

TRANSPORTATION MASTER PLAN

2009-2014



LAKE COUNTY

DEPARTMENT OF PUBLIC WORKS

August 2009

TABLE OF CONTENTS

1. INTRODUCTION

- A. Maintained Road System
- B. Funding Sources Update

2. ROAD PAVEMENT PRESERVATION & MAINTENANCE

- A. Types of Surface Treatments
 - i. Thin Overlay
 - ii. Micro-surfacing
 - iii. Chip Seal
 - iv. Cape Seal
 - v. Rejuvenating Fog Seal
- B. Routine Maintenance
- C. Five-Year Pavement Preservation Maintenance Surfacing

3. BRIDGE PAVEMENT PRESERVATION & MAINTENANCE

- A. Large Span Bridges
- B. Short Span Bridges

4. CAPITAL IMPROVEMENT PROJECTS

5. FUNDING SOURCES

- A. Federal Fuel Tax
- B. State Funding
- C. Local Funding

6. TRANSPORTATION MANAGEMENT PLAN FINANCIAL ANALYSIS

- A. Historical Funding
- B. Funding Plan for Five-Year Transportation Management Plan
 - i. Federal Funding Sources
 - ii. State Funding Sources
 - iii. Local Funding Sources

7. APPENDIX

- A. Functional Classification Map
- B. Primary Road Network Map

1. INTRODUCTION

This Five-Year Transportation Master Plan (TMP) describes the County of Lake Public Works Department's transportation program and lists proposed projects beginning with the 2010 construction season and through the 2014 construction season. The document also includes a financial analysis, which summarizes existing financial sources, and forecasts anticipated revenue for the same period.

This document focuses on pavement and bridge preservation along with road and bridge construction projects in the near future. The TMP is a "living document" which will be modified as necessary. The plan will be reviewed and updated annually.

The County's transportation plan consists of seven basic components:

- ❖ Road routine maintenance
- ❖ Road pavement preservation maintenance
- ❖ Road construction, reconstruction and rehabilitation projects
- ❖ Bridge preservation maintenance
- ❖ Bridge replacement and rehabilitation projects
- ❖ Regional and State highway projects
- ❖ Financial analysis

This plan addresses each program component and includes pertinent information regarding the individual program categories. It is important to note that Lake County's goal is to provide the County's traveling public with the safest and most efficient road system possible given the existing facilities and availability of funding. Protection of the public investment in the County's existing road system is of paramount importance, and the goal of this program is to maintain and/or improve overall roadway conditions. A pavement and bridge preservation program is a key element of this transportation program.

In addition to Road/Bridge Preservation Maintenance this plan also identifies road improvement projects to be funded through various programs.

a. Maintained Road System

The Lake County Maintained Road System consists of 612 miles of roads that include 125 bridges along with 3,555 culverts and numerous drainage structures. These roads vary widely in their volume and type of traffic, pavement condition, and geometrics (such as pavement width). Due to limited availability of funding and the inability to perform all of the maintenance it would like, the Lake County of Board of Supervisor's policy is to not take any additional roads into the County maintained road system.

All of the roads within the County system are classified under the Federal Functional Classification System and was approved by the Federal Highways

Administration (FHWA) in 1992. The County is responsible for initiating any required reclassification of the County roads as well as adding new roads. This process involves providing justification of the change to the Lake County/City Area Planning Council (APC). Once approved by APC, the reclassification is sent to Caltrans for approval, and then on to FHWA for final approval. Functional classification as a minor arterial or major collector makes a roadway eligible for Federal Aid funds. Of the County's 612 miles of roads, 477 miles (78%) are classified as rural minor or rural local roads and do not qualify for Federal or State Aid funds from programs such as the Regional Surface Transportation Program (RSTP) and the State Transportation Improvement Program (STIP). The federal functional classification road map for the County is located in Appendix A.

Within the Maintained Road System, there are 136 miles of roads that constitute the County's Primary Road Network (Appendix B). Roads were identified as primary roads based on their importance in interconnecting the cities and communities within the County. All of these roadways have functional classifications that qualify them for Federal Aid funds. The primary road network is a planning tool for the County and can be revised and amended as needed to better fit the needs of the County.

