SR 53	3448	19556	23004	4643	26790	31433	36.6%	4625	27580	32205	40.0%	4591	29470	34061	48.1%
Highland Sprgs Rd/SR 29	2882	19120	22001	3061	22274	25336	15.2%	3303	24741	28044	27.5%	3878	29581	33459	52.1%
Main St-SR 175/SR 29	2233	19309	21542	2456	22338	24795	15.1%	2755	24841	27596	28.1%	3630	29719	33349	54.8%
Lakeport Blvd/Main St	9000	11000	20000	10183	12278	22461	12.3%	12068	14196	26264	31.3%	14628	17143	31771	58.9%
Main St/SR 29	4000	16437	20437	4840	19574	24414	19.5%	5680	21261	26941	31.8%	6800	24708	31508	54.2%
Morgan Vly Rd-SR 29/SR 53-SR 29	8200	13299	21498	10521	17707	28227	31.3%	10780	18289	29069	35.2%	11382	20021	31403	46.1%
SR 20/SR 53	8069	11708	19777	9451	13864	23315	17.9%	10589	15263	25852	30.7%	13106	18120	31226	57.9%
Bell Hill Rd/SR 29	1000	18633	19678	1050	21969	23066	17.2%	1050	24333	25430	29.2%	1170	28923	30093	52.9%
Argonaut Rd/SR 29	912	18196	19108	958	21404	22362	17.0%	1023	23740	24764	29.6%	1168	28313	29482	54.3%
SR 20/SR 29	8727	7901	16628	9793	8790	18583	11.8%	11190	10779	21969	32.1%	15375	13598	28973	74.2%
Renfro Rd/SR 29	1151	17437	18588	1322	20599	21922	17.9%	1416	22870	24286	30.7%	1572	27298	28870	55.3%
11th St/Main St	9604	8267	17870	11065	9468	20533	14.9%	12917	11031	23948	34.0%	15132	13059	28191	57.8%
Merrit Rd/SR 29	UNAVAIL.	17437	17437	UNAVAIL.	20599	20599	18.1%	UNAVAIL.	22870	22870	31.2%	UNAVAIL.	27298	27298	56.6%
Bottle Rock Rd/SR 29	6659	11950	18609	7396	14582	21978	18.1%	7967	15396	23363	25.5%	9311	17376	26687	43.4%
N-L Cutoff/SR 29	5000	10592	15592	5825	11889	17714	13.6%	7035	14495	21530	38.1%	8285	17850	26135	67.6%
Lakeview Dr/SR 20	3778	10930	14708	4332	12657	16990	15.5%	4977	14759	19736	34.2%	6196	18729	24924	69.5%
N-L Cutoff/SR 20	5000	9634	14634	5825	11111	16936	15.7%	7035	12696	19731	34.8%	8285	16462	24747	69.1%
Lakeshore Dr/Olympic	12089	4605	16693	15547	4879	20426	22.4%	15895	5279	21173	26.8%	16910	6305	23215	39.1%
6th St/Main St	2587	12000	14587	2912	13464	16376	12.3%	3362	15589	18951	29.9%	4043	18816	22859	56.7%
Olympic/SR 53	4346	10547	14894	4531	12699	17229	15.7%	4960	13948	18909	27.0%	6073	16371	22444	50.7%
Seigler Canyon Rd/SR 29	1112	12791	13903	1350	16481	17832	28.3%	1353	17038	18392	32.3%	1359	18315	19674	41.5%
Scotts Vly Rd/SR 20	398	10217	10616	403	11236	11638	9.6%	514	13112	13626	28.4%	628	18529	19157	80.5%
Lakeshore Blvd/Park Wy	4594	6666	11260	5536	7941	13477	19.7%	6567	9273	15840	40.7%	7903	11219	19122	69.8%
Soda Bay-S. Main/SR 175	9500	2930	12430	10630	3349	13979	12.5%	11937	3735	15671	26.1%	14240	4605	18845	51.6%
Lakeshore Dr/Old State Hwy	11869	1621	13490	15469	1939	17408	29.0%	15773	1991	17764	31.7%	16694	2140	18834	39.6%
Bartlett Sprgs Rd/SR 20	1213	9950	11163	1272	11576	12848	15.1%	1380	13615	14995	34.3%	1577	17245	18821	68.6%
Lakeview Dr/SR 20	1234	9657	10891	1428	11205	12632	16.0%	1688	13115	14802	35.9%	2013	16637	18650	71.2%
11th St/Central St-Spurr St	11739	UNAVAIL.	11739	13542	UNAVAIL.	13542	15.4%	15814	UNAVAIL.	15814	34.7%	18518	UNAVAIL.	18518	57.7%
Foothill Dr/SR 20	3864	6254	10118	4661	7486	12147	20.0%	5571	8500	14071	39.1%	6951	10845	17796	75.9%
Pt Lakview Rd/SR 29	1020	10701	11721	1192	13664	14856	26.8%	1252	14238	15490	32.2%	1306	15584	16890	44.1%
Elk Mtn. Rd/SR 20	3270	5719	8989	3825	6525	10350	15.1%	4516	7131	11646	29.6%	5505	10066	15571	73.2%
Diener Dr/SR 29	907	9765	10672	1285	12459	13743	28.8%	1251	13020	14270	33.7%	1172	14376	15548	45.7%
SR 175/SR 29 (MT)	2788	6928	9716	3694	9610	13304	36.9%	3728	9988	13716	41.2%	3687	11508	15195	56.4%
Red Hills Rd-Sr 281/SR 29	1135	9248	10383	1352	11682	13034	25.5%	1444	12244	13688	31.8%	1568	13612	15180	46.2%
Schindler St/SR 20	500	8849	9349	615	10672	11287	20.7%	730	11846	12576	34.5%	865	13946	14811	58.4%
Dry Creek Cutoff/SR 29	1906	5804	7710	1920	6800	8720	13.1%	2257	7718	9975	29.4%	3239	10955	14194	84.1%
Big Vly Rd/Soda Bay Rd	3286	5000	8286	3645	5545	9190	10.9%	4097	6235	10332	24.7%	4863	7400	12263	48.0%
SR 20/Widgeon Wy	5921	1195	7117	7187	1480	8667	21.8%	8081	1743	9824	38.0%	10064	2084	12148	70.7%
Main St/State St	4125	3000	7125	4985	3630	8615	20.9%	5884	4290	10174	42.8%	6997	5100	12097	69.8%
Arrowhead Dr/Lakeshore Dr-San Joaquin Ave	0	7811	7811	0	10827	10827	38.6%	0	11133	11133	42.5%	0	12004	12004	53.7%
Big Vly Rd/Highland Sprgs Rd	4569	3448	8017	5014	3777	8791	9.7%	5625	4204	9829	22.6%	6740	5069	11809	47.3%
Butts Canyon Rd/SR 29	865	6643	7508	750	8980	9730	29.6%	743	9368	10111	34.7%	862	10897	11759	56.6%
Hill Rd/Scotts Vly Rd	1552	6611	8163	1651	7280	8931	9.4%	1871	8038	9909	21.4%	2092	9140	11232	37.6%
Hill Rd/Park Wy	1482	6666	8148	1571	7941	9512	16.7%	1779	9273	11052	35.6%	1984	11219	11219	37.7%
Country Club Dr/ SR 20	1052	4848	5900	1341	5826	7167	21.5%	1580	6504	8084	37.0%	1850	8294	10144	71.9%
Bottle Rock Rd/SR 175	3367	2728	6094	3890	3177	7067	16.0%	4229	3383	7612	24.9%	5019	3897	8916	46.3%
N-L Cutoff/Westlake Rd	5000	0	5000	5825	0	5825	16.5%	7035	0	7035	40.7%	8285	0	8285	65.7%
Bottle Rock Rd/Harrington Flat	5616	0	5616	6269	0	6269	11.6%	6767	0	6767	20.5%	7936	0	7936	41.3%
Dry Creek Cutoff/SR 175	1906	2969	4875	1920	3615	5535	13.5%	2257	3815	6072	24.5%	3239	4231	7470	53.2%
Old State Hwy/Olympic	811	4346	5157	970	4531	5500	6.7%	996	4960	5956	15.5%	1070	6073	7143	38.5%
Big Canyon Rd/SR 175	1207	3355	4562	1531	4134	5665	24.2%	1533	4336	5869	28.7%	1562	4769	6330	38.8%
Crystal Lake/Lakeshore Blvd	400	3355	3755	438	3996	4434	18.1%	482	4742	5224	39.1%	548	5749	6297	67.7%
Argonaut/Big Vly Rd	1524	2943	4467	1616	3452	5068	13.5%	1747	3706	5452	22.1%	2037	4163	6199	38.8%

Table G-3
Intersection Volumes - By Volume
(Average Daily Traffic)

	Existing Model Calibration			Model Year 2005				Model Year 2010				Model Year 2020			
Intersection (A Street/B Street)	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase	A Street Approach Volume	B Street Approach Volume	Total Entering Volume	Percent Increase
Soda Bay Rd/Stone Dr	2098	1200	3298	2328	1320	3648	10.6%	2639	1464	4103	24.4%	3228	1728	4956	50.3%
Mathews Rd/SR 175	379	1726	2105	381	1755	2135	1.4%	406	1979	2385	13.3%	610	2961	3571	69.7%
Lake St/Morgan Vly Rd	2000	1000	3000	2306	1153	3459	15.3%	2314	1157	3471	15.7%	2338	1169	3507	16.9%
Loch Lommond Rd/Seigler Sprgs Rd	1301	1355	2656	1578	1754	3332	25.5%	1574	1752	3326	25.2%	1565	1739	3304	24.4%
SR 175/Sulphur Crk Rd	1291	1311	2602	1536	1470	3005	15.5%	1542	1516	3058	17.5%	1562	1650	3212	23.4%
Scotts Vly Rd/Hill Rd	1480	887	2367	1571	947	2518	6.4%	1779	1069	2849	20.4%	1984	1198	3182	34.4%
Merrit Rd/Renfro	0	2301	2301	0	2645	2645	14.9%	0	2832	2832	23.1%	0	3144	3144	36.6%
Pt Lakeview Rd/SR 281	631	1473	2103	644	1766	2410	14.6%	710	1906	2615	24.3%	791	2097	2887	37.3%
Diener/SR 175	0	2400	2400	0	2441	2441	1.7%	0	2544	2544	6.0%	0	2592	2592	8.0%
Red Hills Rd/SR 175	1000	1200	2200	1017	1221	2238	1.7%	1058	1272	2330	5.9%	1077	1296	2373	7.9%
Big Canyon Rd/Harbin Sprgs Rd	682	1079	1762	869	1362	2231	26.7%	872	1359	2232	26.7%	895	1365	2261	28.3%
Highland Sprgs Rd/Mathews Rd	1210	379	1589	1226	381	1606	1.1%	1256	406	1663	4.6%	1407	610	2017	26.9%
Red Hills Rd/Seigler Sprgs Rd	1000	571	1571	1017	705	1722	9.6%	1058	729	1787	13.7%	1077	759	1836	16.9%
Big Canyon Rd/Seigler Sprgs Rd	158	1191	1349	208	1454	1662	23.1%	211	1459	1671	23.8%	229	1473	1702	26.2%
Harrington Flat Rd/Sulphur Crk Rd	0	1259	1259	0	1362	1362	8.1%	0	1427	1427	13.3%	0	1596	1596	26.7%
Big Vly Rd/Renfro Rd	1151	0	1151	1322	0	1322	14.9%	1416	0	1416	23.1%	1572	0	1572	36.6%
SR 175/Summit Dr	1205	0	1205	1415	0	1415	17.5%	1428	0	1428	18.5%	1476	0	1476	22.6%
Emerford Rd/SR 175	0	1205	1205	0	1415	1415	17.5%	0	1428	1428	18.5%	0	1476	1476	22.6%
Argonaut Rd/Highland Sprgs Rd	300	853	1153	300	853	1153	0.0%	300	891	1191	3.3%	300	1009	1309	13.5%
Diener Dr/Seigler Sprgs Rd	454	533	986	642	666	1308	32.6%	625	688	1314	33.2%	586	718	1304	32.2%
6th St/Martin St	617	174	791	657	190	847	7.0%	725	207	932	17.8%	843	239	1082	36.7%
Hill Rd E/Hill Rd	222	111	334	244	122	365	9.5%	268	134	402	20.6%	305	152	457	37.0%

Table G-4
Road Segment Capacity Analysis - By Name
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
11TH ST E OF 29	A2-3	13,848	13884	-	15778	-	16,020	13884	YES	15778	YES	18,712	13884	YES	15778	YES	21,905	13884	YES	15778	YES
11TH ST W OF MAIN	A2-2	9,574	11570	-	13148	-	11,065	11570	-	13148	-	12,917	11570	YES	13148	-	15,132	11570	YES	13148	YES
6TH ST FR MANZANITA TO MAIN	RD-2	530	20213	-	22790	-	562	20213	-	22790	-	621	20213	-	22790	-	724	20213	-	22790	-
ARGONAUT FR 29 TO BIG VY RD		1,528	-	-	-	-	1,616	-	-	-	-	1,747	-	-	-	-	2,037	-	-	-	-
ARGONAUT FR HISPGSRD TO 29		300	-	-	-	-	300	-	-	-	-	300	-	-	-	-	300	-	-	-	-
BARTLETT SPGS RD E/O SR 20		1,204	-	-	-	-	1,272	-	-	-	-	1,380	-	-	-	-	1,577	-	-	-	-
BARTLETT SPGS RD		30	-	-	-	-	26	-	-	-	-	26	-	-	-	-	30	-	-	-	-
BELL HILL RD.	RB-2	1,000	23491	-	26296	-	1,050	23491	-	26296	-	1,050	23491	-	26296	-	1,170	23491	-	26296	-
BELL HILL RD. W/O 29	RB-2	90	23491	-	26296	-	94	23491	-	26296	-	94	23491	-	26296	-	105	23491	-	26296	-
BIG CYN RD		865	-	-	-	-	750	-	-	-	-	743	-	-	-	-	862	-	-	-	-
BIG CYN RD		158	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
BIG CYN RD N/O SR 175	RC-2	1,223	21247	-	24543	-	1,531	21247	-	24543	-	1,533	21247	-	24543	-	1,562	21247	-	24543	-
BIG CYN RD S/O ED 119		166	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
BIG CYN RD S/O SEIGLER CYN R		158	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
BIG VY RD	RB-2	5,774	23491	-	26296	-	6,383	23491	-	26296	-	7,153	23491	-	26296	-	8,618	23491	-	26296	-
BIG VY RD	RB-2	1,510	23491	-	26296	-	2,009	23491	-	26296	-	2,141	23491	-	26296	-	2,377	23491	-	26296	-
BIG VY RD	RB-2	3,585	23491	-	26296	-	4,260	23491	-	26296	-	4,579	23491	-	26296	-	5,181	23491	-	26296	-
BIG VY RD ARGONAUT TO MERRITT	RB-2	2,057	23491	-	26296	-	2,645	23491	-	26296	-	2,832	23491	-	26296	-	3,144	23491	-	26296	-
BIG VY RD/HILAND SPGS RD MAIN	RB-2	3,286	23491	-	26296	-	3,645	23491	-	26296	-	4,097	23491	-	26296	-	4,863	23491	-	26296	-
BOTTLE ROCK RD SULFCRKRD/SR 175	RC-2	3,460	21247	-	24543	-	3,890	21247	-	24543	-	4,229	21247	-	24543	-	5,019	21247	-	24543	-
BOTTLE RCK RD N/O SULFUR CRK	RC-2	4,652	21247	-	24543	-	5,143	21247	-	24543	-	5,567	21247	-	24543	-	6,561	21247	-	24543	-
BOTTLE ROCK RD S/O SR 29	RC-2	6,704	21247	-	24543	-	7,396	21247	-	24543	-	7,967	21247	-	24543	-	9,311	21247	-	24543	-
BUTTS CYN RD	RD-2	2,500	20213	-	22790	-	3,275	20213	-	22790	-	3,388	20213	-	22790	-	3,620	20213	-	22790	-
BUTTS CYN RD E/O SR 29	RD-4	1,817	22229	-	25069	-	750	22229	-	25069	-	743	22229	-	25069	-	862	22229	-	25069	-
BUTTS CYN RD W/O CO. LINE	RD-5	1,817	22229	-	25069	-	750	22229	-	25069	-	743	22229	-	25069	-	862	22229	-	25069	-
COUNTRY CLUB DR E/O SR 20	RD-2	1,052	20213	-	22790	-	1,341	20213	-	22790	-	1,580	20213	-	22790	-	1,850	20213	-	22790	-
COUNTRY CLUB DRIVE (MIDDLE)	RD-2	2,606	20213	-	22790	-	3,210	20213	-	22790	-	3,821	20213	-	22790	-	4,712	20213	-	22790	-
Crystal Lake E of Hill Rd East	RD-2	400	20213	-	22790	-	438	20213	-	22790	-	482	20213	-	22790	-	548	20213	-	22790	-
Dam Rd E of 53	RD-2	1,327	20213	-	22790	-	1,726	20213	-	22790	-	1,709	20213	-	22790	-	1,639	20213	-	22790	-
Diener btw Sieg Spr & Low Lk		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
Diener Dr E of Seigler Springs		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
Diener Dr W of Lowr Lk		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
DRY CRK CUTOFF	RD-2	1,900	20213	-	22790	-	1,920	20213	-	22790	-	2,257	20213	-	22790	-	3,239	20213	-	22790	-
Elk Mtn Rd.	RB-2	378	23491	-	26296	-	326	23491	-	26296	-	331	23491	-	26296	-	380	23491	-	26296	-
Elk Mtn Rd. -north Upper Lake	RB-2	2,500	23491	-	26296	-	2,500	23491	-	26296	-	2,500	23491	-	26296	-	2,500	23491	-	26296	-
Elk Mtn Rd.	RB-2	3,270	23491	-	26296	-	3,825	23491	-	26296	-	4,516	23491	-	26296	-	5,505	23491	-	26296	-
FOOTHILL DR (LU) E/O SR 20	A3-2	3,831	11307	-	12271	-	4,661	11307	-	12271	-	5,571	11307	-	12271	-	6,951	11307	-	12271	-
GADDY LN. (KV)	RB-2	2,635	23491	-	26296	-	2,764	23491	-	26296	-	3,255	23491	-	26296	-	3,921	23491	-	26296	-
HARBIN SPRINGS N OF B CANYON		1,087	-	-	-	-	1,362	-	-	-	-	1,359	-	-	-	-	1,365	-	-	-	-
HARBIN SPRINGS RD N END		1,087	-	-	-	-	1,362	-	-	-	-	1,359	-	-	-	-	1,365	-	-	-	-
HIGH ST S OF LAKESHORE	RD-2	3,812	20213	-	22790	-	4,526	20213	-	22790	-	5,373	20213	-	22790	-	6,431	20213	-	22790	-
HIGH STREET BTW 20 & 16	A1-3	11,890	15217	-	16829	-	13,674	15217	-	16829	-	15,959	15217	YES	16829	-	18,756	15217	YES	16829	YES
HIGHLAND FR ARGONAUT TO MERRIT	RC-2	1,600	21247	-	24543	-	1,600	21247	-	24543	-	1,670	21247	-	24543	-	1,891	21247	-	24543	-
HIGHLAND SPGS RD	RC-2	800	21247	-	24543	-	800	21247	-	24543	-	835	21247	-	24543	-	946	21247	-	24543	-
HIGHLAND SPGS RD	RC-2	3,264	21247	-	24543	-	3,645	21247	-	24543	-	4,097	21247	-	24543	-	4,863	21247	-	24543	-
HIGHLAND SPGS RD 29 TO MATHEWS	RC-2	2,315	21247	-	24543	-	2,346	21247	-	24543	-	2,402	21247	-	24543	-	2,688	21247	-	24543	-
HIGHLAND SPGS RD BIG VY RD TO 29	RC-2	3,389	21247	-	24543	-	3,777	21247	-	24543	-	4,204	21247	-	24543	-	5,069	21247	-	24543	-
HIGHLAND SPGS RD MATHEWS TO ARGONT	RC-2	105	21247	-	24543	-	106	21247	-	24543	-	111	21247	-	24543	-	126	21247	-	24543	-
Hill Rd EAST		1,482	-	-	-	-	1,571	-	-	-	-	1,779	-	-	-	-	1,984	-	-	-	-
Hill Rd East S of Crystal Lk		223	-	-	-	-	244	-	-	-	-	268	-	-	-	-	305	-	-	-	-
Hill Rd N of Riggs		1,553	-	-	-	-	1,651	-	-	-	-	1,871	-	-	-	-	2,092	-	-	-	-
Hill Rd N of Scotts Vly	RD-2	223	20213	-	22790	-	244	20213	-	22790	-	268	20213	-	22790	-	305	20213	-	22790	-
LAKE ST (CO) E/O LAKELAND ST	A3-2	2,758	11307	-	12271	-	3,356	11307	-	12271	-	4,144	11307	-	12271	-	4,880	11307	-	12271	-
LAKE ST (CO) S/O SR 20		1,420	-	-	-	-	1,645	-	-	-	-	1,925	-	-	-	-	2,462	-	-	-	-
LAKE ST. (LL) N/O MORGAN VY RD	RD-2	2,000	20213	-	22790	-	2,306	20213	-	22790	-	2,314	20213	-	22790	-	2,338	20213	-	22790	-
LAKEPORT BLVD. E/O 29 FWY	A2-2	9,131	11570	-	13148	-	10,507	11570	-	13148	-	12,623	11570	YES	13148	-	14,767	11570	YES	13148	YES
LAKEPORT BL W OF MAIN ST	A2-2	9,000	11570	-	13148	-	10,183	11570	-	13148	-	12,068	11570	YES	13148	-	14,628	11570	YES	13148	YES
LAKESHORE BL ASHE ST TO HIGH ST	RC-2	2,898	21247	-	24543	-	3,466	21247	-	24543	-	4,112	21247	-	24543	-	5,067	21247	-	24543	-
LAKESHORE BL NR LANGE ST	RC-2	2,898	21247	-	24543	-	3,466	21247	-	24543	-	4,112	21247	-	24543	-	5,067	21247	-	24543	-
LAKESHORE BLVD N/O PARK WAY	RC-2	6,286	21247	-	24543	-	7,606	21247	-	24543	-	9,022	21247	-	24543	-	10,739	21247	-	24543	-
LAKESHORE BLVD S/O N-L CUTOF	RC-2	3,849	21247	-	24543	-	4,627	21247	-	24543	-	5,637	21247	-	24543	-	6,897	21247	-	24543	-
LAKESHORE DR n. of Olympic	RD-2	14,240	20213	-	22790	-	17,819	20213	-	22790	-	18,358	20213	-	22790	-	19,860	20213	-	22790	-
LAKESHORE DR OLD ST SR/SR 53	RC-2	12,101	21247	-	24543	-	15,738	21247	-	24543	-	16,107	21247	-	24543	-	17,154	21247	-	24543	-
LAKESHORE DR S/O OLYMPIC	A2-3	9,996	13884	-	15778	-	13,274	13884	-	15778	-	13,431	13884	-	15778	-	13,960	13884	YES	15778	-
LAKESHORE DR W/O OLD ST SR	RC-2	11,676	21247	-	24543	-	15,200	21247	-	24543	-	15,438	21247	-	24543	-	16,234	21247	-	24543	-
LAKEVW DR N (W/O ED 63 CC)	RD-2	3,778	20213	-	22790	-	4,332	20213	-	22790	-	4,977	20213	-	22790	-	6,196	20213	-	22790	-
LAKEVW DR. (E/O CC)	RD-2	1,234	20213	-	22790	-	1,428	20213	-	22790	-	1,688	20213	-	22790	-	2,013	20213	-	22790	-
LOCH LOMOND RD W/O SEIGLER SPG	RD-2	1,297	20213	-	22790	-	1,578	20213	-	22790	-	1,574	20213	-	22790	-	1,565	20213	-	22790	-
LOCH LOMOND RD. W/O 175	RD-2	1,297	20213	-	22790	-	1,578	20213	-	22790	-	1,574	20213	-	22790	-	1,565	20213	-	22790	-
MAIN ST	A2-2	4,643	11570	-	13148	-	5,263	11570	-	13148	-	6,104	11570	-	13148	-	7,362	11570	-	13148	-
MAIN ST (KV) N/O SR 29	A2-3	4,000	13884	-	15778	-	4,840	13884	-	15778	-	5,680	13884	-	15778	-	6,800	13884	-	15778	-
MAIN ST (KV) S/O STATE ST.	A2-3	4,733	13884	-	15778	-	9,971	13884	-	15778	-	11,768	13884	-	15778	-	13,994	13884	YES	15778	-