The remaining 477 miles of County roads or secondary roads either have a lower functional classification on the Federal Aid system or are roads that the County has placed less importance. Of the 477 miles of secondary roads, 148 miles have a gravel or dirt surface. All resurfacing of secondary roads will be funded through the Public Works maintenance budget consisting primarily of Proposition 42 funds and will not receive Federal or State Aid (RSTP, STIP). The best defense against roadway deterioration is a rigorous preventive maintenance program that includes regularly scheduled crack sealing and resurfacing (slurry seals, chip seals, cape seals and overlays). Preventive maintenance treatments sustain a roads pavement condition at a relatively low cost. When done in a timely manner, resurfacing can greatly reduce the need for labor-intensive crack seals, pothole repairs, and for costly reconstruction.

The County has a significant investment in its road system. Given the importance of this system to the mobility of our citizens and the quality of life in Lake County, protection of this investment is critical. A Pavement Management Program (PMP) is a valuable tool used by many agencies in the United States to quantify the overall needs for a road system. Lake County's recently updated PMP (June 2008) provides a management tool to inventory road pavement, assessment of pavement conditions, a record of historical maintenance, forecasting of budget needs and identification of needed pavement rehabilitation for the entire county road system.

The Lake County Department of Public Works is responsible for the repair and maintenance of 1,013 lane miles of roadway pavement. (Lane miles include multiple lane roadways, center turn lanes and passing lanes). The Pavement Condition Index or PCI, for paved County roadways is a measurement of

pavement grade or condition and ranges from zero (worst) to 100 (best). An optimal PCI is 70 or higher. In 2005, the average PCI of the County's Paved Roadway Network was 51. However, the average PCI in 2008 fell to 32.

b. Funding Sources Update

The County's historical primary sources of ongoing revenue for road repairs are:

- Federal gas tax
- State highway user's tax
- A portion of the County property tax and
- Federal Forest Service funds.

This level of funding provides for only minimum maintenance services and does not provide sufficient funding for a pavement/bridge preservation program to arrest the ongoing deterioration of the road system. This revenue will further be reduced due to discontinuation of Federal Forest Service funds. It is imperative that new and additional revenue sources be developed to keep pace with our road infrastructure's maintenance needs.

To emphasize the need for additional revenue to maintain the surface of our roads, the Pavement Management Program (PMP) study in 2005 concluded it would require a one-time expenditure of \$12.0 million to address just the deferred maintenance needs. In order to maintain the existing roadway system at a PCI of 51, \$1.2 million would be required annually over the following five years. This amount would be for materials only and assumes that labor, equipment, etc. are provided by County forces and funded within the overall road budget. Unfortunately, the County did not have \$1.2 million per year to address this deterioration.

The update to the PMP study in 2008 revealed a decline in the PCI to 32 with \$8.9 million is now needed to maintain this lower rating. To put this in perspective, returning the County's road system to a PCI of 86 (optimal) will require an expenditure of \$274.8 million over the next 10 years.

On the State level several additional sources of revenue have been approved by the voters to provide funding for road and bridge preservation activities and capital improvement projects. In March of 2002 the voters of California approved Proposition 42, which directs the state sales tax on fuel from the State general fund to transportation. The funds are to be divided between the State Transportation Improvement Program (STIP), mass transit and road maintenance for cities and counties. Prior to 2006, only limited Proposition 42 payments ever made it to local agencies due to State General Fund borrowing of these monies. In 2006, the State paid back the Proposition 42 loans for FY 03/04 and 04/05. Also in 2006, the voters passed Proposition 1A, which stabilized Proposition 42 funding into the future by making it more difficult for the State to borrow these monies for uses other than transportation. Borrowing now requires repayment with interest over the following three-year period.

With the passage of Proposition 1A, it was anticipated that beginning in Fiscal Year 2008-2009, Proposition 42 funds would be more reliably directed to cities & counties for road maintenance. In FY 08/09, the County did receive \$1.1 million in Proposition 42 funds for road maintenance and a similar amount was made available through the State Transportation Improvement Program (STIP). However, the State legislature does have the authority to borrow Proposition 42 funding and has suggested the termination of the proposition by either legislation or initiative.

In 2006, California voters also passed Proposition 1B, the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act. Proposition 1B provides \$1 billion directly to Counties for local streets and roads to be allocated using a formula for number of registered vehicles and number of maintained miles. The proportionate share to Lake County over a five-year period is \$4.4 million. Prior to its fiscal meltdown, the State did authorize bond sales for this proposition and the County was able to receive \$1.7 million in funding. However, the State's current credit rating has postponed all future bond sales and disbursements. The County does not have any indication when the remaining \$2.7 million will become available.

On the local level the Public Works Department has developed additional programs which have been approved by the Board of Supervisors to provide revenue to address the County's road infrastructure. Increased building activity had accelerated the rate at which local county maintained roads were being deteriorating. Additionally, an increased rate of deterioration has been traced to the advent of side loading refuse trucks and the increased frequency of refuse collection trips for recyclables and green waste.

In 2006, the Lake County/City Area Planning Council (APC) funded an element of the Regional Transportation Planning and Work Program to study the impact of refuse/recycling trucks and construction related activity trucks on local roads and streets in both cities as well as the unincorporated areas of the county. Based on the study findings and the anticipated five year average expenditure by the County for the purpose of pavement preservation, the Board of Supervisors adopted a Road Impact Fee Program in July 2007. It was anticipated that the Road Impact Fee Program could generate up to \$365,500 annually for road preservation. However, the program was not fully implemented per the study and the current recession has impacted construction and limited fee revenue to \$165,000 annually, less than one-half of the expected revenue.

In FY 07/08 the County contracted with Quincy Engineering to prepare a bridge management plan for bridges in the county system. This plan was completed in June, 2009. Once the plan is adopted and approved by Caltrans, county bridges with a span greater than 20' will be eligible for Highway Bridge Program funds. These funds are available for bridge preventive maintenance activities if such a management plan is in place. Preservation of the structural serviceability of our bridges is a key element of the Program.

In 2005 the Board of Supervisors established a Countywide Service Area (CSA) to make extended road services available to County residents which are not normally provided through existing funding sources. The CSA is empowered to provide enhanced road maintenance for roads within the county system. These services are provided through the establishment of zones of benefit within the countywide service area. Funding is established as a special tax or as a benefit assessment approved by the voters or landowners.

2. ROAD PAVEMENT PRESERVATION & MAINTENANCE

In addition to routine road maintenance activities (patching, ditch grading, tree trimming, etc.), the Department Public Works (DPW) resurfaces County roads to prevent deterioration. Overlays, cape seals, chip seals, and micro-surfacing are various resurfacing methods that can add between five to ten (5-10) years of life expectancy to paved surfaces. Roads that are to receive road maintenance surface treatments are prioritized based on several factors including: pavement condition, traffic volume, existing surfacing type (AC, road mix, or gravel), width, frequency of surface repairs and various other factors. Typically, thin overlays and chip seal surface treatments can be performed by DPW personnel and equipment. The costs shown below, and following, are for materials and specialty contracted equipment only (DPW labor is omitted).

Micro-surfacing and cape seals are performed by a private contractor. Roads that are to receive surface treatments from this program are first prepared by DPW forces and equipment performing dig out repairs of failed pavement sections and repairing or upgrading the drainage culverts and ditches.

a. Types of Surface Treatments

i. **Thin Overlay:** These overlays are an effective form of surface treatment and involve the placement of a new layer of asphalt concrete (AC) approximately 1-inch thick upon an existing roadway. A thin overlay can be performed by DPW crews with a current construction cost for a two lane road of approximately \$50,000 to \$75,000 per mile. Optimally, AC overlays are placed on an existing AC road that is in stable condition. An AC overlay should not be confused with, or used as a substitution for, reconstruction of a failed roadway. Properly constructed and maintained, an AC overlay can extend the life expectancy of a roadway up to 10 years and more.