Table G-4
Road Segment Capacity Analysis - By Name
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
MAIN ST N/O LAKEPORT BL	A2-2	12,000	11570	YES	13148	-	13,464	11570	YES	13148	YES	15,589	11570	YES	13148	YES	18,816	11570	YES	13148	YES
MAIN ST S of LKEPRT BL	A2-2	10,000	11570	-	13148	-	11,091	11570	-	13148	-	12,803	11570	YES	13148	-	15,470	11570	YES	13148	YES
MARTIN E OF KECK	RD-2	706	20213	-	22790	-	752	20213	-	22790	-	828	20213	-	22790	-	962	20213	-	22790	-
MARTIN S OF RIGGS	RD-2	706	20213	-	22790	-	752	20213	-	22790	-	828	20213	-	22790	-	962	20213	-	22790	-
MATHEWS RD.		380	-	-	-	-	381	-	-	-	-	406	-	-	-	-	610	-	-	-	-
MORGAN VY RD SR 53 TO LAKE ST	RD-2	2,000	20213	-	22790	-	2,306	20213	-	22790	-	2,314	20213	-	22790	-	2,338	20213	-	22790	-
NICE-LUCERNE CUTOFF	RB-2	5,000	23491	-	26296	-	5,825	23491	-	26296	-	7,035	23491	-	26296	-	8,285	23491	-	26296	-
NORTH DRIVE (CO)	RD-2	258	20213	-	22790	-	386	20213	-	22790	-	401	20213	-	22790	-	438	20213	-	22790	-
OLD 53	RD-2	1,630	20213	-	22790	-	1,939	20213	-	22790	-	1,991	20213	-	22790	-	2,140	20213	-	22790	-
OLD 53 LKSHR DR/CRAWFD(CL)	RD-2	3,583	20213	-	22790	-	4,581	20213	-	22790	-	4,632	20213	-	22790	-	4,670	20213	-	22790	-
OLD 53 N/O CRAWFORD AV(CL)	RD-2	3,564	20213	-	22790	-	4,799	20213	-	22790	-	4,744	20213	-	22790	-	4,651	20213	-	22790	-
OLD 53 SR W/O SR 53 (CL)	RD-2	5,584	20213	-	22790	-	7,561	20213	-	22790	-	7,541	20213	-	22790	-	7,542	20213	-	22790	-
OLYMPIC DR W OF OLD 53	RD-2	5,962	20213	-	22790	-	6,470	20213	-	22790	-	6,952	20213	-	22790	-	8,213	20213	-	22790	-
Olympic E of Lakeshore	RD-2	4,608	20213	-	22790	-	4,879	20213	-	22790	-	5,279	20213	-	22790	-	6,305	20213	-	22790	-
OLYMPIC E OF OLD 53	RD-2	4,332	20213	-	22790	-	4,531	20213	-	22790	-	4,960	20213	-	22790	-	6,073	20213	-	22790	-
PARK WAY W/O LAKESHORE (LP)	RC-2	6,690	21247	-	24543	-	7,941	21247	-	24543	-	9,273	21247	-	24543	-	11,219	21247	-	24543	-
PARK WY E/O SR 29	RC-2	6,690	21247	-	24543	-	7,941	21247	-	24543	-	9,273	21247	-	24543	-	11,219	21247	-	24543	-
PT LAKEVIEW RD E/O SR 281	RB-2	639	23491	-	26296	-	644	23491	-	26296	-	710	23491	-	26296	-	791	23491	-	26296	-
PT LAKEVIEW RD N/O SR 29	RB-2	1,023	23491	-	26296	-	1,192	23491	-	26296	-	1,252	23491	-	26296	-	1,306	23491	-	26296	-
PT LAKEVW RD BETW ED 86 & 113	RB-2	1,023	23491	-	26296	-	1,192	23491	-	26296	-	1,252	23491	-	26296	-	1,306	23491	-	26296	-
RED HILLS RD BTW 175 & SIEGLER	RD-2	1,000	20213	-	22790	-	1,017	20213	-	22790	-	1,058	20213	-	22790	-	1,077	20213	-	22790	-
RENFRO	A3-2	619	11307	-	12271	-	2,645	11307	-	12271	-	2,832	11307	-	12271	-	3,144	11307	-	12271	-
RSSL/CMPTN/SPRR N OF MARTIN		174	-	-	-	-	190	-	-	-	-	207	-	-	-	-	239	-	-	-	-
SAN JOAQUIN AVE ED111 TO 94	RD-2	-	20213	-	22790	-	2,201	20213	-	22790	-	2,201	20213	-	22790	-	2,215	20213	-	22790	-
SAN JOAQUIN AVE SOUTH	RD-2	2,947	20213	-	22790	-	7,897	20213	-	22790	-	7,942	20213	-	22790	-	8,164	20213	-	22790	-
SAN JOAQUIN AVE SOUTH	RD-2	1,431	20213	-	22790	-	3,835	20213	-	22790	-	3,908	20213	-	22790	-	4,147	20213	-	22790	-
SAN JOAQUIN AVE.	RD-2	281	20213	-	22790	-	386	20213	-	22790	-	401	20213	-	22790	-	438	20213	-	22790	-
SCHINDLER ST. (CO)	A3-2	500	11307	-	12271	-	615	11307	-	12271	-	730	11307	-	12271	-	865	11307	-	12271	-
SCOTTS VALLEY RD W OF 29	RB-2	4,768	23491	-	26296	-	7,420	23491	-	26296	-	8,154	23491	-	26296	-	9,222	23491	-	26296	-
SCOTTS VY RD (DUE N/S SEGMENT)	RB-2	6,715	23491	-	26296	-	1,571	23491	-	26296	-	1,779	23491	-	26296	-	1,984	23491	-	26296	-
SCOTTS VY RD NORTH	RB-2	1,482	23491	-	26296	-	403	23491	-	26296	-	514	23491	-	26296	-	628	23491	-	26296	-
SCOTTS VY RD W/O 29	RB-2	400	23491	-	26296	-	7,140	23491	-	26296	-	7,922	23491	-	26296	-	9,058	23491	-	26296	-
SCOTTS VY RD. S/O SR 20	RB-2	6,489	23491	-	26296	-	403	23491	-	26296	-	514	23491	-	26296	-	628	23491	-	26296	-
SEIGLER CYN RD S/O SR 29	RB-2	-	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
SEIGLER CYN RD W/O SEIGLR SPG	RB-2	1,112	23491	-	26296	-	1,558	23491	-	26296	-	1,565	23491	-	26296	-	1,588	23491	-	26296	-
SEIGLER CYRN RD NE BIG CYN RD	RB-2	1,277	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
SEIGLER CYRN RD NO.	RB-2	1,112	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
SEIGLER SPGS N RD N/O LOCHLMD	RB-2	1,439	23491	-	26296	-	435	23491	-	26296	-	432	23491	-	26296	-	436	23491	-	26296	-
SEIGLER SPGS NO. RD	RB-2	351	23491	-	26296	-	666	23491	-	26296	-	688	23491	-	26296	-	718	23491	-	26296	-
SEIGLER SPGS RD S/O SR 29	RB-2	535	23491	-	26296	-	744	23491	-	26296	-	770	23491	-	26296	-	801	23491	-	26296	-
SO MAIN 175 TO HIGHLAND SPGS	RD-2	10,000	20213	-	22790	-	11,090	20213	-	22790	-	12,470	20213	-	22790	-	14,800	20213	-	22790	-
SO. MAIN LP BLVD TO 175	RD-2	9,000	20213	-	22790	-	10,170	20213	-	22790	-	11,403	20213	-	22790	-	13,680	20213	-	22790	-
SO. MAIN W/O 29	RD-2	2,930	20213	-	22790	-	3,349	20213	-	22790	-	3,735	20213	-	22790	-	4,605	20213	-	22790	-
SODA BAY RD E/O GADDY LN	RC-2	5,612	21247	-	24543	-	6,291	21247	-	24543	-	7,239	21247	-	24543	-	8,875	21247	-	24543	-
SODA BAY RD W/O ED 84	RC-2	1,866	21247	-	24543	-	2,050	21247	-	24543	-	2,275	21247	-	24543	-	2,596	21247	-	24543	-
SODA BAY RD. W/O GADDY LN.	RC-2	4,459	21247	-	24543	-	4,656	21247	-	24543	-	5,277	21247	-	24543	-	6,456	21247	-	24543	-
SR 175 BIG CYN RD TO SR 29	RA-2	3,008	24277	-	28049	-	3,694	24277	-	28049	-	3,728	24277	-	28049	-	3,687	24277	-	28049	-
SR 175 EMRFRD RD TO SUMMIT DR	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
SR 175 FR 29 TO MATHEWS	RA-2	1,536	24277	-	28049	-	1,564	24277	-	28049	-	1,776	24277	-	28049	-	2,656	24277	-	28049	-
SR 175 LLOMOND/SULFUR CRK RD	RA-2	1,381	24277	-	28049	-	1,656	24277	-	28049	-	1,655	24277	-	28049	-	1,648	24277	-	28049	-
SR 175 N/O BIG CYN RD.	RA-2	4,106	24277	-	28049	-	4,575	24277	-	28049	-	4,944	24277	-	28049	-	5,851	24277	-	28049	-
SR 175 N/O LOCH LOMOND RD	RA-2	2,400	24277	-	28049	-	2,441	24277	-	28049	-	2,544	24277	-	28049	-	2,592	24277	-	28049	-
SR 175 S/O BOTLE CRK RD	RA-2	-	24277	-	28049	-	4,178	24277	-	28049	-	4,541	24277	-	28049	-	5,423	24277	-	28049	-
SR 175 S/O SUMMIT DR.	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
SR 175 SULFR CRK RD TO EMERFD	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
SR 175 W/O MATHEWS	RA-2	1,915	24277	-	28049	-	1,945	24277	-	28049	-	2,182	24277	-	28049	-	3,266	24277	-	28049	-
SR 175/BOTTLE ROCK RD	RA-2	1,875	24277	-	28049	-	2,175	24277	-	28049	-	2,224	24277	-	28049	-	2,370	24277	-	28049	-
SR 20 BURPEE DR/BARTLETT SPGS	RA-2	10,186	24277	-	28049	-	11,919	24277	-	28049	-	13,958	24277	-	28049	-	17,643	24277	-	28049	-
SR 20 E/O JCT SR 53	RA-2	5,636	24277	-	28049	-	6,207	24277	-	28049	-	6,983	24277	-	28049	-	9,663	24277	-	28049	-
SR 20 e/o Scotts Vy Rd	RA-2	10,016	24277	-	28049	-	11,034	24277	-	28049	-	12,855	24277	-	28049	-	18,215	24277	-	28049	-
SR 20 e/o SR 29	RA-2	6,604	24277	-	28049	-	7,543	24277	-	28049	-	8,338	24277	-	28049	-	11,558	24277	-	28049	-
SR 20 e/o Upper Lake	RA-2	4,868	24277	-	28049	-	5,507	24277	-	28049	-	5,924	24277	-	28049	-	8,574	24277	-	28049	-
SR 20 FOOTHILL DR/CC DR (LU)	RA-2	4,290	24277	-	28049	-	5,155	24277	-	28049	-	5,714	24277	-	28049	-	7,369	24277	-	28049	-
SR 20 FR LKVW DR TO N-L CUTOF	RA-2	8,949	24277	-	28049	-	10,491	24277	-	28049	-	12,271	24277	-	28049	-	15,631	24277	-	28049	-
SR 20 FR REC CUTOF TO LKVW DR	RA-2	12,705	24277	-	28049	-	14,824	24277	-	28049	-	17,248	24277	-	28049	-	21,827	24277	-	28049	-
SR 20 Mendo to Scotts Vy Rd	RA-2	10,415	24277	-	28049	-	11,437	24277	-	28049	-	13,369	24277	-	28049	-	18,843	24277	-	28049	-
SR 20 N/O FOOTHILL DR	RA-2	8,121	24277	-	28049	-	9,816	24277	-	28049	-	11,286	24277	-	28049	-	14,320	24277	-	28049	-
SR 20 NR COLUSA CO. LINE	RA-2	5,636	24277	-	28049	-	6,207	24277	-	28049	-	6,983	24277	-	28049	-	9,663	24277	-	28049	-
SR 20 nr Witter Spgs Rd	RA-2	10,016	24277	-	28049	-	11,034	24277	-	28049	-	12,855	24277	-	28049	-	18,215	24277	-	28049	-
SR 20 S/O BARTLET SPGS RD	RA-2	9,551	24277	-	28049	-	11,232	24277	-	28049	-	13,271	24277	-	28049	-	16,846	24277	-	28049	-
SR 20 S/O COUNTRY CLUB DR	RA-2	5,342	24277	-	28049	-	6,496	24277	-	28049	-	7,294	24277	-	28049	-	9,219	24277	-	28049	-
SR 20 SCHINDLER TO SULFR BNK	RA-2	10,454	24277	-	28049	-	12,800	24277	-	28049	-	14,387	24277	-	28049	-	16,876	24277	-	28049	-

Table G-4
Road Segment Capacity Analysis - By Name
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
SR 20 W/O SCHINDLER ST.	RA-2	7,110	24277	-	28049	-	8,544	24277	-	28049	-	9,306	24277	-	28049	-	11,015	24277	-	28049	-
SR 20 w/o SR 29	RA-2	10,864	24277	-	28049	-	12,043	24277	-	28049	-	14,043	24277	-	28049	-	19,192	24277	-	28049	-
SR 20 W/O WIDGEON WY	RA-2	5,812	24277	-	28049	-	7,070	24277	-	28049	-	7,932	24277	-	28049	-	9,853	24277	-	28049	-
SR 20 w/o Witter Spgs Rd	RA-2	10,072	24277	-	28049	-	11,140	24277	-	28049	-	13,008	24277	-	28049	-	18,225	24277	-	28049	-
SR 20 WIDGEON WY/LAKE ST (CO)	RA-2	6,449	24277	-	28049	-	7,877	24277	-	28049	-	8,869	24277	-	28049	-	10,909	24277	-	28049	-
SR 281	RA-2	1,284	24277	-	28049	-	1,572	24277	-	28049	-	1,693	24277	-	28049	-	1,859	24277	-	28049	-
SR 281 PT LAKEVIEW RD/SR 29	RA-2	1,735	24277	-	28049	-	1,959	24277	-	28049	-	2,118	24277	-	28049	-	2,334	24277	-	28049	-
SR 29 BTL RCK RD TO S JCT 175	RA-2	9,201	24277	-	28049	-	11,548	24277	-	28049	-	12,093	24277	-	28049	-	13,435	24277	-	28049	-
SR 29 BUTTS CYN RD TO SR 175	RA-2	7,100	24277	-	28049	-	9,007	24277	-	28049	-	9,353	24277	-	28049	-	10,875	24277	-	28049	-
SR 29 CENTRAL MIDDLETOWN	RA-2	5,160	24277	-	28049	-	6,383	24277	-	28049	-	7,085	24277	-	28049	-	9,686	24277	-	28049	-
SR 29 E/O JCT SR 175	RA-2	9,201	24277	-	28049	-	11,548	24277	-	28049	-	12,093	24277	-	28049	-	13,435	24277	-	28049	-
SR 29 E/O SEIGLER SPGS RD	RA-2	9,402	24277	-	28049	-	11,817	24277	-	28049	-	12,394	24277	-	28049	-	13,790	24277	-	28049	-
SR 29 FR 175 TO MATHEWS RD	F-4	20,351	56729	-	70122	-	23,662	56729	-	70122	-	26,287	56729	-	70122	-	31,406	56729	-	70122	-
SR 29 FR ARGONAUT TO MERRITT	RA-3	18,311	26646	-	30854	-	21,922	26646	-	30854	-	24,286	26646	-	30854	-	28,870	26646	YES	30854	-
SR 29 FR LP BLVD TO JCT 175	F-4	18,102	56729	-	70122	-	21,015	56729	-	70122	-	23,395	56729	-	70122	-	28,032	56729	-	70122	-
SR 29 FR MARTIN TO LP BLVD	F-4	22,077	56729	-	70122	-	25,524	56729	-	70122	-	29,260	56729	-	70122	-	34,880	56729	-	70122	-
SR 29 FR N-L CUT TO PARK WY	F-4	13,147	56729	-	70122	-	14,988	56729	-	70122	-	18,212	56729	-	70122	-	22,102	56729	-	70122	-
SR 29 FR SR 20 TO WESTLKE RD	F-4	7,897	56729	-	70122	-	8,790	56729	-	70122	-	10,779	56729	-	70122	-	13,598	56729	-	70122	-
SR 29 FR WLKE TO N-L CUTOFF	F-4	7,897	56729	-	70122	-	8,790	56729	-	70122	-	10,779	56729	-	70122	-	13,598	56729	-	70122	-
SR 29 HIGHLAND TO ARGONAUT	RA-3	17,776	26646	-	30854	-	20,887	26646	-	30854	-	23,195	26646	-	30854	-	27,756	26646	YES	30854	-
SR 29 MERRITT TO BELL HILL RD	RA-3	14,676	26646	-	30854	-	21,922	26646	-	30854	-	24,286	26646	-	30854	-	28,870	26646	YES	30854	-
SR 29 MIDDLETOWN/LOWER LAKE	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-
SR 29 N OF SCOTTS VLY RD	F-4	17,916	56729	-	70122	-	20,760	56729	-	70122	-	24,921	56729	-	70122	-	29,815	56729	-	70122	-
SR 29 N/O BUTTS CYN RD	RA-2	7,055	24277	-	28049	-	8,953	24277	-	28049	-	9,383	24277	-	28049	-	10,920	24277	-	28049	-
SR 29 N/O ED 62 CC	F-4	4,868	56729	-	70122	-	5,507	56729	-	70122	-	5,924	56729	-	70122	-	8,574	56729	-	70122	-
SR 29 N/O ED117	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-
SR 29 N/O MAIN ST/KV	RA-3	14,244	26646	-	30854	-	21,532	26646	-	30854	-	23,824	26646	-	30854	-	28,098	26646	YES	30854	-
SR 29 NORTH MIDDLETOWN	RA-2	7,414	24277	-	28049	-	10,214	24277	-	28049	-	10,622	24277	-	28049	-	12,141	24277	-	28049	-
SR 29 PT LAKEVW RD TO SIEGLER	RA-2	10,306	24277	-	28049	-	13,101	24277	-	28049	-	13,645	24277	-	28049	-	14,962	24277	-	28049	-
SR 29 PT LKVW RD 2 SIEGLER CY	RA-2	11,274	24277	-	28049	-	14,226	24277	-	28049	-	14,831	24277	-	28049	-	16,205	24277	-	28049	-
SR 29 S OF SCOTTS VLY RD	F-4	22,077	56729	-	70122	-	25,524	56729	-	70122	-	29,260	56729	-	70122	-	34,880	56729	-	70122	-
SR 29 S. MIDDLETOWN/NAPA CO.	RA-2	6,459	24277	-	28049	-	7,218	24277	-	28049	-	8,351	24277	-	28049	-	12,225	24277	-	28049	-
SR 29 S/O BELL HILL RD/ED75CC	RA-3	14,768	26646	-	30854	-	22,016	26646	-	30854	-	24,380	26646	-	30854	-	28,976	26646	YES	30854	-
SR 29 S/O ED116	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-
SR 29 S/O ED117	RA-2	6,629	24277	-	28049	-	8,509	24277	-	28049	-	8,920	24277	-	28049	-	10,388	24277	-	28049	-
SR 29 S/O MAIN ST. KV	RA-3	14,772	26646	-	30854	-	17,616	26646	-	30854	-	18,699	26646	-	30854	-	21,317	26646	-	30854	-
SR 29 S/O PARK WY	F-4	17,916	56729	-	70122	-	20,760	56729	-	70122	-	24,921	56729	-	70122	-	29,815	56729	-	70122	-
SR 29 SEIGLER CY RD TO SR 53	RA-2	14,535	24277	-	28049	-	18,735	24277	-	28049	-	19,245	24277	-	28049	-	20,425	24277	-	28049	-
SR 29 W/O BOTTLE ROCK RD	RA-3	14,772	26646	-	30854	-	17,616	26646	-	30854	-	18,699	26646	-	30854	-	21,317	26646	-	30854	-
SR 53 E/O CLRLK OAKS TO HY 53	RA-3	10,451	26646	-	30854	-	12,695	26646	-	30854	-	14,195	26646	-	30854	-	16,549	26646	-	30854	-
SR 53 LAKE ST TO OLD ST SR	A1-5	21,306	30433	-	33659	-	27,729	30433	-	33659	-	28,489	30433	-	33659	-	30,396	30433	-	33659	-
SR 53 N/O LAKESHORE DR (CL)	A1-4	10,148	25349	-	28049	-	12,757	25349	-	28049	-	13,804	25349	-	28049	-	15,694	25349	-	28049	-
SR 53 N/O OLD ST SR (CL)	A1-5	18,842	30433	-	33659	-	25,851	30433	-	33659	-	26,671	30433	-	33659	-	28,545	30433	-	33659	-
SR 53 N/O OLYMPIC (CL)	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 53 N/O SR 29 (LL)	A1-5	19,898	30433	-	33659	-	24,586	30433	-	33659	-	25,401	30433	-	33659	-	27,604	30433	-	33659	-
SR 53 S/O JCT SR 20	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 53 S/O JCT SR 20	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 53 S/O LAKESHORE DR (CL)	A1-5	18,415	30433	-	33659	-	24,750	30433	-	33659	-	25,738	30433	-	33659	-	27,803	30433	-	33659	-
SR 53 S/O LOWER LAKE	A1-4	8,364	25349	-	28049	-	10,827	25349	-	28049	-	11,178	25349	-	28049	-	12,438	25349	-	28049	-
SR 53 S/O OLYMPIC	A1-4	9,340	25349	-	28049	-	11,533	25349	-	28049	-	12,634	25349	-	28049	-	14,622	25349	-	28049	-
STATE ST. (KV)	RD-2	3,000	20213	-	22790	-	3,630	20213	-	22790	-	4,290	20213	-	22790	-	5,100	20213	-	22790	-
STONE DR S OF SODA BAY	RB-2	1,200	23491	-	26296	-	1,320	23491	-	26296	-	1,464	23491	-	26296	-	1,728	23491	-	26296	-
SULFUR BANK DR S/O SR 20	RC-2	1,000	21247	-	24543	-	1,293	21247	-	24543	-	1,373	21247	-	24543	-	1,493	21247	-	24543	-
SULFUR BANK DR.	RC-2	200	21247	-	24543	-	263	21247	-	24543	-	270	21247	-	24543	-	283	21247	-	24543	-
SULFUR BANK DR.	RC-2	721	21247	-	24543	-	1,118	21247	-	24543	-	1,172	21247	-	24543	-	1,249	21247	-	24543	-
SULFUR CRK RD E/O BOTTLE CRK R	RC-2	1,192	21247	-	24543	-	1,253	21247	-	24543	-	1,338	21247	-	24543	-	1,541	21247	-	24543	-
SULFUR CRK RD W/O SR 175	RC-2	1,328	21247	-	24543	-	1,470	21247	-	24543	-	1,516	21247	-	24543	-	1,650	21247	-	24543	-
WIDGEON WAY		1,193	-	-	-	-	1,480	-	-	-	-	1,743	-	-	-	-	2,084	-	-	-	-

Table G-5
Road Segment Capacity Analysis - By Volume
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
SR 29 FR MARTIN TO LP BLVD	F-4	22,077	56729	-	70122	-	25,524	56729	-	70122	-	29,260	56729	-	70122	-	34,880	56729	-	70122	-
SR 29 S OF SCOTTS VLY RD	F-4	22,077	56729	-	70122	-	25,524	56729	-	70122	-	29,260	56729	-	70122	-	34,880	56729	-	70122	-
SR 29 FR 175 TO MATHEWS RD	F-4	20,351	56729	-	70122	-	23,662	56729	-	70122	-	26,287	56729	-	70122	-	31,406	56729	-	70122	-
SR 53 LAKE ST TO OLD ST SR	A1-5	21,306	30433	-	33659	-	27,729	30433	-	33659	-	28,489	30433	-	33659	-	30,396	30433	-	33659	-
SR 29 N OF SCOTTS VLY RD	F-4	17,916	56729	-	70122	-	20,760	56729	-	70122	-	24,921	56729	-	70122	-	29,815	56729	-	70122	-
SR 29 S/O PARK WY	F-4	17,916	56729	-	70122	-	20,760	56729	-	70122	-	24,921	56729	-	70122	-	29,815	56729	-	70122	-
SR 29 S/O BELL HILL RD/ED75CC	RA-3	14,768	26646	-	30854	-	22,016	26646	-	30854	-	24,380	26646	-	30854	-	28,976	26646	YES	30854	-
SR 29 FR ARGONAUT TO MERRITT	RA-3	18,311	26646	-	30854	-	21,922	26646	-	30854	-	24,286	26646	-	30854	-	28,870	26646	YES	30854	-
SR 29 MERRITT TO BELL HILL RD	RA-3	14,676	26646	-	30854	-	21,922	26646	-	30854	-	24,286	26646	-	30854	-	28,870	26646	YES	30854	-
SR 53 N/O OLD ST SR (CL)	A1-5	18,842	30433	-	33659	-	25,851	30433	-	33659	-	26,671	30433	-	33659	-	28,545	30433	-	33659	-
SR 29 N/O MAIN ST/KV	RA-3	14,244	26646	-	30854	-	21,532	26646	-	30854	-	23,824	26646	-	30854	-	28,098	26646	YES	30854	-
SR 29 FR LP BLVD TO JCT 175	F-4	18,102	56729	-	70122	-	21,015	56729	-	70122	-	23,395	56729	-	70122	-	26,032	56729	-	70122	-
SR 53 S/O LAKESHORE DR (CL)	A1-5	18,415	30433	-	33659	-	24,750	30433	-	33659	-	25,738	30433	-	33659	-	27,803	30433	-	33659	-
SR 29 HIGHLAND TO ARGONAUT	RA-3	17,776	26646	-	30854	-	20,887	26646	-	30854	-	23,195	26646	-	30854	-	27,756	26646	YES	30854	-
SR 53 N/O SR 29 (LL)	A1-5	19,898	30433	-	33659	-	24,586	30433	-	33659	-	25,401	30433	-	33659	-	27,604	30433	-	33659	-
SR 29 FR N-L CUT TO PARK WY	F-4	13,147	56729	-	70122	-	14,988	56729	-	70122	-	18,212	56729	-	70122	-	22,102	56729	-	70122	-
11TH ST E OF 29	A2-3	13,848	13884	-	15778	-	16,020	13884	YES	15778	YES	18,712	13884	YES	15778	YES	21,905	13884	YES	15778	YES
SR 20 FR REC CUTOF TO LKVW DR	RA-2	12,705	24277	-	28049	-	14,824	24277	-	28049	-	17,248	24277	-	28049	-	21,827	24277	-	28049	-
SR 29 S/O MAIN ST. KV	RA-3	14,772	26646	-	30854	-	17,616	26646	-	30854	-	18,699	26646	-	30854	-	21,317	26646	-	30854	-
SR 29 W/O BOTTLE ROCK RD	RA-3	14,772	26646	-	30854	-	17,616	26646	-	30854	-	18,699	26646	-	30854	-	21,317	26646	-	30854	-
SR 29 SEIGLER CY RD TO SR 53	RA-2	14,535	24277	-	28049	-	18,735	24277	-	28049	-	19,245	24277	-	28049	-	20,425	24277	-	28049	-
LAKESHORE DR n. of Olympic	RD-2	14,240	20213	-	22790	-	17,819	20213	-	22790	-	18,358	20213	-	22790	-	19,860	20213	-	22790	-
SR 20 w/o SR 29	RA-2	10,864	24277	-	28049	-	12,043	24277	-	28049	-	14,043	24277	-	28049	-	19,192	24277	-	28049	-
SR 20 Mendo to Scotts Vy Rd	RA-2	10,415	24277	-	28049	-	11,437	24277	-	28049	-	13,369	24277	-	28049	-	18,843	24277	-	28049	-
MAIN ST N/O LAKEPORT BL	A2-2	12,000	11570	YES	13148	-	13,464	11570	YES	13148	YES	15,589	11570	YES	13148	YES	18,816	11570	YES	13148	YES
HIGH STREET BTW 20 & 16	A1-3	11,890	15217	-	16829	-	13,674	15217	-	16829	-	15,959	15217	YES	16829	-	18,756	15217	YES	16829	YES
SR 20 w/o Witter Spgs Rd	RA-2	10,072	24277	-	28049	-	11,140	24277	-	28049	-	13,008	24277	-	28049	-	18,225	24277	-	28049	-
SR 20 e/o Scotts Vy Rd	RA-2	10,016	24277	-	28049	-	11,034	24277	-	28049	-	12,855	24277	-	28049	-	18,215	24277	-	28049	-
SR 20 nr Witter Spgs Rd	RA-2	10,016	24277	-	28049	-	11,034	24277	-	28049	-	12,855	24277	-	28049	-	18,215	24277	-	28049	-
SR 53 N/O OLYMPIC (CL)	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 53 S/O JCT SR 20	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 53 S/O JCT SR 20	RA-3	11,647	26646	-	30854	-	13,864	26646	-	30854	-	15,263	26646	-	30854	-	18,120	26646	-	30854	-
SR 20 BURPEE DR/BARTLETT SPGS	RA-2	10,186	24277	-	28049	-	11,919	24277	-	28049	-	13,958	24277	-	28049	-	17,643	24277	-	28049	-
LAKESHORE DR OLD ST SR/SR 53	RC-2	12,101	21247	-	24543	-	15,738	21247	-	24543	-	16,107	21247	-	24543	-	17,154	21247	-	24543	-
SR 20 SCHINDLER TO SULFR BNK	RA-2	10,454	24277	-	28049	-	12,800	24277	-	28049	-	14,387	24277	-	28049	-	16,876	24277	-	28049	-
SR 20 S/O BARTLET SPGS RD	RA-2	9,551	24277	-	28049	-	11,232	24277	-	28049	-	13,271	24277	-	28049	-	16,646	24277	-	28049	-
SR 53 E/O CLRLK OAKS TO HY 53	RA-3	10,451	26646	-	30854	-	12,695	26646	-	30854	-	14,195	26646	-	30854	-	16,549	26646	-	30854	-
LAKESHORE DR W/O OLD ST SR	RC-2	11,676	21247	-	24543	-	15,200	21247	-	24543	-	15,438	21247	-	24543	-	16,234	21247	-	24543	-
SR 29 PT LKVW RD 2 SIEGLER CY	RA-2	11,274	24277	-	28049	-	14,228	24277	-	28049	-	14,831	24277	-	28049	-	16,205	24277	-	28049	-
SR 53 N/O LAKESHORE DR (CL)	A1-4	10,148	25349	-	28049	-	12,757	25349	-	28049	-	13,804	25349	-	28049	-	15,694	25349	-	28049	-
SR 20 FR LKVW DR TO N-L CUTOF	RA-2	8,949	24277	-	28049	-	10,491	24277	-	28049	-	12,271	24277	-	28049	-	15,631	24277	-	28049	-
MAIN St S of LKEPRT BL	A2-2	10,000	11570	-	13148	-	11,091	11570	-	13148	-	12,803	11570	YES	13148	-	15,470	11570	YES	13148	YES
11TH ST W OF MAIN	A2-2	9,574	11570	-	13148	-	11,065	11570	-	13148	-	12,917	11570	YES	13148	-	15,132	11570	YES	13148	YES
SR 29 PT LAKEVW RD TO SIEGLER	RA-2	10,306	24277	-	28049	-	13,101	24277	-	28049	-	13,645	24277	-	28049	-	14,962	24277	-	28049	-
SO MAIN 175 TO HIGHLAND SPGS	RD-2	10,000	20213	-	22790	-	11,090	20213	-	22790	-	12,470	20213	-	22790	-	14,800	20213	-	22790	-
LAKEPORT BLVD. E/O 29 FWY	A2-2	9,131	11570	-	13148	-	10,507	11570	-	13148	-	12,623	11570	YES	13148	-	14,767	11570	YES	13148	YES
LAKEPORT BL W OF MAIN ST	A2-2	9,000	11570	-	13148	-	10,183	11570	-	13148	-	12,068	11570	YES	13148	-	14,628	11570	YES	13148	YES
SR 53 S/O OLYMPIC	A1-4	9,340	25349	-	28049	-	11,533	25349	-	28049	-	12,634	25349	-	28049	-	14,622	25349	-	28049	-
SR 20 N/O FOOTHILL DR	RA-2	8,121	24277	-	28049	-	9,816	24277	-	28049	-	11,286	24277	-	28049	-	14,320	24277	-	28049	-
MAIN ST (KV) S/O STATE ST.	A2-3	4,733	13884	-	15778	-	9,971	13884	-	15778	-	11,768	13884	-	15778	-	13,994	13884	YES	15778	-
LAKESHORE DR S/O OLYMPIC	A2-3	9,995	13884	-	15778	-	13,274	13884	-	15778	-	13,431	13884	-	15778	-	13,960	13884	YES	15778	-
SR 29 E/O SEIGLER SPGS RD	RA-2	9,402	24277	-	28049	-	11,817	24277	-	28049	-	12,394	24277	-	28049	-	13,790	24277	-	28049	-
SO. MAIN LP BLVD TO 175	RD-2	9,000	20213	-	22790	-	10,170	20213	-	22790	-	11,403	20213	-	22790	-	13,680	20213	-	22790	-
SR 29 FR SR 20 TO WESTLKE RD	F-4	7,897	56729	-	70122	-	8,790	56729	-	70122	-	10,779	56729	-	70122	-	13,598	56729	-	70122	-
SR 29 FR WLKE TO N-L CUTOFF	F-4	7,897	56729	-	70122	-	8,790	56729	-	70122	-	10,779	56729	-	70122	-	13,598	56729	-	70122	-
SR 29 BTL RCK RD TO S JCT 175	RA-2	9,201	24277	-	28049	-	11,548	24277	-	28049	-	12,093	24277	-	28049	-	13,435	24277	-	28049	-
SR 29 E/O JCT SR 175	RA-2	9,201	24277	-	28049	-	11,548	24277	-	28049	-	12,093	24277	-	28049	-	13,435	24277	-	28049	-
SR 53 S/O LOWER LAKE	A1-4	8,364	25349	-	28049	-	10,827	25349	-	28049	-	11,178	25349	-	28049	-	12,438	25349	-	28049	-
SR 29 S. MIDDLETOWN/NAPA CO.	RA-2	6,459	24277	-	28049	-	7,218	24277	-	28049	-	8,351	24277	-	28049	-	12,225	24277	-	28049	-
SR 29 NORTH MIDDLETOWN	RA-2	7,414	24277	-	28049	-	10,214	24277	-	28049	-	10,622	24277	-	28049	-	12,141	24277	-	28049	-
SR 20 e/o SR 29	RA-2	6,604	24277	-	28049	-	7,543	24277	-	28049	-	8,338	24277	-	28049	-	11,558	24277	-	28049	-
PARK WAY W/O LAKESHORE (LP)	RC-2	6,690	21247	-	24543	-	7,941	21247	-	24543	-	9,273	21247	-	24543	-	11,219	21247	-	24543	-
PARK WY E/O SR 29	RC-2	6,690	21247	-	24543	-	7,941	21247	-	24543	-	9,273	21247	-	24543	-	11,219	21247	-	24543	-
SR 20 W/O SCHINDLER ST.	RA-2	7,110	24277	-	28049	-	8,544	24277	-	28049	-	9,306	24277	-	28049	-	11,015	24277	-	28049	-
SR 29 N/O BUTTS CYN RD	RA-2	7,055	24277	-	28049	-	8,953	24277	-	28049	-	9,383	24277	-	28049	-	10,920	24277	-	28049	-
SR 20 WIDGEON WY/LAKE ST (CO)	RA-2	6,449	24277	-	28049	-	7,877	24277	-	28049	-	8,869	24277	-	28049	-	10,909	24277	-	28049	-
SR 29 BUTTS CYN RD TO SR 175	RA-2	7,100	24277	-	28049	-	9,007	24277	-	28049	-	9,353	24277	-	28049	-	10,875	24277	-	28049	-
LAKESHORE BLVD N/O PARK WAY	RC-2	6,286	21247	-	24543	-	7,606	21247	-	24543	-	9,022	21247	-	24543	-	10,739	21247	-	24543	-
SR 29 S/O ED117	RA-2	6,629	24277	-	28049	-	8,509	24277	-	28049	-	8,920	24277	-	28049	-	10,388	24277	-	28049	-
SR 29 MIDDLETOWN/LOWER LAKE	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-
SR 29 N/O ED117	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-
SR 29 S/O ED116	RA-2	6,599	24277	-	28049	-	8,540	24277	-	28049	-	8,916	24277	-	28049	-	10,256	24277	-	28049	-