ii. **Micro-surfacing:** Micro-surfacing is a blend of oil with very small rock and sand that is applied to the roadway. Micro-surfacing is a preventive maintenance procedure to seal small cracks that would otherwise allow surface water to penetrate and damage the road base. Micro-surfacing is performed by a private contractor at a current cost of approximately \$20,000 per mile. This treatment is typically performed on rural minor collector roads and should be

applied every five to seven (5-7) years depending on road condition and traffic volume.

iii. Chip Seal: A chip seal involves the application of liquid asphalt followed by the placement of rock chips on an existing roadway. Chip seals are often performed by DPW crews at a current construction cost of approximately \$30,000 per mile for a single layer of chips. A more durable surface can be provided with a double layer of chips at a cost of \$55,000 per mile. Chip sealing is typically performed on existing AC roads and should be applied every five to seven (5-7) years depending on road condition and traffic volume.

iv. Cape Seal: A cape seal is the combination of a chip seal followed by a micro-surfacing treatment. A cape seal is generally performed on low speed roads and should be applied every seven to ten (7-10) years. The current construction cost to apply a cape seal is approximately \$60,000 per mile.

v. Rejuvenating Fog Seal: - A rejuvenating fog seal consists of applying a thin coat of oil containing a recycling/rejuvenating agent plus a polymer. The oil soaks into the existing pavement, rejuvenates the asphaltic oils and seals any cracks less than ¼" wide. This is used on asphalt pavement that has begun to oxidize and can extend the life expectancy of the roadway by three to five (3-5) years. The current cost for this treatment is approximately \$3,000 per mile.

b. Routine Maintenance

In addition to pavement resurfacing of county roads, there is a constant demand to maintain the drainage systems (culverts, ditches, pumps, etc.), pavement markings, and signs, as well as patching existing surfaces until a rehabilitation project can be funded. The County's historical primary sources of ongoing revenue for road repairs are gas tax and highway user's tax, a portion of the property tax and Federal Forest Service funds. This level of funding has only provided minimum maintenance services and does not provide sufficient funding for a pavement preservation maintenance program. Resurfacing is a necessary component of maintaining our roads; however, so is maintaining adequate drainage, signs, and pavement markings. The Public Works Department strives to strike a reasonable balance between these functions to ensure the safest roads for the traveling public and to protect the County's investment in its infrastructure.

c. Five-Year Pavement Preservation Maintenance Surfacing

It is the goal of the Public Works Department to find the funds necessary to implement a pavement preservation maintenance program that will effectively maintain the roads. This program will utilize all of the surface treatment techniques mentioned above in the most cost effective and beneficial manner.

During the past several years the County has completed pavement preservation maintenance work with intermittent funding from the County General Funds and sales tax on gasoline (dedicated to pavement maintenance). However, a reliable source of funding did not become available until FY 08-09 when Proposition 42 (sales tax on fuel) was allocated to counties.

The following list contains proposed mileage of roads to receive surface treatment over the next five construction seasons (2009 - 2013). The roads are listed by functional classification and include the surface treatment type, and estimated cost per year. The cost is for materials and specialty contracted equipment only (except for micro-surfacing and cape seals) and include a 5% annual cost escalation factor. County personnel and equipment costs are not included. This list is based on current and projected revenue and may be increased or decreased based on future revenue or maintenance needs.