Table G-5
Road Segment Capacity Analysis - By Volume
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
SR 20 W/O WIDGEON WY	RA-2	5,812	24277	-	28049	-	7,070	24277	-	28049	-	7,932	24277	-	28049	-	9,853	24277	-	28049	-
SR 29 CENTRAL MIDDLETOWN	RA-2	5,180	24277	-	28049	-	6,383	24277	-	28049	-	7,085	24277	-	28049	-	9,686	24277	-	28049	-
SR 20 E/O JCT SR 53	RA-2	5,636	24277	-	28049	-	6,207	24277	-	28049	-	6,983	24277	-	28049	-	9,663	24277	-	28049	-
SR 20 NR COLUSA CO. LINE	RA-2	5,636	24277	-	28049	-	6,207	24277	-	28049	-	6,983	24277	-	28049	-	9,663	24277	-	28049	-
BOTTLE ROCK RD S/O SR 29	RC-2	6,704	21247	-	24543	-	7,396	21247	-	24543	-	7,967	21247	-	24543	-	9,311	21247	-	24543	-
SCOTTS VALLEY RD W OF 29	RB-2	4,768	23491	-	26296	-	7,420	23491	-	26296	-	8,154	23491	-	26296	-	9,222	23491	-	26296	-
SR 20 S/O COUNTRY CLUB DR	RA-2	5,342	24277	-	28049	-	6,496	24277	-	28049	-	7,294	24277	-	28049	-	9,219	24277	-	28049	-
SCOTTS VY RD W/O 29	RB-2	-	23491	-	26296	-	7,140	23491	-	26296	-	7,922	23491	-	26296	-	9,058	23491	-	26296	-
SODA BAY RD E/O GADDY LN	RC-2	5,612	21247	-	24543	-	6,291	21247	-	24543	-	7,239	21247	-	24543	-	8,875	21247	-	24543	-
BIG VY RD	RB-2	5,774	23491	-	26296	-	6,383	23491	-	26296	-	7,153	23491	-	26296	-	8,618	23491	-	26296	-
SR 20 e/o Upper Lake	RA-2	4,868	24277	-	28049	-	5,507	24277	-	28049	-	5,924	24277	-	28049	-	8,574	24277	-	28049	-
SR 29 N/O ED 62 CC	F-4	4,868	56729	-	70122	-	5,507	56729	-	70122	-	5,924	56729	-	70122	-	8,574	56729	-	70122	-
NICE-LUCERNE CUTOFF	RB-2	5,000	23491	-	26296	-	5,825	23491	-	26296	-	7,035	23491	-	26296	-	8,285	23491	-	26296	-
OLYMPIC DR W OF OLD 53	RD-2	5,962	20213	-	22790	-	6,470	20213	-	22790	-	6,952	20213	-	22790	-	8,213	20213	-	22790	-
SAN JOAQUIN AVE SOUTH	RD-2	2,947	20213	-	22790	-	7,897	20213	-	22790	-	7,942	20213	-	22790	-	8,164	20213	-	22790	-
OLD 53 SR W/O SR 53 (CL)	RD-2	5,584	20213	-	22790	-	7,561	20213	-	22790	-	7,541	20213	-	22790	-	7,542	20213	-	22790	-
SR 20 FOOTHILL DR/CC DR (LU)	RA-2	4,290	24277	-	28049	-	5,155	24277	-	28049	-	5,714	24277	-	28049	-	7,369	24277	-	28049	-
MAIN ST	A2-2	4,643	11570	-	13148	-	5,263	11570	-	13148	-	6,104	11570	-	13148	-	7,362	11570	-	13148	-
FOOTHILL DR (LU) E/O SR 20	A3-2	3,831	11307	-	12271	-	4,661	11307	-	12271	-	5,571	11307	-	12271	-	6,951	11307	-	12271	-
LAKESHORE BLVD S/O N-L CUTOF	RC-2	3,849	21247	-	24543	-	4,627	21247	-	24543	-	5,637	21247	-	24543	-	6,897	21247	-	24543	-
MAIN ST (KV) N/O SR 29	A2-3	4,000	13884	-	15778	-	4,840	13884	-	15778	-	5,680	13884	-	15778	-	6,800	13884	-	15778	-
BOTTLE RCK RD N/O SULFUR CRK	RC-2	4,652	21247	-	24543	-	5,143	21247	-	24543	-	5,567	21247	-	24543	-	6,561	21247	-	24543	-
SODA BAY RD. W/O GADDY LN.	RC-2	4,459	21247	-	24543	-	4,656	21247	-	24543	-	5,277	21247	-	24543	-	6,456	21247	-	24543	-
HIGH ST S OF LAKESHORE	RD-2	3,812	20213	-	22790	-	4,526	20213	-	22790	-	5,373	20213	-	22790	-	6,431	20213	-	22790	-
Olympic E of Lakeshore	RD-2	4,608	20213	-	22790	-	4,879	20213	-	22790	-	5,279	20213	-	22790	-	6,305	20213	-	22790	-
LAKEVW DR N (W/O ED 63 CC)	RD-2	3,778	20213	-	22790	-	4,332	20213	-	22790	-	4,877	20213	-	22790	-	6,196	20213	-	22790	-
OLYMPIC E OF OLD 53	RD-2	4,332	20213	-	22790	-	4,531	20213	-	22790	-	4,960	20213	-	22790	-	6,073	20213	-	22790	-
SR 175 N/O BIG CYN RD.	RA-2	4,106	24277	-	28049	-	4,575	24277	-	28049	-	4,944	24277	-	28049	-	5,851	24277	-	28049	-
Elk Mtn Rd.	RB-2	3,270	23491	-	26296	-	3,825	23491	-	26296	-	4,516	23491	-	26296	-	5,505	23491	-	26296	-
SR 175 S/O BOTLE CRK RD	RA-2	-	24277	-	28049	-	4,179	24277	-	28049	-	4,541	24277	-	28049	-	5,423	24277	-	28049	-
BIG VY RD	RB-2	3,585	23491	-	26296	-	4,260	23491	-	26296	-	4,579	23491	-	26296	-	5,181	23491	-	26296	-
STATE ST. (KV)	RD-2	3,000	20213	-	22790	-	3,630	20213	-	22790	-	4,290	20213	-	22790	-	5,100	20213	-	22790	-
HIGHLAND SPGS RD BIG VY RD TO 29	RC-2	3,389	21247	-	24543	-	3,777	21247	-	24543	-	4,204	21247	-	24543	-	5,069	21247	-	24543	-
LAKESHORE BL ASHE ST TO HIGH ST	RC-2	2,898	21247	-	24543	-	3,466	21247	-	24543	-	4,112	21247	-	24543	-	5,067	21247	-	24543	-
LAKESHORE BL NR LANGE ST	RC-2	2,898	21247	-	24543	-	3,466	21247	-	24543	-	4,112	21247	-	24543	-	5,067	21247	-	24543	-
BOTTLE ROCK RD SULFCRKRD/SR 175	RC-2	3,460	21247	-	24543	-	3,890	21247	-	24543	-	4,229	21247	-	24543	-	5,019	21247	-	24543	-
LAKE ST (CO) E/O LAKELAND ST	A3-2	2,758	11307	-	12271	-	3,356	11307	-	12271	-	4,144	11307	-	12271	-	4,880	11307	-	12271	-
HIGHLAND SPGS RD	RC-2	3,264	21247	-	24543	-	3,645	21247	-	24543	-	4,097	21247	-	24543	-	4,863	21247	-	24543	-
BIG VY RD/HILAND SPGS RD MAIN	RB-2	3,286	23491	-	26296	-	3,645	23491	-	26296	-	4,097	23491	-	26296	-	4,863	23491	-	26296	-
COUNTRY CLUB DRIVE (MIDDLE)	RD-2	2,606	20213	-	22790	-	3,210	20213	-	22790	-	3,821	20213	-	22790	-	4,712	20213	-	22790	-
OLD 53 LKSHR DR/CRAWFD(CL)	RD-2	3,583	20213	-	22790	-	4,581	20213	-	22790	-	4,632	20213	-	22790	-	4,670	20213	-	22790	-
OLD 53 N/O CRAWFORD AV(CL)	RD-2	3,564	20213	-	22790	-	4,799	20213	-	22790	-	4,744	20213	-	22790	-	4,651	20213	-	22790	-
SO. MAIN W/O 29	RD-2	2,930	20213	-	22790	-	3,349	20213	-	22790	-	3,735	20213	-	22790	-	4,605	20213	-	22790	-
SAN JOAQUIN AVE SOUTH	RD-2	1,431	20213	-	22790	-	3,835	20213	-	22790	-	3,908	20213	-	22790	-	4,147	20213	-	22790	-
GADDY LN. (KV)	RB-2	2,635	23491	-	26296	-	2,764	23491	-	26296	-	3,255	23491	-	26296	-	3,921	23491	-	26296	-
SR 175 BIG CYN RD TO SR 29	RA-2	3,008	24277	-	28049	-	3,694	24277	-	28049	-	3,728	24277	-	28049	-	3,687	24277	-	28049	-
BUTTS CYN RD	RD-2	2,500	20213	-	22790	-	3,275	20213	-	22790	-	3,388	20213	-	22790	-	3,620	20213	-	22790	-
SR 175 W/O MATHEWS	RA-2	1,915	24277	-	28049	-	1,945	24277	-	28049	-	2,182	24277	-	28049	-	3,266	24277	-	28049	-
DRY CRK CUTOFF	RD-2	1,900	20213	-	22790	-	1,920	20213	-	22790	-	2,257	20213	-	22790	-	3,239	20213	-	22790	-
BIG VY RD ARGONAUT TO MERRITT	RB-2	2,057	23491	-	26296	-	2,645	23491	-	26296	-	2,832	23491	-	26296	-	3,144	23491	-	26296	-
RENFRO	A3-2	619	11307	-	12271	-	2,645	11307	-	12271	-	2,832	11307	-	12271	-	3,144	11307	-	12271	-
HIGHLAND SPGS RD 29 TO MATHEWS	RC-2	2,315	21247	-	24543	-	2,346	21247	-	24543	-	2,402	21247	-	24543	-	2,688	21247	-	24543	-
SR 175 FR 29 TO MATHEWS	RA-2	1,536	24277	-	28049	-	1,564	24277	-	28049	-	1,776	24277	-	28049	-	2,656	24277	-	28049	-
SODA BAY RD W/O ED 84	RC-2	1,866	21247	-	24543	-	2,050	21247	-	24543	-	2,275	21247	-	24543	-	2,596	21247	-	24543	-
SR 175 N/O LOCH LOMOND RD	RA-2	2,400	24277	-	28049	-	2,441	24277	-	28049	-	2,544	24277	-	28049	-	2,592	24277	-	28049	-
Elk Mtn Rd. -north Upper Lake	RB-2	2,500	23491	-	26296	-	2,500	23491	-	26296	-	2,500	23491	-	26296	-	2,500	23491	-	26296	-
LAKE ST (CO) S/O SR 20		1,420	-	-	-	-	1,645	-	-	-	-	1,925	-	-	-	-	2,462	-	-	-	-
BIG VY RD	RB-2	1,510	23491	-	26296	-	2,009	23491	-	26296	-	2,141	23491	-	26296	-	2,377	23491	-	26296	-
SR 175/BOTTLE ROCK RD	RA-2	1,875	24277	-	28049	-	2,175	24277	-	28049	-	2,224	24277	-	28049	-	2,370	24277	-	28049	-
LAKE ST. (LL) N/O MORGAN VY RD	RD-2	2,000	20213	-	22790	-	2,306	20213	-	22790	-	2,314	20213	-	22790	-	2,338	20213	-	22790	-
MORGAN VY RD SR 53 TO LAKE ST	RD-2	2,000	20213	-	22790	-	2,306	20213	-	22790	-	2,314	20213	-	22790	-	2,338	20213	-	22790	-
SR 281 PT LAKEVIEW RD/SR 29	RA-2	1,735	24277	-	28049	-	1,959	24277	-	28049	-	2,118	24277	-	28049	-	2,334	24277	-	28049	-
SAN JOAQUIN AVE ED111 TO 94	RD-2	-	20213	-	22790	-	2,201	20213	-	22790	-	2,201	20213	-	22790	-	2,215	20213	-	22790	-
OLD 53	RD-2	1,630	20213	-	22790	-	1,939	20213	-	22790	-	1,991	20213	-	22790	-	2,140	20213	-	22790	-
Hill Rd N of Riggs		1,553	-	-	-	-	1,651	-	-	-	-	1,871	-	-	-	-	2,092	-	-	-	-
WIDGEON WAY		1,193	-	-	-	-	1,480	-	-	-	-	1,743	-	-	-	-	2,084	-	-	-	-
ARGONAUT FR 29 TO BIG VY RD		1,528	-	-	-	-	1,616	-	-	-	-	1,747	-	-	-	-	2,037	-	-	-	-
LAKEVW DR. (E/O CC)	RD-2	1,234	20213	-	22790	-	1,428	20213	-	22790	-	1,688	20213	-	22790	-	2,013	20213	-	22790	-
Hill Rd EAST		1,482	-	-	-	-	1,571	-	-	-	-	1,779	-	-	-	-	1,984	-	-	-	-
SCOTTS VY RD (DUE N/S SEGMENT)	RB-2	6,715	23491	-	26296	-	1,571	23491	-	26296	-	1,779	23491	-	26296	-	1,984	23491	-	26296	-
HIGHLAND FR ARGONAUT TO MERRIT	RC-2	1,600	21247	-	24543	-	1,600	21247	-	24543	-	1,670	21247	-	24543	-	1,891	21247	-	24543	-
SR 281	RA-2	1,284	24277	-	28049	-	1,572	24277	-	28049	-	1,693	24277	-	28049	-	1,859	24277	-	28049	-

Table G-5
Road Segment Capacity Analysis - By Volume
(Average Daily Traffic)

		Existing Model Calibration					Model Year 2005					Model Year 2010					Model Year 2020				
Road Name	Road Class	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?	Volume (ADT)	LOS D/E Threshold	LOS D/E Threshold Exceeded?	LOS E/F Threshold	LOS E/F Threshold Exceeded?
COUNTRY CLUB DR E/O SR 20	RD-2	1,052	20213	-	22790	-	1,341	20213	-	22790	-	1,580	20213	-	22790	-	1,850	20213	-	22790	-
STONE DR S OF SODA BAY	RB-2	1,200	23491	-	26296	-	1,320	23491	-	26296	-	1,464	23491	-	26296	-	1,728	23491	-	26296	-
SULFUR CRK RD W/O SR 175	RC-2	1,328	21247	-	24543	-	1,470	21247	-	24543	-	1,516	21247	-	24543	-	1,650	21247	-	24543	-
SR 175 LLOMOND/SULFUR CRK RD	RA-2	1,361	24277	-	28049	-	1,656	24277	-	28049	-	1,655	24277	-	28049	-	1,648	24277	-	28049	-
Dam Rd E of 53	RD-2	1,327	20213	-	22790	-	1,726	20213	-	22790	-	1,709	20213	-	22790	-	1,639	20213	-	22790	-
SEIGLER CYN RD W/O SEIGLR SPG	RB-2	1,112	23491	-	26296	-	1,558	23491	-	26296	-	1,565	23491	-	26296	-	1,588	23491	-	26296	-
BARTLETT SPGS RD E/O SR 20		1,204	-	-	-	-	1,272	-	-	-	-	1,380	-	-	-	-	1,577	-	-	-	-
LOCH LOMOND RD W/O SEIGLER SPG	RD-2	1,297	20213	-	22790	-	1,578	20213	-	22790	-	1,574	20213	-	22790	-	1,565	20213	-	22790	-
LOCH LOMOND RD. W/O 175	RD-2	1,297	20213	-	22790	-	1,578	20213	-	22790	-	1,574	20213	-	22790	-	1,565	20213	-	22790	-
BIG CYN RD N/O SR 175	RC-2	1,223	21247	-	24543	-	1,531	21247	-	24543	-	1,533	21247	-	24543	-	1,562	21247	-	24543	-
SULFUR CRK RD E/O BOTTLE CRK R	RC-2	1,192	21247	-	24543	-	1,253	21247	-	24543	-	1,338	21247	-	24543	-	1,541	21247	-	24543	-
SULFUR BANK DR S/O SR 20	RC-2	1,000	21247	-	24543	-	1,293	21247	-	24543	-	1,373	21247	-	24543	-	1,493	21247	-	24543	-
SR 175 EMRFRD RD TO SUMMIT DR	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
SR 175 S/O SUMMIT DR.	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
SR 175 SULFR CRK RD TO EMERFD	RA-2	1,222	24277	-	28049	-	1,415	24277	-	28049	-	1,428	24277	-	28049	-	1,476	24277	-	28049	-
HARBIN SPRINGS N OF B CANYON		1,087	-	-	-	-	1,362	-	-	-	-	1,359	-	-	-	-	1,365	-	-	-	-
HARBIN SPRINGS RD N END		1,087	-	-	-	-	1,362	-	-	-	-	1,359	-	-	-	-	1,365	-	-	-	-
SEIGLER CYN RD S/O SR 29	RB-2	400	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
SEIGLER CYRN RD NE BIG CYN RD	RB-2	1,277	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
SEIGLER CYRN RD NO.	RB-2	1,112	23491	-	26296	-	1,350	23491	-	26296	-	1,353	23491	-	26296	-	1,359	23491	-	26296	-
PT LAKEVIEW RD N/O SR 29	RB-2	1,023	23491	-	26296	-	1,192	23491	-	26296	-	1,252	23491	-	26296	-	1,306	23491	-	26296	-
PT LAKEVW RD BETW ED 86 & 113	RB-2	1,023	23491	-	26296	-	1,192	23491	-	26296	-	1,252	23491	-	26296	-	1,306	23491	-	26296	-
SULFUR BANK DR.	RC-2	721	21247	-	24543	-	1,118	21247	-	24543	-	1,172	21247	-	24543	-	1,249	21247	-	24543	-
Diener btw Sieg Spr & Low Lk		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
Diener Dr E of Seigler Springs		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
Diener Dr W of Lowr Lk		904	-	-	-	-	1,285	-	-	-	-	1,251	-	-	-	-	1,172	-	-	-	-
BELL HILL RD.	RB-2	1,000	23491	-	26296	-	1,050	23491	-	26296	-	1,050	23491	-	26296	-	1,170	23491	-	26296	-
RED HILLS RD BTW 175 & SIEGLER	RD-2	1,000	20213	-	22790	-	1,017	20213	-	22790	-	1,058	20213	-	22790	-	1,077	20213	-	22790	-
MARTIN E OF KECK	RD-2	706	20213	-	22790	-	752	20213	-	22790	-	828	20213	-	22790	-	962	20213	-	22790	-
MARTIN S OF RIGGS	RD-2	706	20213	-	22790	-	752	20213	-	22790	-	828	20213	-	22790	-	962	20213	-	22790	-
HIGHLAND SPGS RD	RC-2	800	21247	-	24543	-	800	21247	-	24543	-	835	21247	-	24543	-	946	21247	-	24543	-
SCHINDLER ST. (CO)	A3-2	500	11307	-	12271	-	615	11307	-	12271	-	730	11307	-	12271	-	865	11307	-	12271	-
BIG CYN RD		865	-	-	-	-	750	-	-	-	-	743	-	-	-	-	862	-	-	-	-
BUTTS CYN RD E/O SR 29	RD-4	1,817	22229	-	25069	-	750	22229	-	25069	-	743	22229	-	25069	-	862	22229	-	25069	-
BUTTS CYN RD W/O CO. LINE	RD-5	1,817	22229	-	25069	-	750	22229	-	25069	-	743	22229	-	25069	-	862	22229	-	25069	-
SEIGLER SPGS RD S/O SR 29	RB-2	535	23491	-	26296	-	744	23491	-	26296	-	770	23491	-	26296	-	801	23491	-	26296	-
PT LAKEVIEW RD E/O SR 281	RB-2	639	23491	-	26296	-	644	23491	-	26296	-	710	23491	-	26296	-	791	23491	-	26296	-
6TH ST FR MANZANITA TO MAIN	RD-2	530	20213	-	22790	-	562	20213	-	22790	-	621	20213	-	22790	-	724	20213	-	22790	-
SEIGLER SPGS NO. RD	RB-2	351	23491	-	26296	-	666	23491	-	26296	-	688	23491	-	26296	-	718	23491	-	26296	-
SCOTTS VY RD NORTH	RB-2	1,482	23491	-	26296	-	403	23491	-	26296	-	514	23491	-	26296	-	628	23491	-	26296	-
SCOTTS VY RD. S/O SR 20	RB-2	6,489	23491	-	26296	-	403	23491	-	26296	-	514	23491	-	26296	-	628	23491	-	26296	-
MATHEWS RD.		380	-	-	-	-	381	-	-	-	-	406	-	-	-	-	610	-	-	-	-
Crystal Lake E of Hill Rd East	RD-2	400	20213	-	22790	-	438	20213	-	22790	-	482	20213	-	22790	-	548	20213	-	22790	-
NORTH DRIVE (CO)	RD-2	258	20213	-	22790	-	386	20213	-	22790	-	401	20213	-	22790	-	438	20213	-	22790	-
SAN JOAQUIN AVE.	RD-2	281	20213	-	22790	-	386	20213	-	22790	-	401	20213	-	22790	-	438	20213	-	22790	-
SEIGLER SPGS N RD N/O LOCHLMD	RB-2	1,439	23491	-	26296	-	435	23491	-	26296	-	432	23491	-	26296	-	436	23491	-	26296	-
Elk Mtn Rd.	RB-2	378	23491	-	26296	-	326	23491	-	26296	-	331	23491	-	26296	-	380	23491	-	26296	-
Hill Rd East S of Crystal Lk		223	-	-	-	-	244	-	-	-	-	268	-	-	-	-	305	-	-	-	-
Hill Rd N of Scotts Vly	RD-2	223	20213	-	22790	-	244	20213	-	22790	-	268	20213	-	22790	-	305	20213	-	22790	-
ARGONAUT FR HISPGSRD TO 29		300	-	-	-	-	300	-	-	-	-	300	-	-	-	-	300	-	-	-	-
SULFUR BANK DR.	RC-2	200	21247	-	24543	-	263	21247	-	24543	-	270	21247	-	24543	-	283	21247	-	24543	-
RSSL/CMPTN/SPRR N OF MARTIN		174	-	-	-	-	190	-	-	-	-	207	-	-	-	-	239	-	-	-	-
BIG CYN RD		158	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
BIG CYN RD S/O ED 119		166	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
BIG CYN RD S/O SEIGLER CYN R		158	-	-	-	-	208	-	-	-	-	211	-	-	-	-	229	-	-	-	-
HIGHLAND SPGS RD MATHEWS TO ARGONT	RC-2	105	21247	-	24543	-	106	21247	-	24543	-	111	21247	-	24543	-	126	21247	-	24543	-
BELL HILL RD. W/O 29	RB-2	90	23491	-	26296	-	94	23491	-	26296	-	94	23491	-	26296	-	105	23491	-	26296	-
BARTLETT SPGS RD		30	-	-	-	-	26	-	-	-	-	26	-	-	-	-	30	-	-	-	-

APPENDIX D

Two Lane Highway Level of Service Description

Lake County Regional Transportation Plan

1994 Update

TABLE N-8
TWO LANE HIGHWAYS
LEVELS OF SERVICE DESCRIPTION

Level of Service A: The highest quality of service occurs when motorists are able to drive at their desired speed. Without strict enforcement, this highest quality, representative of level of service A, would result in average speeds approaching 60 MPH on two-lane highways. The passing frequency required to maintain these speeds has not reached a demanding level. Passing demand is well below passing capacity, and almost no platoons of three or more vehicles are observed. Drivers are delayed no more than 30 percent of the time by slow moving vehicles.

Level of Service B: Speeds of 55 MPH or slightly higher are expected on level terrain. Passing demand needed to maintain desired speeds becomes significant and approximately equals the passing capacity at the lower boundary of level of service B. Drivers are delayed up to 45 percent of the time on the average. As service degrades into level of service C, the number of platoons forming in the traffic stream begins to increase dramatically.

Level of Service C: Increases in traffic flow results in noticeable increases in platoon formation, platoon size, and frequency of delay, even though unrestricted passing demand exceeds passing capacity. At higher volume levels, chaining of platoons and significant reductions in passing capacity begin to occur. While traffic flow is stable, it is becoming susceptible to congestion due to turning traffic and slow moving traffic vehicles. Percent time delays are up to 60 percent.

Level of Service D: Level of service D is characterized by traffic flow approaching instability. The two opposing traffic streams essentially begin to operate separately at higher volume levels, as passing becomes extremely difficult. Passing demand is very high, while passing capacity approaches zero. Mean platoon sizes of 5 to 10 vehicles are common although speeds of 50 MPH can still be maintained under ideal conditions. The fraction of no passing zones along the roadway section usually has little influence on passing. Turning vehicles and/or roadside distractions cause major shockwaves in the traffic stream. The percentage of time motorists are delayed approaches 75%.

Level of Service E: In this level, the percent of time delay is greater than 75%. Under ideal conditions, speeds will drop below 50 MPH. Average speeds on highways with less than ideal conditions will be slower, as low as 25 MPH on sustained upgrades. Passing is virtually impossible under these conditions, and platooning becomes intense when slower vehicles or other interruptions are encountered. The highest volume attainable under level of service E conditions defines the capacity of the highway.

Level of Service F: This level represents heavily congested flow with traffic demand exceeding capacity. Volumes are lower than capacity, and speeds are below capacity speed. Level of service E is seldom attained over extended sections on level terrain as more than a transient condition; most often perturbations in traffic flow as level E is approached cause a rapid transition to level of service F.

APPENDIX E

Highway 20 Traffic Calming and Beautification Plan

RRM Design Group

September 2005

HIGHWAY 20 TRAFFIC CALMING AND BEAUTIFICATION PROJECT

Clearlake Oaks

Recommended Improvements


Highway 20 Traffic Calming and Beautification Project
Clearlake Oaks
September 1, 2005 Scale: 1"=100'-0"
rrm design group
creating environments people enjoy
Roundabout
Decorative Crossings:
Colored Pavement
In-ground lighting
Landscaped Bulb-outs
Pedestrian Islands
Keys BLVD
SR-20
Entry Statement:
Gateway Monument
Rumble Strip
Landscaping
LED Speed Signs
Streetlights
Throughout Design


High Valley Rd
SR-20
Schindler St
Butler St
1st St
2nd St
3rd St
4th St
5th St
Hoover St
Decorative Crossings:
Colored Pavement
In-ground lighting
Landscaped Bulb-outs
Pedestrian Islands
Sheltered Bus Stops
in Existing Locations
6' Wide Sidewalks
10' Lakeside Class I
Bike Path
Landscaped Medians


Road Realignments:
Island
Pine
High Valley
High Valley Rd
SR-20
Oak Grove Ave
SR-20
Lake St
Shoul St
SR-20
Landscaped Medians


Sheltered Bus Stops
in Existing Locations
6' Sidewalks in
Commercial Area
Road Realignment
New Parking Lot
with small Park Area
Decorative Crossings:
Colored Pavement
In-ground lighting
Landscaped Bulb-outs
Pedestrian Islands
Road Realignment
Street Trees in
Bulb-outs
6' Sidewalks with a
Lakeside Class I Bike
Path
Entry Statement:
Gateway Monument
Rumble Strip
Landscaping
LED Speed Awareness Signs
Road Realignment
Oak Grove Ln
SR-20
Oak St
Acorn St
Plaza St
Pine St
Shady Ln
Tower Mart
Island Dr

HIGHWAY 20 TRAFFIC CALMING AND BEAUTIFICATION PROJECT

Lucerne

Recommended Improvements


Country Club Drive
Twelfth Avenue
Thirteenth Avenue
Fourteenth Avenue
Fifteenth Avenue
Sixteenth Avenue
Seventeenth Avenue
Roundabout at Thirteenth & Hwy 20
Bulbout at intersections
Landscaped Medians
Highway 20 Traffic Calming and Beautification Project
Lucerne
September 1, 2005
Scale: 1"=600'-0"
rrmdesigngroup
creating environments people enjoy


Country Club Drive
Third Avenue
Fourth Avenue
Fifth Avenue
Sixth Avenue
Seventh Avenue
Eight Avenue
Ninth Avenue
Tenth Avenue
Eleventh Avenue
Twelfth Avenue
Bulbout at intersections
Decorative Crossing
Landscaped Medians


Foothill Drive
Grove Street
Street trees visually narrow roadway
Roundabout at Foothill & Hwy 20 serves as an entry statement
First Avenue
Second Avenue

HIGHWAY 20 TRAFFIC CALMING AND BEAUTIFICATION PROJECT

Nice

Recommended Improvements


Highway 20 Traffic Calming and Beautification Project
Nice
September 1, 2005
Scale: 1"=100'-0"
rrmdesign group
creating environments people enjoy
Decorative Pedestrian Crossings:
Colored pavement or Striping
In-ground Lighting
Landscaped Bulbouts
Pedestrian Islands
Hudson Ave
Beach Ave
Entry Statement:
Gateway Monument
Rumble Strip
Landscaping
LED Speed Awareness Signs
Bike Routing:
Class II Bike Path (shared, striped) on Both sides of Highway between Hudson & Sayre
Class I Bike Path (separated from roadway) from Lakeshore to Hudson
Manzanita Drive
Sidewalks:
6' width
Both Sides of Highway from Sayre to Post Office
Street Lights
Throughout Town
Entry Statement:
Gateway Monument
Rumble Strip
Landscaping
LED Speed Awareness Signs


Hinman Park:
Angled Parking
One-way Traffic around Park
Boggs Avenue:
One-way Traffic
New Parking Lot
Triangle Park:
Angled Parking
One-way Traffic
Traffic Control at Sayre,
Pedestrian Crossing
Street Trees in Bulbouts
from Sayre to Worldmark
Accent Trees
Mark Marina
Entry Statement:
Gateway Monument
Rumble Strip
Landscaping
LED Speed Awareness Signs
Sheltered Bus Stops:
Keeling
Hudson
WorldMark
Landscape/Hardsacape
Medians Control Traffic Flow
Boggs Ave
Sayre St
Levy Ave
Hinman Park
Keeling Ave
Crump Ave
Howard Ave
Manzanita Dr
SR-20

APPENDIX F

Recommended 10-20 Year Capital Improvement Projects

Subject to Funding Availability

Lake Countywide Roadway Needs Study

Table 7 - State Highway Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability

ON-ROAD	FROM	TO	PROJECT JUSTIFICATION	TYPE OF PROJECT	SUMMARY DESCRIPTION	Year 2020 ADT	$1,000	2000 Priority #	Previous Priority #	$/vol	Capacity Needs Timing
Proposed 10-Year CIP											
SR 20	Intersection	SR 53	Safety/Capacity	TrafficContro	Install traffic signal or roundabout as interim measure with future consideration for grade separated interchange	31,200	350 to 15,000	1	n/a	11.22	2000-2005 acc rate = 1.17
S.R. 29	Intersection	S.R. 20	Safety/Capacity	Accident Reduction	Install traffic signal or roundabout as interim measure with future consideration for grade separated interchange	29,000	350 to 9,000	2	n/a	12.07	2000-2005 acc rate=0.53
S.R. 53	Intersection	Olympic Dr	Safety/Capacity	Accident Reduction	Install traffic signal or roundabout	22,400	1,000	3	n/a	44.64	2000-2005 acc rate=0.52
NOTE: Priority #4 deleted per Caltrans recommendation											
S.R. 29	Intersection	S.R. 281	Safety	Accident Reduction	*Already included in STIP programmed project*	15,200			n/a		
SR 29	Intersection	Seigler Cyn Rd	Capacity	TrafficContro	Channelization on SR 29 to accommodate turns	19,700	500	5	n/a	25.38	2000-2005
SR 20	Intesection	Scotts Valley Rd	Capacity	TrafficContro	Channelization on SR 20 to accommodate turns	19,200	800	6	n/a	41.67	2000-2005
SR 20	Intersection	Bartlett Sp Rd	Capacity	TrafficContro	Channelization on SR 20 to accommodate turns	18,800	400	7	n/a	21.28	2000-2005
SR 20	Intersection	Lakeview Dr (CO	Capacity	TrafficContro	*Improvements not feasible per Caltrans*	18,700					
SR 29	Intersection	Butts Canyon R	Operation/Safety	Channelizatic	Install left-turn lane on SR 29 and widening of bridge	11,800	3,000	8	n/a	254.24	2000-2005 requested by County
SR 20	Intersection	Island Drive	Operation/Safety	Channelizatic	Install left-turn lane on SR 20	10,000	900	9	n/a	90.00	2000-2005 requested by County
SR 29	Intersection	Spruce Grove R	Operation/Safety	Channelizatic	Install left-turn lane on SR 29 at both intersections	11,900	1,000	10	n/a	84.03	2000-2005 requested by County
SR 29	Intersection	Bottle Rock Rd	Capacity	TrafficContro	Install left-turn channelization only per Caltrans	26,700	500	11	n/a	18.73	2000-2005
SR 20	Intersection	Lakeview D(N)	Capacity	TrafficContro	*Improvements already included in SHOPP program*	24,900					
SR 20	Intersection	Nice-Luc CO	Capacity	TrafficContro	Install traffic signal or roundabout	24,800	400	12	n/a	16.13	2000-2005
SR 20	Intersection	High Valley Rd	Operation	Widening	Further analysis needed to determine necessary improvements	9,200	144	13	n/a	15.65	2000-2005 requested by County
20-Year CIP											
SR 20	Intersection	Foothill Dr	Capacity	TrafficContro	Install traffic signal	17,800	600	14	n/a	33.71	2005-2010
SR 20	Intersection	Widgeon Way	Capacity	Channelizatic	Infeasible due to physical and environmental constraints (per Caltrans info)	12,100					
SR 20	Intersection	Main Street -UL	Capacity	TrafficContro	Install traffic signal	15,570	400	15	n/a	25.69	2010-2015
SR 20	Intersection	Country Club Dr	Capacity	Channelizatic	Install left turn lane on SR 20	10,100	500	16	n/a	49.50	2010-2015

SR 29	Intersection	Pt Lakeview Rd	Capacity	Channelizatic	EB accelleration lane to accommodate left turns onto SR 29	16,700	500	17	n/a	29.94	2015-2020
S.R. 53	Intersection	north Clearlake	Capacity	TrafficControl	Provide north Clearlake Interchange	24,000	10,000	18	n/a		2015-2020
SR 29	SR 175	Main Street (KV)	Capacity	Widening	Upgrade 5.5 miles section to 4-lane freeway facility	29,000	80,000	19	n/a		2015-2020
SR 29	Intersections	Main St (KV) Bell Hill Rd Renfro-Merritt Argonaut Road Highland Sp Rd SR 175-Main St	Capacity	TrafficContro	As part of 4-lane freeway upgrade to SR29, provide interchanges at appropriate spacing as well as frontage roads and local street connections to interchanges. This is considered the South Lakeport 4-lane expressway project. A preliminary draft Project Study Report by Caltrans estimates costs from $80 to $125 million for improvements						

Table 6 - County Road Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability

ON-ROAD	FROM	TO	PROJECT JUSTIFICATION	TYPE OF PROJECT	SUMMARY DESCRIPTION	Year 2020 ADT	$1,000	2000 Priority #	Previous Priority #	$/vol	Capacity Needs Timing
Proposed 10-Year CIP											
Lakeshore Blvd.	Park Way	Whalen Way	Safety/Capacity	Widening	Parkway to Walnut Dr. funded & scheduled 2000 Widen 3.8 mi segment to include 2-12' lanes and 4' shoulders, and bike lanes. Install turn pocket for NB/WB movement at Park Way and Hill Rd. Replace structure at Lyons Creek	10,700	$5,000	1	1	467.29	2000
S. Main-Soda Bay Rd	Intersection	S.R. 175	Safety/Capacity	Traffic Control	Resolve accident conflicts, install turn lanes traffic signalization, all-way stop or roundabout coordinate with Caltrans	33,300	$521	2	n/a	15.65	2000 rate=0.78
Nice-Lucerne Cutoff	Lakeshore Bl.	new section	Safety/Flood	Widening	Widen 1.5 mile segment to include 2-12' and 6' bicycle lanes, widening through curves, raise grade above flood plain (1,000 ft)	8,285	$2,500	3	2	301.75	rate=2.80
State Street	Main Street	Gaddy Lane	Safety	Accident Reduction	Resolve accident conflicts (0.4 mi)	5,100	$205	4	n/a	40.20	rate=3.22
Konocti Road (KV)	Main Street	Single Spring D	Safety	Accident Reduction	Resolve accident conflicts (0.5 mi)	1,000	$110	5	n/a	110.00	rate=3.10
Park Way	Intersection	Hill Road E	Safety	Accident Reduction	Resolve accident conflicts through signage striping, or the installation of a roundabout or traffic signal	11,200	$165	6	n/a	14.73	rate=2.09
Big Valley Road	Intersection	Stone Drive	Safety	Accident Reduction	Resolve accident conflicts through striping of channelization islands	2,300	$28	7	n/a	12.17	rate=1.39
Big Valley Road	Intersection	Merrit Road	Safety	Accident Reduction	Resolve accident conflicts through use of signage, striping or roundabout traffic control	4,300	$28	8	n/a	6.51	rate=1.11
Morgan Valley Road	Intersection	Lake Street	Safety	Accident Reduction	Resolve accident conflicts	3,000	$28	9	n/a	9.33	rate=1.04
Bottle Rock Road	Various	locations	Safety	Hazard Mitig	Install rock fence to reduce rock hazards in roadway.	6,500	$100	10	n/a	15.38	
Lakeshore Blvd	Intersection	Rainbow Road	Capacity/Safety	Channelization	Install left-turn lane on Lakeshore Blvd.	6,000	$50	11	n/a	8.33	2005-2010
Main St. (Kelseyville)	Intersection	*State St.*	Safety	Realignment	Consider roundabout or realign intersection to provi potential for 4-leg square intersection which would require widening and realignment	12,100	$250	12	26	20.66	2000-2005
Lakeshore Bouelvard	Intersection	Park Way	Capacity/Safety	Traffic Control	Install left-turn channelizatoin, traffic signal or roundabout	19,100	$246	13	n/a	12.88	2005-2010

Soda Bay Rd. (Spot MP 4.2)	Intersction	Park Dr.	Safety	Realignment Safety	Widen intersection approaches on Soda Bay Rd. and remove horizontal curve. Provide left turn bays on Soda Bay Rd. and increase radii on curve returns. Address stop sign running issue	6,500	$86	14	16	13.23	2000-2005
Soda Bay Rd. (Spot MP 2.8)	Intersection	Stone Drive	Safety	Realignment	Widen intersection approaches on Soda Bay Rd. Increase radii on intersection returns and consider left-turn channelization on Soda Bay Rd.	6,500	$110	15	15	16.92	
Soda Bay Road (Bixby Corner)	near	Big Valley Rd	Safety	Realignment	Construct new segment on NW corner of existing turn.	6,500	$220	16	3	33.85	
Elk Mountain Road	Intersection	Middle Creek R	Safety	Realignment	Realign Curve and widen (400 ft)	3,500	$168	17	n/a	48.00	
Main Street (UL)	Intersection	Mendenhall Ln	Operation	Realignment	Realign intersection to eliminate skew (400 feet)	3,000	$85	18	n/a	28.33	
Soda Bay Road (Spot MP 3.5 Morrison Corner)	South Main Stre	Clark Dr.	Safety	Realignment Widening	Construct new segment on SW corner of existing turn. New alignment to provide 2-12' lanes, 4' shoulders and extra widening on turn.	6,500	$250	19	12	38.46	
SodaBayRd. (MP1.5 Wooldridge Corner)	South Main St.	Clark Dr.	Safety	Realignment	Construct segment on new alignment on SE corner of existing turn to provide 30-35 MPH design speed.	6,500	$197	20	17	30.31	
Big Valley Rd.	Soda Bay Rd.	Highland Sprin	Capacity	Widening	Widen this 0.25 mile segment to 2-14' lanes with 4' shoulders. Provides connection to project on Highland Springs Rd.	8,600	$340	21	35	39.53	
Soda Bay Rd. (Spot 9.9-10.6)	Little Borax Rd	Madrone	Safety	Realignment Widening	Minor realignment to correct curves. Widen to provide2-12' lanes and 2' shoulders. (0.25 mi.)	6,500	$390	22	43	60.00	
Scotts Valley Rd. (Spot MP 5.0)	11th Street	SR 20	Safety	Realignment Widening	Realign 295' of existing road approximately 0.3 miles north of of Hendricks (Northern Intersection)	2,000	$195	23	8	97.50	
High Valley Road	SR 20	Lakeview Dr	Operation	Widening	Widen to 2 -12'lanes (300 feet), provide ped path also channelization at SR 20	1,000	$185	24	n/a	185.00	
Bottle Rock Rd. (MP 9.5-10.0)	Lions Club	Union Oil Gate:	Operations	Widening	Widen Bottle Rock Rd. to 2-12' lanes and 4' shoulders on .50 mile segment.	6,600	$675	25	44	102.27	
Soda Bay Road (Spot MP 5.2, 5.5,5.8)	South Main St.	Clark Dr.	Safety	Realignment Widening	Construct segment on new alignment from Gaddy Road intersection (MP 5.2) to turn at MP 5.8. Provide 2-12' lanes with 4' shoulder.	6,500	$1,560	26	13	240.00	
Park Way	Keeling Ave	LakeshoreBl	Safety	Widening	Widen to provide 2-12' lanes and 4' paved shoulders throughout. (0.95 mi)	11,200	$1,800	27	25	160.71	
Keeling Avenue	Park Way	Crystal Lake	Flooding	Flood Detour	Expand capacity and reduce conflict areas in order to provide more capacity during flood detour (0.70 mile)	10,700	$1,650	28	n/a	154.21	