FY 2009-10

\$325,000 = Surface treatment
\$ 75,000 = Prep materials
 6.25 miles Major Collector
 4.50 miles Rural Minor Collector
 2.25 miles Minor Arterial
 13.0 miles Total

FY 2010-11

\$328,000 = Surface treatment
\$ 71,000 = Prep materials
 12.5 miles Major Collector

FY 2011-12

\$356,000 = Surface treatment
\$64,000 = Prep materials
 11.88 miles Major Collector

FY 2012-13

\$325,000 = Surface treatment
\$75,000 = Prep materials
 11.0 miles Major Collector

FY 2013-14

\$322,000 = Surface treatment
\$78,000 = Prep materials

 2.5 miles Rural Minor Collector
 8.0 miles Major Collector
 10.5 miles Total

3. Bridge Preservation Maintenance Program

a. Long Span Bridges (spans greater than 20')

The first goal is to maintain the existing inventory of bridges with spans twenty (20) feet and greater in a structurally safe and serviceable condition; correct minor structural defects early in a bridge's life; extend the service lives of existing bridges and make efficient use of limited resources. Preventive Maintenance should be programmed at the optimal time or specified intervals to help preserve the structural condition of bridge or to extend the service life of bridges.

Based on the department Policy for Bridge Rehabilitation and Replacement, Public Works will annually evaluate deficiencies and work recommendations identified in the specific Caltrans bridge inspection reports to determine an appropriate preventive maintenance project. However, the current deficiencies and work recommendations have the following funding needs for FY 2009-2014:

Five-Year Long-Span Plan

	Total Cost	County Share
Maintenance	\$ 701,700	\$ 80,500
Replacement	\$ 4,349,000	\$ 498,900
Total	\$ 5,050,700	\$ 579,400

b. Short Span Bridges (spans 20' or less)

The second goal is to address the preservation and or replacement of short span bridges (less than twenty feet), which are not eligible for federal funding. Annual bridge inspections will be conducted by DPW staff to determine an appropriate preservation or replacement project. Work will be primarily be done by the Roads Division bridge crew. The current deficiencies and work recommendations have the following funding needs for FY 2009-2014:

Five-Year Short-Span Plan

	Total Cost	County Share
Maintenance	\$ 30,800	\$ 30,800
Replacement	\$ 366,400	\$ 366,400
Total	\$ 397,200	\$ 397,200

4. CAPITAL IMPROVEMENT PROJECTS

Projects included in this part of the program include roadway reconstruction, pavement rehabilitation, bridge replacement or rehabilitation, safety improvements, bicycle and pedestrian enhancements. There are numerous funding sources for these projects.

A road reconstruction or pavement rehabilitation project on our primary roads has a substantially greater cost per mile than the pavement preservation maintenance projects. This is due to several factors including (1) federal funds require that roads be fully improved to current standards, (2) federal guidelines require more stringent environmental protocols and construction sampling requirements, (3) these projects are typically on primary roads which have a higher volume of traffic (especially truck volumes) than local rural roads, (4) primary roads are typically wider than the local rural roads, and (5) the projects are typically designed to have a minimum twenty-year life expectancy. In meeting these requirements, the typical pavement rehabilitation project on a rural road will cost approximately \$200,000 per mile and a typical reconstruction project will cost approximately \$300,000 per mile.

An integral element of the County's transportation infrastructure is the network of bridges designed to carry vehicular, bicycle, and pedestrian traffic across rivers and streams. There are 76 bridges which have a span greater than 20 feet which makes them potentially eligible for Federal funds. Each of these bridges has been given a Sufficiency Rating (SR) by Caltrans which is a numeric representation of the competence of a bridge to remain in service. Sufficiency Ratings range from zero to 100, with zero representing an entirely insufficient bridge and 100 representing an entirely sufficient bridge.

To be eligible for funding by the Highway Bridge Program (HBP), a bridge structure must have a Sufficiency Rating of 80 or less; or, be identified as potentially having specific service or functional deficiencies. These deficiencies can be either structural or functional. Candidate bridge projects are identified by reviewing the established Sufficiency Ratings.

Currently the County has 25 long-span bridges with a SR below 80 and above 50 which qualify them for HBP rehabilitation funds, and there are 18 bridges with a SR below 50 which qualifies these bridges for HBRR replacement funds. The County is limited to the number of HBRR projects that can be performed due to the required 12% local cost match.

The following table is a prioritized list projects by Fiscal Year along with potential sources of funding. It is unlikely that all of these projects will be constructed within the listed fiscal year, or at all. But this list does identify projects that could be advanced to be "shovel ready" should funding become available.