Walnut Drive	Lakeshore	Hill Road E	Flooding	Flood Detour	Expand capacity and reduce conflict areas in order to provide more capacity during flood detour	n/a	n/a	29	n/a	
S. Main St.	Soda Bay Rd.	L'port City Limits	Capacity	Widening	Widen on existing alignment to provide 2-12' lanes, 4' shoulders and center two-way left turn lane throughout (1.0 mi)	14,800	$1,555	30	22	105.07
Highland Springs Rd.	Big Valley Rd.	SR 29	Capacity	Widening	Widen 2-12' lanes and add 4' shoulders along 0.5 mile segment.	5,100	$561	31	38	110.00
Hendricks Rd.	Intersection	Scotts Valley R	Safety	Realignment	Realign intersection with Scotts Valley Rd. approximately 450' North of existing location to improve sight distances.	2,000	$222	32	40	111.00
Soda Bay Road	South Main St	PM 0.5 (C-lake ready-mix)	Capacity/Safety	Widening	Widen to 2-12' lanes, 6-shoulders, and center two-way left-turn lane (0.5 mi)	6500	$778	33	n/a	119.69
Soda Bay Rd. (MP 9.1 - 9.9)	Clark Dr.	SR 281	Safety Operations	Widening	Widen 0.8 mile segment to provide 2-12' lanes with 2' shoulders.	6,500	$898	34	28	138.15
Wilkenson Lane (Kelseyville)	Main St.	Lillian Dr.	Safety Capacity	Widening	Widen to 2-12' lanes and 4' shoulders. Replace single lane bridge at Lillian Creek. Tie into Oak Hill Extension	1,000	$154	35	14	154.00
Morgan Valley Rd. (MP 2.0 Herndon Creek)	SR 29	Napa County L	Safety	Realignment	Realign curve and widen to include 4' shoulders.	800	$128	36	29	160.00
Butts Canyon Road	PM 4.1	PM 4.3	Safety	Realignment	Construct approximately 1500' of roadway on new alignment to improve curve and sight distances. New roadway to include 2-12' lanes, 4' shoulders and 35 MPH design speed on curve.	1000	$225	37	n/a	225.00
Highland Springs Roa	SR 29	Sky Park Dr	Capacity	Widening	Widen to 2-12' lanes and 6'shoulders to accommodate commercial development	5,000	$1,166	38	n/a	233.20
Scotts Valley Rd. (MP 1/2-1.45)	Near Intersectio	Hill Road	Safety Operations	Realignment Widening	Realign approximately 1400' of roadway to correct a series of curves in vicinity of intersection. Extend Hill Road intersection into new curve radius. Widen Scotts Valley Road to provide 12' lanes and 4' shoulders with SB/EB turn pocket.	2,000	$513	39	10	256.50
Scotts Valley Rd. (MP 0.15-1.20)	L'port City Limit	Near Hill Rd. Intersection	Safety Capacity	Widening	Widen Scotts Valley Road to 2-14' lanes with 4' shoulders where possible.	2,000	$735	40	11	367.50
Mendenhall Rd.	Elk Mountain Rc	SR 20	Capacity	Widening	Widen to 2-12' lanes with 4' shoulders. Minor geometric improvement at Main St. intersection.	1,000	$385	41	39	385.00
Elk Mountain Rd.	Pitney Lane	Mendenhall Rd	Capacity	Widening	Widen 1.2 mile segment to 2-12' lanes with 4' shoulders.	2,500	$1,347	42	41	538.80

Gaddy Lane	Soda Bay Rd.	State St.	Safety Capacity	Widening	Widen Gaddy Lane to a minimum of 2-12' lanes with 4' paved shoulders on this 2.1 mile segment.	3,900	$2,357	43	20	604.36	
Point Lakeview Rd.	Soad Bay Rd.	Wheeler Dr.	Capacity	Widening Resurfacing	Widen this 2-12' lanes with 4' shoulders for 1.2 mile segment south of Soda Bay Rd. Resurface entire length.	1,300	$1,347	44	37	1036.15	
Seigler Canyon Road	SR 29	Big Canyon Rd	Capacity/Safety	Realignment Widening	widen to 2-12' lanes, 6' shoulders, curve realignment at various locations(3.3 miles)	1,500	$5,131	45	n/a	3420.67	
Soda Bay Rd.	S. Main St.	Clark Drive	Safety	Widening	Generally, widen to provide 4' shoulders and increased widening on turns	6,500	$2,428	46	24	373.54	
Soda Bay Road	Big Valley Road	PM 3.7	Operations/Safety	Realignment	Construct new tangent section to eliminate 4, 90 degree curves (2.0 miles)	6500	$3,115	47	n/a	479.23	
Main Street	SR 29	State Street	Capacity/Safety**	Widening	Widen Main Street to 4-12' lanes and 4'shoulders with turn pockets on 0.51 mile segment	14,000	$793	48	n/a	56.64	2020 acc rate=2.4
Soda Bay Road	Bridge #14C-61	Cole Creek	Structurally/functi deficient	Bridge Recon			$500	B1			
Lakeshore Blvd	Bridge #14C-65	Lyons Creek	Structurally/functi deficient	Bridge Recon			$300	B2			
Perini Road	Bridge #14C-92	Siegler Creek	Structurally/functi deficient	Bridge Recon			$200	B3			
Sylar Lane	Bridge #14C-79	Cole Creek	Load Limits/functi deficient	Bridge Recon			$150	B4			
W Robinson Rancheri	Bridge #14C-86	Robinson Cree	Load Limits/functi deficient	Bridge Recon			$150	B5			
Hilderbrand Drive	Bridge #14C-72	St. Helena Cree	Load Limits/functi deficient	Bridge Recon			$450	B6			
Bridge Arbor North Rd	Bridge #14C-22	Clover Creek	Load Limits/functi deficient	Bridge Recon			$200	B7			
Foard Road	Bridge #14C-76	Anderson Cree	Load Limits/functi deficient	Bridge Recon			$150	B8			
Witter Springs Road	Bridge #14C-103	Cooper Creek	Load Limits/functi deficient	Bridge Recon			$150	B9			
Clayton Creek Road	Bridge #14C-31	Clayton Creek	Load Limits/functi deficient	Bridge Recon			$200	B10			

Witter Springs Road	Bridge #14C-102	Cooper Creek	Structurally/functi deficient	Bridge Recon	$150	B11
Highland Springs Road	Bridge #14C-85	Highland Sprin	Structurally/functi deficient	Bridge Recon	$100	B12
Mathews Road	Bridge #14C-82	Manning Creek	Structurally/functi deficient	Bridge Recon	$350	B13
Ackley Road	Bridge #14C-83	Manning Creek	Structurally/functi deficient	Bridge Recon	$150	B14
Hardin Springs Road	Bridge #14C-112	Harbin Creek	Structurally/functi deficient	Bridge Recon	$100	B15

Table 5 - Clearlake Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability

ON-ROAD	FROM	TO	PROJECT JUSTIFICATION	TYPE OF PROJECT	SUMMARY DESCRIPTION	Year 2020 ADT	$1,000	2000 Priority #	Previous Priority #	$/vol
10-year CIP										
Old State Highway	Intersection	Austin Road	Safety**	Accident Reduction	Resolve accident conflicts by increasing sight distance, providing enhanced striping, warning signs or other measures indicated by accident history	6,800	$28	1	n/a	4.04 rate=0.58
Lakeshore Dr.	Olympic Dr.	S.R. 53	Safety, Pedestrian, Drainage	Widening	Provide 2-12' travel lanes with 4' paved shoulders throughout with curb, gutter and sidewalk.	17,150	2,640	2	5	153.94
Lakeshore	Intersection	Olympic Dr.	Operations	Traffic Control	Install Traffic Signal or Roundabout	23,200	245	3	3	10.56
Old Hwy 53	Intersection	Olympic Dr.	Operations	Signalization	Signalize intersection with emergency vehicle pre-empt.	7,100	245	4	4	34.51
Lakeshore Dr. & Pomo Rd.	Olympic Dr. Lakeshore Dr.	Pomo Road Arrowhead Rd.	Safety Capacity	Widening	Provide 2-12' travel lanes with 4' paved shoulders throughout. Channelize intersection of Woodland/Pomo to define turning movements. (1.5 mi)	14,000	1,687	5	5	120.50
20-year CIP										
Lakeshore Dr.	Old State Hwy	Olympic Dr.	Safety Capacity	Widening	Add two -way left Turn lane from old Hwy 53 to Olympic Eliminate back-out parking where possible. Requires row acquisition to replace parking near lake front. (1.4 mi.)	15,100	2,180	6	1	144.37
Arrowhead Rd.	Sulphur Bank	Park St.	Safety Capacity	Widening	Widen to provide 12' travel lanes with 4' paved shoulders throughout geometric improvements at Park/Arrowhead intersection. (0.5 mi.)	1,500	562	7	6	374.67
Old Hwy 53	Olympic	SH 53	Safety Capacity	Widening Medi	Widen to provide 2-12' lanes and 4' shoulders. Add medians at curve areas. Realign curve at Ridgeview. Channelize intersection with Davis. (2.5 mi.)	7,500	2,812	8	2	374.93

Table 4 - Lakeport Recommended 10 to 20 Year Capital Improvement Projects Subject to Funding Availability

ON-ROAD	FROM	TO	PROJECT JUSTIFICATION	TYPE OF PROJECT	SUMMARY DESCRIPTION	Year 2020 ADT	$1,000	2000 Priority #	Previous Priority #	$/vol	Capacity Needs Timing
Proposed 10-Year CIP											
Hartley Street	**Intersection**	**16th Street**	**Safety****	**Accident Reduction**	**Resolve accident conflicts by increasing sight distance, providing enhanced striping, warning signs or other measures indicated by accident history**	**6,000**	**27.5**	**1**	**n/a**	**4.58**	**2000-2005** rate=0.78
N. Forbes Street	**Intersection**	**11th Street**	**Safety****	**Accident Reduction**	**Resolve accident conflicts by increasing sight distance, providing enhanced striping, warning signs or other measures indicated by accident history**	**14,000**	**27.5**	**2**	**n/a**	**1.96**	**2000-2005** rate=0.72
N. Forbes Street	**Intersection**	**3rd Street**	**Safety****	**Accident Reduction**	**Resolve accident conflicts by increasing sight distance, providing enhanced striping, warning signs or other measures indicated by accident history**	**12,000**	**27.5**	**3**	**n/a**	**2.29**	**2000-2005** rate=0.39
Bevins Street	**Intersection**	**Bevins Court**	**Safety****	**Accident Reduction**	**Resolve accident conflicts by increasing sight distance, providing enhanced striping, warning signs or other measures indicated by accident history**	**n/a**	**27.5**	**4**	**n/a**		**2000-2005**
High Street	Intersection	Clearlake Ave.	Operations	Realignment	Increase curb return radii on NE corner of intersection	6,500	**55**	5	2	8.46	2000-2005
Main Street	Intersection	Lakeport Blvd.	Capacity/Geometric	Signalization/ Roundabout	Install Traffic Signal/Enhance lane geometrics or install roundabout	31,800	272.5	6	5	8.57	2000
11th Street	**Intersection**	**Main Street**	**Capacity**	**Signalization/ Roundabout**	**Install Traffic Signal/Enhance lane geometrics or install roundabout**	**28,200**	**272.5**	**7**	**n/a**	**9.66**	**2000-2005**
Lakeport Boulevard	**Intersection**	**Parallel Drive**	**Capacity/Operatio**	**Traffic Control**	**Install Roundabout**	**n/a**	**200**	**8**	**n/a**	**n/a**	**2000-2005**
High Street	Vicinity of	Lakeshore Blvd.	Safety/Operations	Channelization Pedestrian	Channelize curve and intersection to provide guidance through curve and eliminate NB to WB turning conflicts	6,500	**55**	9	1	8.46	2005-2010
Main Street	Intersection	Clearlake Ave.	Operations	Realignment	Increase curve radius of turns in SW quadrant	6,500	**27.5**	10	3	4.23	2005-2010
Hartley Street	**20th Street**	**N City Limits**	**Flooding**	**Flood Detour**	**Expand capacity and reduce conflict areas in order to provide more capacity during flood detour such as a roundabout at Hartley/20th rather than all-way stop**	**10,700**	**245**	**11**	**n/a**	**22.90**	**flood**
Proposed 20-Year CIP											
Lakeport Blvd	**"Brunos"**	**Main Street**	**Capacity**	**Widening**	**Widen to 4-12' lanes and 5'bike lanes with turn pockets on 500 foot segment**	**30,000**	**295**	**12**	**n/a**	**9.83**	**2010**
Main Street	Intersection	Third St.	Operations	Signalization	Signalize with emergency pre-empt.	13,000	245	13	6	18.85	2010-2015
11th Street	**Pool Street**	**Main Street**	**Capacity**	**Widening**	**Widen to 3-12' lanes and 5'bike lanes for 1,800 feet**	**31,000**	**1,200**	**14**	**n/a**	**38.71**	**2005-2010**
S. Main Street	**Kimberly Lane**	**S City Limits**	**Pedestrian**	**Sidewalk**	**Provide curb, gutter and sidewalk on west side**	**15,400**	**$637**	**15**	**n/a**	**41.36**	**2010-2015**
Lakeport Blvd	Intersection	SR 29	Operations	Signalization	Install Traffic Signals/Roundabouts	18,000	680	16	10	37.78	2010-2015
Lakeport Blvd	Intersection	Bevins St.	Operations	Signalization	Signalize/Install Roundabout in conjunction with NB Ramp	n/a	245	17	9	n/a	2010-2015
Parallel Drive	**Craig Avenue**	**Martin Street**	**Circulation**	**New Road**	**Complete Frontage Road**	**n/a**	**n/a**	**18**	**n/a**	**n/a**	**2020**
Kimberly Lane	**Kimberly end**	**Lakeport Blvd.**	**Circulation**	**New Road**	**Develop connection**	**n/a**	**1554**	**19**	**n/a**	**n/a**	**2020**

APPENDIX G

Critical Accident Analysis

Lake Countywide Roadway Needs Study: Appendix D

Critical Accident Analysis

Information regarding the accidents reported along the roadways in Lake County was requested from the California Highway Patrol. A database from the Statewide Integrated Traffic Records System (SWITRS) was obtained indicating reported accidents during the period between January 1, 1995, and September 15, 1998. This database was used to formulate accident rates for highways, arterial routes and major collectors within Lake County including the Cities of Clearlake and Lakeport. These rates were compared with average rates for highways and intersections as determined by the California Department of Transportation in their document, *Accident Data on California State Highways*. Where actual accident rates for roadway segments and intersections exceeded the average rates published in the Caltrans document, improvements to resolve accident conflicts were determined.

State Highways

With the exception of one four-lane divided freeway segment on S.R. 29, all of the State Highway segments are characterized as two-lane rural highways in areas that vary from flat to mountainous. The average accident rates for a two-lane rural highway vary from 0.80 to 1.75 accidents per million vehicle miles (acc/mvm), depending on the geography. The expected accident rate for a four-lane freeway section is 1.00 acc/mvm.

Intersections with various controls that had three or more reported accidents were tabulated and compared with average accident rates for the respective intersection control. Average accident rates varied from 0.34 accidents per million vehicles entering (acc/mve) for a side stop control, 0.64 acc/mve for all-way stop controls, and 0.70 acc/mve for a signalized intersection.

Roadway segments and intersections were then ranked in comparison with the average accident rates. The critical locations where the actual rate significantly exceeds the average rate are listed below.

Roadway Segments

Highway 175 (Highway 29 to County Line)	Rate = 2.14 acc/mvm

Intersections

Highway 20/Keys Boulevard (All-Way Stop Control)	Rate = 0.82 acc/mve
Highway 29/Highway 281 (Side Stop Control)	Rate = 0.82 acc/mve
Highway 20/Highway 29 (Side Stop Control)	Rate = 0.53 acc/mve
Highway 53/Olympic Drive (Side Stop Control)	Rate = 0.52 acc/mve

County Maintained Roadways

Accidents rates for 72 County-maintained roadway segments were calculated and compared with average accident rates from the Caltrans publication. The average rates for rural highways with similar characteristics and varying geography range from 0.80 acc/mvm to 2.10 acc/mvm. Average accident rates for intersections were discussed above. Critical segments and intersections were ranked based on this comparison, and the

locations with the highest ranking are listed below.

Roadway Segments

Harrington Flat Road	Rate = 7.65 acc/mvm
Sulphur Creek Road	Rate = 6.43 acc/mvm
Kelsey Creek Drive (Highway 29 to Gross Cutoff)	Rate = 4.14 acc/mvm
State Street	Rate = 3.22 acc/mvm
Konocti Road (Main Street to Oak Hills Lane)	Rate = 3.10 acc/mvm

Intersections

Park Way/Hill Road East (Side Stop Control)	Rate = 2.09 acc/mve
Big Valley Road/Stone Road (Side Stop Control)	Rate = 1.39 acc/mve
Scotts Valley Road/Riggs Road (Side Stop Control)	Rate = 1.12 acc/mve
Big Valley Road/Merrit Road (All-Way Stop Control)	Rate = 1.11 acc/mve
Morgan Valley Road/Lake Street (Side Stop Control)	Rate = 1.04 acc/mve

Clearlake and Lakeport Maintained Roads

Accident rates for 39 urban roadway segments within the city limits of Clearlake and Lakeport were calculated and compared with the average accident rate for urban highways, which is 3.00 acc/mvm. Critical segments where the actual rate exceeded the average rate were then ranked. Similarly, accident rates for intersections were calculated and compared to the Caltrans averages previously discussed. The critical locations for these streets and intersections are listed below.

City of Clearlake Roadway Segments

Sulphur Bank (Arrowhead Road to City Limits)	Rate = 4.94 acc/mvm

City of Clearlake Intersections

Old State Highway/Austin Road (Side Stop Control)	Rate = 0.58 acc/mve
Division Avenue/Uhl Avenue (Side Stop Control)	Rate = 0.39 acc/mve

City of Lakeport Roadway Segments

No critical segments were identified in the City of Lakeport.

City of Lakeport Intersections

Hartley Street/16th Street (Side Stop Control)	Rate = 0.78 acc/mve
11th Street/N. Forbes Street (Side Stop Control)	Rate = 0.72 acc/mve
N. Forbes Street/3rd Street (Side Stop Control)	Rate = 0.39 acc/mve

A copy of the spreadsheet containing the Roadway Segment and Intersection Accident Rate Calculations follows.

Table - -
State Highway Segment Accidents

ROAD NAME	FROM	TO	LENGTH MILES	3.5 yrs ACCIDENTS	ADT	COUNT DATE	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
Hwy 175	Hwy 29 (South)	Bottle Rock Rd.	8.42	30	8,227	3/10/99	**0.34**	0.80-1.75	
Hwy 175	Bottle Rock Rd.	Hwy 29	11.37	28	3,450		**0.56**	0.80-1.75	
Hwy 175	Hwy 29 (North)	County Line	8.19	24	1,070	3/10/99	**2.14**	0.80-1.75	**1**
Hwy 20	County Line	Hwy 53	14.86	49	5,057	3/10/99	**0.51**	0.80-1.75	
Hwy 20	Hwy 53	Country Club Dr.	13.72	72	4,181	3/10/99	**0.98**	0.80-1.75	**2**
Hwy 20	Country Club Dr.	Hwy 29	9.56	50	8,402	3/10/99	**0.49**	0.80-1.75	
Hwy 20	Hwy 29	County Line	8.34	44	6,979	3/10/99	**0.59**	0.80-1.75	
Hwy 281	All		3	7	5,097	3/10/99	**0.36**	0.80-1.75	
Hwy 29	County Line	Hwy 175 (South)	5.81	20	6,856	3/10/99	**0.39**	0.80-1.75	
Hwy 29	Hwy 175	Hwy 53	14.5	62	8,712	3/10/99	**0.38**	0.80-1.75	
Hwy 29	Hwy 53	Hwy 175	10.74	53	8,000		**0.48**	0.80-1.75	
Hwy 29	Hwy 175	Live Oak Dr.	3.69	18	9,308	3/10/99	**0.41**	0.80-1.75	
Hwy 29	Live Oak Dr.	Hwy 175 (North)	5.4	15	11,900	3/10/99	**0.18**	0.80-1.75	
Hwy 29	Hwy 175	Hwy 20	12.4	19	5,424	3/10/99	**0.22**	1.00	
Hwy 53	Hwy 29	40th Ave.	2.96	42	15,359	3/10/99	**0.72**	0.80-1.75	**3**
Hwy 53	40th Ave.	Hwy 20	4.49	17	9,917	3/10/99	**0.30**	0.80-1.75	

Table - -
State Highway Accidents at Intersections

ROAD NAME	CROSS STREET	Roadway Controls	3.5 yrs ACCIDENTS	ENTERING VOLUME	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
Hwy 20	Bartlett Springs Road	Side Stop	3	9,250	**0.25**	0.34	
Hwy 20	Hudson Avenue	Side Stop	3	10,000	**0.23**	0.34	
Hwy 20	Hwy 29	Side Stop	7	10,250	**0.53**	0.34	**3**
Hwy 20	Hwy 53	Side Stop	4	9,500	**0.33**	0.34	
Hwy 20	Keys Boulevard	Side Stop	5	4,750	**0.82**	0.34	**1**
Hwy 20	Third Avenue	Side Stop	4	9,250	**0.34**	0.34	
Hwy 20	Island Drive	Side Stop				0.34	
Hwy 20	High Valley Road	Side Stop				0.34	
Hwy 29	Argonuat Road	Side Stop	3	12,500	**0.19**	0.34	
Hwy 29	Armstrong Road	Side Stop	4	12,500	**0.25**	0.34	
Hwy 29	C Street	Side Stop	3	9,250	**0.25**	0.34	
Hwy 29	Highland Springs Road	Side Stop	2	13,000	**0.12**	0.34	
Hwy 29	Hwy 281	Side Stop	11	10,500	**0.82**	0.34	**2**
Hwy 29	Hwy 53	Signal	4	16,000	**0.20**	0.70	
Hwy 53	18th Avenue	Signal	5	16,750	**0.23**	0.70	
Hwy 53	40th Avenue	Signal	11	18,750	**0.46**	0.70	
Hwy 53	Dam Road	Signal	20	19,000	**0.82**	0.70	**5**
Hwy 53	Olympic Drive	Side Stop	8	12,000	**0.52**	0.34	**4**

Table - -
County Maintained Segment Accidents

#	ROAD NAME	COUNTY #	FROM	TO	* CLASSIF.	LENGTH MILES	3.5 yrs ACCIDENTS	ADT	COUNT DATE	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
1	**Barnes St**	117X	All		RMC	0.17	0	1,057	Sep-97	-	0.80-2.10	
2	**Bell Hill Rd**	510	All		RMC	4.05	4	1,378	Aug-97	0.56	0.80-2.10	
3	**Big Valley Rd**	541	Soda Bay Rd	Highland Springs Rd	RMC	0.75	0	1,990	Jul-97	-	0.80-2.10	
4	**Big Valley Rd**	541	Merritt Rd	Bell Hill Rd	MC	3.3	1	1,499	Jul-97	0.16	0.80-2.10	
5	**Big Bear Rd**	147H	All		RMC	0.57	2	609	Aug-97	4.51	0.80-2.10	
6	**Big Canyon Rd**	107	Wardlaw St	Harbin Springs Rd	RMC	1.25	1	1,036	Aug-97	0.60	0.80-2.10	
7	**Bonham Rd**	140B	Morgan Valley Rd	Quarterhorse Ln	RMC	0.34	1	1,032	Aug-97	2.23	0.80-2.10	
8	**Bottle Rock Rd**	515	All		ART	10.91	31	1,750	Aug-98	1.27	0.80-2.10	
9	**Burpee Dr**	306AD	All		MC	0.15	0	56	Nov-97	-	0.80-2.10	
10	**Butts Canyon Rd**	101	All		MC	10.13	24	2,331	Aug-98	0.80	0.80-2.10	
11	**Clover Dr**	314	All		RMC	0.58	0	428	Jun-97	-	0.80-2.10	
12	**Copsey Creek Wy**	147J	Quarterhorse Ln	Big Bear Rd	RMC	0.06	0	120	Aug-97	-	0.80-2.10	
13	**Country Club Dr**	307A	All		MC	1.19	2	830	Jun-97	1.59	0.80-2.10	
14	**Cruickshank Rd**	516B	All		RMC	0.23	0	232	Jul-97	-	0.80-2.10	
15	**Crystal Lake Wy**	403A	Hartley Rd	Keeling Ave	RMC	0.07	0	450	Jul-97	-	0.80-2.10	
16	**Dry Creek Cutoff**	113	Sheveland Rd	Dry Creek Rd	RMC	1.69	0	196	Sep-97	-	0.80-2.10	
17	**Elk Mountain Rd**	301	Main St	Simmons Rd	MC	33.84	18	2,243	Aug-98	0.19	0.80-2.10	
18	**Elk Mountain Rd**	301	Simmons Rd	County Line	RMC	2.4	1	413	Jun-97	0.79	0.80-2.10	
19	**Emerford Dr**	137N	All		RMC	0.42	0	513	Sep-97	-	0.80-2.10	
20	**Gaddy Ln**	505	All		RMC	2.74	6	1,476	Jul-97	1.16	0.80-2.10	
21	**Harrington Flat Rd**	515A	All		RMC	5.34	6	115	Jul-97	7.65	0.80-2.10	1
22	**Hartley Rd**	408	All		RMC	0.54	1	667	Jul-97	2.17	0.80-2.10	
23	**Hartmann Rd**	104	SR 29	Stinson Rd	MC	2	12	2,779	Sep-97	1.69	0.80-2.10	
24	**Heidi Wy**	518D	All		RMC	0.16	0	331	Nov-97	-	0.80-2.10	
25	**Highland Springs Rd**	412	Big Valley Rd	Bell Hill Rd	RMC	3.75	7	1,611	Jul-97	0.91	0.80-2.10	
26	**Hill Rd**	403	Scotts Valley Rd	Hill Rd E. (north)	RMC	3.92	3	253	Jun-97	2.37	0.80-2.10	9
27	**Hoberg Dr**	136F	Emerford Dr	Summit Blvd	RMC	0.54	0	255	Sep-97	-	0.80-2.10	
28	**Keeling Ave**	411	All		RMC	0.7	1	188	Jul-97	5.95	0.80-2.10	
29	**Kelsey Creek Dr**	542	SR 29	Gross Cutoff	RMC	1.44	6	787	Jul-97	4.14	0.80-2.10	3
30	**Konocti Rd**	518	Main St	Oak Hills Ln	RMC	0.61	8	3,314	Aug-98	3.10	0.80-2.10	5
31	**Lake St**	141D	All		MC	1.17	4	1,980	Aug-97	1.35	0.80-2.10	
32	**Lakeshore Dr**	205	All		MC	2.92	0	389	Aug-97	-	0.80-2.10	
33	**Lakeshore Blvd**	400	All		MC	4.7	53	6,056	Aug-98	1.46	0.80-2.10	
34	**Lakeview Dr (Nice)**	306A	SR 20	Burpee Dr	MC	2.4	2	1,597	Aug-98	0.41	0.80-2.10	
35	**Lillian Dr**	519F	Heidi Wy	Single Spring Dr	RMC	0.3	0	2,000 *		-	0.80-2.10	
36	**Live Oak Dr**	516	Main St	Cruickshank Rd	RMC	0.59	1	1,340	Jul-97	0.99	0.80-2.10	
37	**Loch Lomond Rd**	525	All		MC	3.23	4	1,273	Jul-97	0.76	0.80-2.10	
38	**Louis Ln**	518E	Oak Hills Ln	Heidi Wy	RMC	0.1	0	154	Aug-97	-	0.80-2.10	
39	**Main St (Kelseyville)**	522V	All		MC	1.03	10	3,165	Mar-99	2.40	0.80-2.10	8
40	**Martin St**	404B	All		RMC	1.4	3	697	Jul-97	2.41	0.80-2.10	7
41	**Mendenhall Ave**	311M	All		MC	0.41	2	1,652	Aug-98	2.31	0.80-2.10	11

***- 2,000 ADT Estimated**

Table - -
County Maintained Segment Accidents (Continued)

#	ROAD NAME	COUNTY #	FROM	TO	* CLASSIF.	LENGTH MILES	3.5 yrs ACCIDENTS	ADT	COUNT DATE	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
42	**Merritt Rd**	526	Big Valley Rd	Loasa Rd	RMC	0.21	0	2,528	Aug-97	-	0.80-2.10	
43	**Merritt Rd**	526	SR 29	Big Valley Rd	MC	0.39	1	3,022	Mar-99	0.66	0.80-2.10	
44	**Mill St**	141	Morgan Valley Rd	Winchester St	RMC	0.11	0	685	Sep-97	-	0.80-2.10	
45	**Morgan Valley Rd**	140	All		MC	14.92	25	2,033	Jul-98	0.65	0.80-2.10	
46	**New Long Valley Rd**	221	SR 20	Spring Valley Rd	MC	2.8	7	914	Aug-97	2.14	0.80-2.10	12
47	**Nice-Lucerne Cutoff**	407	All		ART	2.46	24	2,730	Jun-97	2.80	0.80-2.10	6
48	**North Dr**	209	All		MC	2.47	1	192	Aug-97	1.65	0.80-2.10	
49	**Oak Hills Ln**	518A	All		RMC	0.11	0	2,000 *		-	0.80-2.10	
50	**Park Dr**	502D	Soda Bay Rd	Park Rd	RMC	1.06	2	1,149	Jul-97	1.29	0.80-2.10	
51	**Park Way**	411B	All		MC	1	2	2,005	Jul-97	0.78	0.80-2.10	
52	**Pt. Lakeview Rd**	219	All		MC	7.2	16	742	Aug-97	2.34	0.80-2.10	10
53	**Quarterhorse Ln**	140C	Bonham Rd	Copsey Creek Wy	RMC	0.15	0	279	Aug-97	-	0.80-2.10	
54	**Red Hills Rd**	517E	SR 29	SR 175	RMC	2.11	1	1,074	Jul-97	0.35	0.80-2.10	
55	**Riggs Rd**	404	All		RMC	0.97	2	467	Oct-97	3.46	0.80-2.10	
56	**Santa Clara Rd**	117G	SR 175	south end	RMC	0.82	0	435	Sep-97	-	0.80-2.10	
57	**Scotts Valley Rd**	401	All		MC	11.18	20	2,227	Jul-97	0.63	0.80-2.10	
58	**Second St (Upper Lake)**	311	Main St	Middle Creek Rd	RMC	0.12	0	1,531	Jul-97	-	0.80-2.10	
59	**Seigler Canyon Rd**	137	All		MC	5.14	13	1,125	Aug-98	1.76	0.80-2.10	
60	**Single Spring Dr**	519D	Lillian Dr	Lillian Dr	RMC	0.1	0	695	Aug-97	-	0.80-2.10	
61	**Socrates Mine Rd**	111	All		RMC	4.44	2	1,019	Sep-97	0.35	0.80-2.10	
62	**Soda Bay Rd**	502	All		MC	13.8	95	6,261	Mar-99	0.86	0.80-2.10	
63	**South Main St**	400A	All		MC	0.69	7	8,708	Aug-97	0.91	0.80-2.10	
64	**Spruce Grove Rd**	122	SR 29 (south)	Jerusalem Grade Rd	RMC	2	9	2,238	Nov-97	1.57	0.80-2.10	
66	**State St**	522	All		RMC	0.4	5	3,036	Aug-97	3.22	0.80-2.10	4
67	**Sulphur Creek Rd**	515B	All		RMC	1.23	5	495	Aug-97	6.43	0.80-2.10	2
68	**Sulphur Bank Dr**	216	All		MC	4.13	10	339	Jul-97	5.59	0.80-2.10	
69	**Summit Blvd**	136	Hoberg Dr	SR 175	RMC	0.37	1	808	Sep-97	2.62	0.80-2.10	
70	**Wardlaw St**	117A	Big Canyon Rd	SR 29	RMC	0.17	1	1,480	Sep-97	3.11	0.80-2.10	
71	**Wilkinson Rd**	520	Main St	Lillian Dr	RMC	0.4	0	592	Aug-97	-	0.80-2.10	
72	**Winchester St**	141F	Mill St	Big Bear Rd	RMC	0.2	1	480	Sep-97	8.15	0.80-2.10	
65	**Spruce Road Ext**	105	All		RMC	1.17	2	155	Sep-97	8.63	0.80-2.10	

***- 2,000 ADT Estimated**

Table - -
County Accidents at Intersections

CITY	ROAD NAME	CROSS STREET	Roadway Controls	3.5 yrs ACCIDENTS	ENTERING VOLUME	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
County	**Argonaut Road**	Thomas Drive	Side Stop	3	5,000	**0.47**	0.34	
County	**Big Valley Road**	Merrit Road	4-Way Stop	6	4,250	**1.11**	0.64	**4**
County	**Big Valley Road**	Stone Road	Side Stop	4	2,250	**1.39**	0.34	**2**
County	**Highland Springs Road**	Bell Hill Road	Side Stop	3	3,000	**0.78**	0.34	
County	**Konocti Road**	Main Street	Side Stop	3	6,500	**0.36**	0.34	
County	**Main Street**	3rd Street	Side Stop	3	4,750	**0.49**	0.34	
County	**Morgan Valley Road**	Lake Street	Side Stop	4	3,000	**1.04**	0.34	**5**
County	**Park Way**	Hill Road East	Side Stop	6	2,250	**2.09**	0.34	**1**
County	**Scotts Valley Road**	Riggs Road	Side Stop	5	3,500	**1.12**	0.34	**3**
County	**Soda Bay Road**	Mission Rancheria Road	Side Stop	3	6,750	**0.35**	0.34	
County	**Soda Bay Road/S. Main**	Hwy 175 Access/S. Main	Side Stop	12	12,000	**0.78**	0.34	

Table - -
City of Clearlake Segment Accidents

CITY	ROAD NAME	FROM	TO	* CLASSIF.	LENGTH FEET	LENGTH MILES	3.5 yrs ACCIDENTS	ADT	COUNT DATE	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
Clearlake	**40th Avenue**	Hwy 53	Lakeshore Dr.	Art	300	0.06	0	12,406	Mar-99	-	3.00	
Clearlake	**Arrowhead Road**	Sulpher Bank Dr.	Burns Valley Rd.	Coll	4980	0.94	3	1,500	Jun-98	1.66	3.00	
Clearlake	**Burns Valley Road**	Arrowhead Rd.	Old State Highway	Coll	6522	1.24	9	2,000	Jun-98	2.85	3.00	4
Clearlake	**Dam Road**	Hwy 53	Lake St.	Coll	3178	0.60	1	1,500	Jun-98	0.87	3.00	
Clearlake	**Lakeshore Drive**	40th Ave	Olympic Dr.	Art	9663	1.83	44	11,518	Mar-99	1.63	3.00	
Clearlake	**Lakeshore Drive**	County Club Dr.	San Joaqiun Ave.	Coll	8407	1.59	3	500	Jun-98	2.95	3.00	2
Clearlake	**Lakeshore Drive**	Olympic Dr.	Country Club Dr.	Art	6122	1.16	13	6,876	Mar-99	1.28	3.00	
Clearlake	**Lakeshore Drive**	San Joaquin Ave.	City Limits	Coll	5846	1.11	1	250	Jun-98	2.83	3.00	
Clearlake	**Old State Highway**	Hwy 53	Lakeshore Dr.	Art	10777	2.04	34	6,142	Mar-99	2.12	3.00	
Clearlake	**Old State Highway**	Lakeshore Dr.	Olympic Dr.	Art	5099	0.97	10	5,345	Mar-99	1.52	3.00	
Clearlake	**Old State Highway**	Olympic Dr.	Hwy 53	Art	7045	1.33	5	1,000	Jun-98	2.93	3.00	3
Clearlake	**Olympic Drive**	Lakeshore Dr.	Hwy 53	Art	5289	1.00	14	7,318	Mar-99	1.49	3.00	
Clearlake	**San Joaquin Avenue**	Lakeshore Dr.	Sulpher Bank Dr.	Coll	7804	1.48	0	3,000	*	-	3.00	
Clearlake	**Sulpher Bank**	Arrowhead Rd.	City Limits	Coll	10045	1.90	3	250	Jun-98	4.94	3.00	1

***- 5,000 ADT Arterial Estimated; 3,000 ADT Collector Estimated**

Table - -
City of Clearlake Accidents at Intersections

CITY	ROAD NAME	CROSS STREET	Roadway Controls	3.5 yrs ACCIDENTS	ENTERING VOLUME	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
Clearlake	**Division Avenue**	Uhl Avenue	Side Stop	3	6,000	**0.39**	0.34	**2**
Clearlake	**Lakshore Drive**	Alvita Avenue	Side Stop	3	17,250	**0.14**	0.34	
Clearlake	**Lakshore Drive**	Golf Avenue	Side Stop	5	14,500	**0.27**	0.34	**3**
Clearlake	**Lakshore Drive**	Mullen Avenue	Side Stop	3	14,500	**0.16**	0.34	
Clearlake	**Lakshore Drive**	Old State Highway	Signal	10	17,250	**0.45**	0.70	**4**
Clearlake	**Lakshore Drive**	Olympic Drive	Side Stop	6	16,500	**0.28**	0.34	
Clearlake	**Lakshore Drive**	Palmer Avenue	Side Stop	3	14,500	**0.16**	0.34	
Clearlake	**Old State Highway**	Austin Road	Side Stop	5	6,750	**0.58**	0.34	**1**
Clearlake	**Olympic Drive**	Emmerson Street	Side Stop	3	11,000	**0.21**	0.34	**5**
Clearlake	**Olympic Drive**	Redwood Street	Side Stop	3	11,000	**0.21**	0.34	

Table - -
City of Lakeport Segment Accidents

CITY	ROAD NAME	FROM	TO	* CLASSIF.	LENGTH FEET	LENGTH MILES	3.5 yrs ACCIDENTS	ADT		COUNT DATE	CALCULATED ACCIDENT RATE	EXPECTED RATES	RANKING
Lakeport	**Bevins Street**	Martin St.	Lakeport Blvd.	Art	2450	0.46	6	5,000	*		2.02	3.00	2
Lakeport	**Brush Street**	Eleventh St.	Clear Lake Ave.	Coll	300	0.06	0	3,000	*		-	3.00	
Lakeport	**Central Park**	Spurr St.	Eleventh St.	Coll	1440	0.27	0	3,000	*		-	3.00	
Lakeport	**Clear Lake Avenue**	Main St. N.	High St. N.	Art	550	0.10	0	5,000	*		-	3.00	
Lakeport	**Compton Street**	Russell Street	Spurr St.	Coll	650	0.12	0	3,000	*		-	3.00	
Lakeport	**Eleventh Street**	Main St. N.	City Limits	Art	4460	0.84	10	10,114		Dec-98	0.92	3.00	
Lakeport	**N. Forbes Street**	Clear Lake Ave.	First St.	Art	2730	0.52	3	4,010		Jun-96	1.13	3.00	
Lakeport	**S. Forbes Street**	First St.	Martin St.	Art	640	0.12	0	2,902		May-96	-	3.00	
Lakeport	**Giselman Street**	Lakeshore Blvd.	Lange St.	Coll	1210	0.23	0	3,000	*		-	3.00	
Lakeport	**Hartley Street**	Clear Lake Ave.	Hillcrest Dr.	Coll	2940	0.56	3	3,000	*		1.41	3.00	
Lakeport	**Hartley Street**	Hillcrest Dr.	City Limits	Coll	1880	0.36	0	1,697		May-96	-	3.00	
Lakeport	**High Street**	Eleventh St.	Lakeshore Blvd.	Art	2420	0.46	1	5,000	*		0.34	3.00	
Lakeport	**Lakeport Boulevard**	S. Main St.	Parallel Drive	Art	3050	0.58	5	11,120		Dec-98	0.61	3.00	
Lakeport	**Lakeshore Boulevard**	High St. N.	Lange St.	Art	2100	0.40	2	6,112		Jun-98	0.64	3.00	
Lakeport	**Lakeshore Boulevard**	Lange St.	City Limits	Art	1100	0.21	0	5,000	*		-	3.00	
Lakeport	**Lange Street**	Lakeshore Blvd.	Giselman St.	Coll	500	0.09	0	3,000	*		-	3.00	
Lakeport	**N. Main Street**	Clearlake Ave.	First St.	Art	2750	0.52	11	11,202		Dec-98	1.48	3.00	5
Lakeport	**S. Main Street**	First St.	City Limits	Art	6680	1.27	31	8,055		Feb-99	2.38	3.00	1
Lakeport	**Martin Street**	Bevins St.	City Limits	Coll	1840	0.35	2	3,000	*		1.50	3.00	4
Lakeport	**Martin Street**	Main St. S.	Bevins St.	Art	2580	0.49	2	5,000	*		0.64	3.00	
Lakeport	**Russell Street**	Compton St.	1st St.	Coll	470	0.09	0	3,000	*		-	3.00	
Lakeport	**Russell Street**	1st St.	Martin St.	Coll	700	0.13	1	3,000	*		1.97	3.00	3
Lakeport	**Sixth Street**	Main St. N.	Spurr St.	Coll	3020	0.57	1	3,000	*		0.46	3.00	
Lakeport	**Spurr Street**	Compton St.	Central Park Ave.	Coll	1100	0.21	0	3,000	*		-	3.00	
Lakeport	**Tentieth Street**	High St. N.	Hartley St.	Coll	720	0.14	0	2,045		Jun-98	-	3.00	

***- 5,000 ADT Arterial Estimated; 3,000 ADT Collector Estimated**

Table - -
City of Lakeport Accidents at Intersections

CITY	ROAD NAME	CROSS STREET	Roadway Controls	3.5 yrs ACCIDENTS	ENTERING VOLUME	CALCULATED ACCIDENT RATE		EXPECTED RATES	RANKING
Lakeport	**11th Street**	Forbes Street North	Side Stop	11	14,000	0.72	*	0.34	**2**
Lakeport	**11th Street**	Mellor Drive	Side Stop	4	12,000	0.26		0.34	**4**
Lakeport	**N. Forbes Street**	2nd Street	Side Stop	3	12,000	0.20		0.34	
Lakeport	**N. Forbes Street**	3rd Street	Side Stop	6	12,000	0.39		0.34	**3**
Lakeport	**S. Forbes Street**	Armstrong Street	Side Stop	1	3,750	0.24	*	0.34	**5**
Lakeport	**Hartley Street**	16th Street	Side Stop	6	6,000	0.78		0.34	**1**
Lakeport	**N. Main Street**	1st Street	Side Stop	3	15,000	0.16		0.34	
Lakeport	**N. Main Street**	9th Street	Side Stop	3	15,000	0.16		0.34	
Lakeport	**S. Main Street**	Lakeport Boulevard	Stop	11	19,000	0.53	*	0.64	**3**

***- 3 yrs Accidents supplied by City of Lakeport**

APPENDIX H

Proposed Bikeway Improvement Projects

2002 Lake County Regional Bikeway Plan:

Tables 1 through 13

Table - 1

Lower Lake Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Big Bear Rd 147H	Winchstr - Copsey Cr.	0.57	III	M
Bonham Rd 140B	Morgan Vly - Qtrhorse	0.63	III	M
Copsey Cr Wy 147J	Big Bear - Qtrhorse	0.10	III	M
Lake St 141D	Morgan Vly - Dam	0.11	II	H
Mill St 141	Morgan Vly - Winchstr	0.20	III	M
Main Street #140D	SR 29/53 - Lake	0.16	III	H
Morgan Vly Rd 140	Lake - Bonham	1.19	III	M
Morgan Vly Rd 140	Bonham - Napa County	13.49	III	L
Perini Rd 142	Big Cyn - Seigler	5.22	III	L
Qtrhorse Ln 140C	Copsey Creek - Bonham	0.30	III	M
Second St 141B	Lake - Mill	0.17	III	M
Seigler Cyn Rd 137	Perini - SR 29	0.40	III	L
Winchester St 141F	Mill - End	0.34	III	M

TABLE - 2

Middletown Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Big Canyon Rd 107	SR 175 - Wardlaw	0.25	III	M
Big Canyon Rd 107	Wardlaw - Seigler Cyn	12.80	III	L
Butts Canyon Rd 101	SR 29 - Napa County	10.13	III	L
Central Pk Rd 117U	SR 29 - Santa Clara	0.27	III	M
Dry Cr Cutoff 113	SR 29 - SR 175	1.89	III	M
Harbin Spr Rd 109	Big Canyon - End	2.25	III	L
Pine St 117J	Centra Park - Stewart	0.40	III	M
St Helena Cr 116	Wardlaw - Butts Canyon	0.29	III	M
Santa Clara Rd 117G	Central Park - SR 175	0.82	III	M
Stewart St 117H	Pine - SR 175	0.43	III	M
Wardlaw St 117A	Big Cyn - St Helena Cr	0.35	III	M

TABLE - 3

Cobb Mountain Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Bottle Rock Rd 515	SR 175 - SR 29	10.91	III	M
Casentini Dr 146E	Snead - Harrington Fl	0.32	III	M
Emerford Rd 137N	Hoberg - SR 175	0.42	III	M
Harrington Flat 515A	Casentini - SR 175	0.11	III	M
Harrington Flat 515A	Bottle Rock - Casentini	5.23	III	L
Hoberg Drive 136 F	Summit - Emerford	0.58	III	M
Loch Lomond Rd 525	SR 175 - Seig Spr N	4.43	III	L
Snead Dr 146H	SR 175 - Casentini Dr	0.42	III	M
SR 175 (Parallel to)	Emerford - Snead	0.06	I	M
Summit Blvd 136	SR 175 - Hoberg	0.30	III	M

TABLE - 4

Kelseyville Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Bell Hill Rd 510	Highland Spr - Main	4.05	III	M
Big Valley Rd 541	Soda Bay - Main	4.31	III	M
CA Pack Rd 503D	Finley E - Soda Bay	0.50	III	M
Church St 522Q	Third - Main	0.28	III	M
Clark Dr 506	Gaddy - Soda Bay	2.07	III	M
Cole Cr 515E	Bottle Rock - Live Oak	0.70	III	M
E Highland Rd 510I	Adobe Cr - High Spr	2.30	III	L
Finely East Rd 503E	Big Vly - CA Pack Rd	1.70	III	M
Gaddy Ln 505	State - Clark	0.65	II	M
Gaddy Ln 505	Gunn - State	0.59	III	L
Gard St 522M	Gunn - Third	0.26	III	M
Gunn St 522G	Main - Gard	0.10	III	M
High Spr Rd 412	Bell Hill - Big Vly	3.85	III	M
High Spr Rd 412	Co Line - Bell Hill	6.05	III	L
Live Oak Dr 516	Cole Cr - Main	2.65	III	M
Main St 522V	Big Valley - Gunn	0.12	III	M
Main St 522V	State - Konocti	0.19	II	M
Merrit Rd 526	SR 29 - Big Valley	0.45	III	L
Park Dr 502D	Soda Bay - County Park	1.24	III	M
Soda Bay Rd 502	S Main - State Park	6.70	II	H
State St 522	Main - Gaddy	0.40	II	M
Third St 522C	Church - Gard	0.16	III	M
Staheli Dr 512	Bell Hill - Kelsey Cr	1.04	III	M
Kelsey Creek Dr 542	Staheli - Adobe Cr	5.50	III	M
Adobe Creek Rd 511	Kelsey Cr - High Spr	2.10	III	M

TABLE - 5

Lakeport Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Hill Rd 403	Scotts Vly - Hill Rd E	0.15	III	M
Hill Rd East 403C	Hill - Lakeshore	3.70	III	M
Lakeshore Blvd 400	Parkway - Nice - L Co	2.90	II	H
Park Way 411B	SR 29 - Lakeshore	1.15	III	M
Parallel Dr 406A	SR 175 - Lakeport CL	1.20	III	M
Martin St 404B	Riggs - Lakeport CL	1.10	III	M
Riggs Rd 404	Martin - Scotts Valley	1.00	III	M
Scotts Creek Rd 409	End - Riggs	3.25	III	L
South Main St 400A	Soda Bay - Lakeport CL	0.50	II	H

TABLE - 6

Rivieras Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Fairway Dr 550C	SR 281 - Pt Lakeview	1.32	III	M
Pt Lakeview Rd 219	SR 281 -SR 29	7.20	III	M
Red Hills Rd 517E	SR 175 - SR 29	2.11	III	L
Soda Bay Rd 502	State Parks - SR 281	8.30	III	M

TABLE - 7

Clearlake Oaks/Clearlake Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Keys Blvd 210	End - SR 20	1.10	III	M
Konocti View Dr 210D	Lakeland - Keys	0.11	III	M
Lake St 208R	Lakeland - SR 20	0.50	III	M
Lakeland St 210E	Konocti View - Lake	0.09	III	M
Sulfur Bank Rd 216	Clearlake CL - SR 20	4.13	III	M

TABLE - 8

Nice/Lucerne Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
County Club Dr 307A	SR 20/Foothill	1.19	III	M
Foothill Dr 307AC	SR 20 - County Club	0.53	III	M
Lakeshore Blvd 306Y	Stokes - SR 20	2.47	III	M
Nice - Lucerne Co 407	SR 29 - SR 20	2.13	II	H
Stokes Ave 407A	Nice - L Co - Lakeshore	0.50	III	M
Thirteenth St 307P	SR 20 - County Club	0.20	III	M

TABLE - 9

Blue Lakes Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Scotts Valley Rd 401	11 St/SR 29 - SR 20	11.40	III	M

TABLE -10

Upper Lake Area

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Bridge Arbor 315	Westlake - End	0.50	III	M
Bridge Arbor N 315B	End - SR 20	0.55	III	M
Bridge Arbor (Ext)	Bridge Ar - Bridge Ar N	0.50	I	M
Clover Dr 314	Middle Cr - Elk Mtn	0.50	III	M
Clover Vly Rd 302	First - Second	0.11	III	M
Elk Mtn Rd 301	Middle Cr - Rancheria	0.81	III	M
Elk Mtn Rd 301	Ranch - Mid Cr Camp	7.09	III	L
Main St 311 B	SR 20 - Washington	0.05	III	M
Middle Cr Rd 311A	Second - Clover Dr	0.41	III	M
Old Lucerne Rd 309	Clover Valley - SR 20	0.63	III	M
Second St 311	Wash - Clover Vly	0.37	III	M
Washington St 311C	Main - Second	0.30	III	M
Westlake Rd 400B	Nice-LucernCo - Brdg A	1.50	III	M

TABLE - 11

City of Clearlake

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Old St Hwy-Phase II	Lakeview St. - Dam Rd.	0.50	II	H
Old St Hwy-Phase III	Lakeshore - Olympic		II	H
Austin Rd-Ph. I	Lakeshore -Maple	0.50	II	H
Austin Rd.-Ph. II	Maple-Old St Hwy 53	0.5	II	H
Olympic	Lakeshore - SR 53	1.70	III	M
Davis	Old State Hwy - Phillips	1.10	II	M
Pine Street	Austin - Olympic	0.10	II	H
40th Avenue	Lakeshore - Phillips	0.50	III	M
Phillips Avenue	18th Ave - Davis	1.30	III	H
Frontage Road	Dam Rd - 18th	0.40	II	H
Dam Road	Lake St - State 53	0.50	II	H
Lakeshore Drive	Olympic - State 53	1.90	III	H
Mullen Road	Lakeshore - Austin	0.60	III	M
Division	Lakeshore - Pine	0.20	III	M
40th Avenue	Arnold - Old State Hwy	0.20	III	M
Uhl	Pearl - Palmer	0.20	III	M
Pearl Avenue	Division - Mullen	0.80	III	M

TABLE - 12

City of Lakeport

NAME - ROUTE NO.	TERMINI	LENGTH	CLASS	NEED
Mellor Dr	11th - 20th	0.70	III	M
Alden Ave	11th - 20th	0.70	III	L
High St	11th - 20th	0.50	II	H
20th St	Alden Ave - High	0.60	III	H
Hartley St	20th - Shady Ln	0.50	III	M
Giselman St	20th - Lange	0.20	II	H
Lange St	Lkshre - School Drvway	0.20	III	H
16th St	High - Main	0.10	II	H
11th St	W Cty Limits - Main	0.90	II&III	H
Central Park Ave	Spurr - 11th	0.30	III	L
Spurr St	Berry - Cent Pk Ave	0.20	III	L
Smith St	Martin - Berry	0.30	III	L
S Smith St	Martin - Cul De Sac	0.30	III	L
Bevins St	Lakeport Blvd - Martin	0.30	III	H
Parallel Dr	Lakeport Blvd - Martin	0.70	III	H
Craig Ave	W Cty Limits - Parallel	0.20	III	L
Martin St	W Cty Limits - Main	0.80	II	H
N Main St	Martin - Clearlake Ave	0.70	III	H
Forbes St	Martin - 11th	0.60	II	H
6th St	Roscoe - Spurr	0.20	III	L
Roscoe St	6th - Central Park	0.20	III	L
S Main	Lakeport Blvd - Martin	0.40	II	H
Lakeport Blvd	Parallel Dr - S Main	1.00	II	H
K St	Main - Esplanade	0.20	III	M
Esplanade Ave	K-C	0.30	III	M
C St	Main - Esplanade	0.10	III	M
S Main	S Cty Lim - Lkpt Blvd	0.70	II	H
Shady Lane	W Cty Lim - Hartley	0.30	III	L
North Bound High St	Clearlake Ave - 16th	0.20	II	H
Westside Park Road	Parallel Dr. to 0.50 West	0.5	III	H

SHORT-RANGE BIKEWAY IMPLEMENTATION PLAN

TABLE - 13

Short-Range Implementation Plan

NAME-ROUTE NUMBER	TERMINI	LENGTH	CLASS	USE* EXIST.	USE* PROP.	PARKING EXIST.	PARKING PROP.	EST. COST **
City of Clearlake								
Old St Hwy/Ph II	Lakeview St.-Dam Rd.	0.50	II	40	100	No	No	$600
Austin Road/Ph I	Lakeshore-Maple	0.60	II	50	150	No	No	$500
Old St Hwy/Ph III	Lakeshore-Olympic	0.78	II	40	100	No	No	$860
Austin Road/Ph II	Maple-Old St Hwy	0.40	II	20	70	No	No	$400
Lake/Dam Rd	500' S Cache Cr - 700" W	0.25	II	60	100	Yes	No	$100
City of Lakeport & County of Lake								
So. Main St	Lkpt Blvd - Soda Bay Rd	1.25	II	10	40	No	No	$750
County of Lake								
Lakeshore Blvd 400	Lkpt C. Limits/ Nice-Lucerne c/o	2.90 ***	II	25	50	No	No	$2,175
Soda Bay Rd. 502	S. Main Street - State Park	6.70	II	30	100	No	No	$7,075
TOTALS		**13.38**						**$12,460**

* Existing Use of bikeway facilities is expected to remain modest until enough bikeways are built to form a recognizable system. Proposed Use of facilities will increase to numbers given once bikeways are completed.

** Estimated cost in thousands

*** Partially constructed (Lakeport City Limits to Park Way)

APPENDIX I

Proposed Airport Improvements

Lampson Field Master Plan – June 1993

	Estimated Costs (In 1992 $ values)			
	Total[a]	Federal[b]	County	Private
Short-Term Projects (within 5 Years)				
Install automated weather observing station	$ 60,000	$ 60,000	$ 0	$ 0
Install 12 tiedowns on expanded west apron	6,000	5,000	1,000	0
Acquire land for building area expansion (15.9 acres); including access road right-of-way	1,200,000[b]	1,080,000	120,000	0
Acquire property and construct new access driveway from Sky Park Drive (0.5 acres); including culvert extension and auto parking area	86,000[b]	77,000	9,000	0
Acquire buffer strip along north side of runway (12.3 acre area currently encumbered by 4-foot height limit easement); remove trees	180,000[b]	162,000	18,000	0
Install fencing around existing private building area property; including 2 controlled access gates and new driveway	78,000	0[c]	0	78,000
Install fencing along new north property line				
Construct upstream drainage improvements for building area expansion; including property acquisition (6± acres) and detention basin	320,000[b]	288,000	32,000	0
Construct fire protection system; including wells, water storage, and hydrants	200,000	0[c]	200,000	0[d]
Prepare terminal area expansion site; construct terminal area apron, apron edge taxilane, and hangar area taxilane (first phase – approximately 20 aircraft spaces)	1,900,000	1,710,000	190,000	0
Construct T-hangar building or install portables (first phase – 12 units)	270,000	0	0[e]	270,000
Mid-Range Projects (5 to 10 Years)				
Construct terminal building (7,000 to 10,000 square feet)	$1,000,000	$ 0	$ 500,000[f]	$ 500,000
Construct terminal area auto parking lot and access road	130,000	60,000[g]	70,000	0
Install fuel island and storage tanks	250,000	0	0[e]	250,000
Construct aircraft wash rack and drainage	40,000	0[c]	40,000	0
Install fencing along new building area property line; including controlled access gate	65,000	58,000	7,000	0
Construct/install additional T-hangars/portables (second phase – 24 units)	610,000	0	0[e]	610,000
Slurry seal existing runway, taxiways, and apron areas	100,000	90,000	10,000	0

Table 1

Proposed Airport Improvements

Lampson Field

	Estimated Costs (In 1992 $ values)			
	Total[a]	Federal[b]	County	Private
Long-Term Projects (Beyond 10 Years)				
Construct remainder of terminal area apron and hangar area taxilanes	$ 220,000	$ 198,000	$ 22,000	$ 0
Extend box culvert, apron edge taxilane, and apron area between old and new building areas (after expiration of existing lease in 2009)	200,000	180,000	20,000	0
Overlay runway and taxiways for maintenance purposes	290,000	261,000	29,000	0
Construct additional T-hangar and executive hangar buildings (third phase – 39 units)	900,000	0	0[e]	900,000
Totals				
Short-Term	$4,300,000	$3,382,000	$ 570,000	$ 348,000
Mid-Range	2,195,000	208,000	627,000	1,360,000
Long-Term	1,610,000	639,000	71,000	900,000
MASTER PLAN TOTALS	$8,105,000	$4,229,000	$1,268,000	$2,608,000

Notes

[a] Estimated land costs based upon actual 1989-90 acquisition costs plus escalation factor, administative costs, and contingencies. Estimated engineering costs based upon preliminary engineering designs; actual costs will depend uon detailed designs and specifications; engineering costs and contingencies included.

[b] Federal funding for eligible projects calculated at 90% based upon current legislation. Local share equals 10%. State funds could be used (but are not expected to be) on many of the projects in lieu of Federal funds.

[c] The County should pursue prospect of obtaining federal funding for a portion of these projects.

[d] Fire protection system could be upgraded to also serve adjacent private property with private funding paying for the added costs.

[e] County development and operation of hangars and fuel facility is an alternative to the private development and operation assumed here.

[f] County funding terminal building structure and public-use areas is assumed, although entire building could be privately financed. Federal funding for a portion of the project also may be possible.

[g] Access road portion of project is FAA grant eligible; automobile parking lot portion is not.

Source: Hodges & Shutt (December 1992)

Table 1 - Continued