Road Name Construction Year (FY)	Limits - Description of Work	Funding Source	Cost Estimate (\$1,000)
2009/10			
Soda Bay Rd	Big Valley to Mission Rancheria	BIA	2,400
Cole Creek Bridge	Soda Bay Rd	HBRR,STIP	1,073
Lakeshore Blvd	PM 1.5 to 1.8 - Bike Lanes	Prop 1B	693
Seigler Bridge 14C-215	1.5 mi s/o SR 29	Prop 1B	360
	2009/10 Subtotal:		4,526
2010/11			
Nice-Lucerne Cutoff	SR 29 to Rodman Br. - AC Overlay	STIP	1,142
Bottle Rock Rd	PM 2.1 to 2.7 - AC Overlay	STIP, Prop 1B	1,239
Butts Canyon Rd	PM 3.3 to 4.0	STIP, Prop 1B	959
	2010/11 Subtotal:		3,340
2011/12			
Morgan Valley Rd	Mill St to Bonham Rd - AC Overlay	STIP	1,000
Scotts Valley Rd	SR 29 to Hill Rd	STIP, Prop 1B	1,864
Merritt Bridge 14C-204	.3 mi w/o Renfro	Prop 1B	230
Hendrick Bridge 14C-047	Hendrick Rd	Prop 1B	230
	2011/12 Subtotal:		3,324
2012/13			
Lyons Cr Bridge 14C-65	Lakeshore Blvd - Replace	HBRR	2,000
2013/14			
S. Main/Soda Bay Rd	Lakeport CL to Manning Creek -Lt Turn Ln/Bl	STIP,TE,Demo	11,000
	2013/14 Subtotal:		11,000
Five-Year Grand Total			\$ 24,190

5. FUNDING SOURCES:

a. Federal Fuel Tax

Federal fuel tax revenue is through the Federal Transportation Act referred to as SAFETEA-LU. The ACT was passed in 2005 and provides funding for five years and replaces the previous Act, TEA 21. SAFETEA-LU funds are federal funds that support numerous programs such as the Regional Surface Transportation Program (RSTP), Highway Bridge Replacement and Rehabilitation (HBRR), Highway Safety Improvement Program (HSIP), High Risk Rural Roads Program (HR3), and the Transportation Enhancement Program (TE). These programs require a local match that varies from zero to 20%. Several of these programs as described below are competitive grants and are not included in the proposed capital improvement projects.

HR3: Competitive grant program to correct or improve hazardous roadway conditions on rural major, minor collector or rural local roads.

HSIP: Competitive grant program based on a safety index. Eligible projects include pedestrian and bikeway, traffic calming, traffic signs, sight distance improvements, pavement marking programs and road way realignment projects.

b. State Funding

In addition to the federal fuel tax source, there are several funding opportunities the state provides through a combination of federal and state fuel taxes, the most notable of which is the State Transportation Improvement Program (STIP). The STIP is funded roughly 88% by Federal funds and 12% by State fuel tax. The STIP is broken into two “pots”, regional and interregional. Caltrans receives 25% of the STIP and is authorized to allocate those funds through the Interregional Transportation Improvement Program (ITIP).

The remaining 25% of the STIP are designated as Regional Transportation Improvement Program (RTIP) funds which are programming and allocated by the Transportation Agency in each region. In our case, the region is governed by the Lake County/City Area Planning Council (APC). The County and Cities recommend projects to the APC which then recommends the approved projects to the California Transportation Commission (CTC) for funding approval. Since Caltrans only controls 25% of the STIP, they typically work closely with local jurisdictions to leverage their ITIP funds with RTIP funds to perform work on the State Highways.

Additional state funds allocated to the County include Proposition 42 (sales tax on gas) and the voter approved 1B bond act.

Other State funds available through competitive grant programs, which the County has applied for and will continue to pursue, include the following:

BTA: Bicycle Transportation Account funds for projects which improve safety and convenience for bicycle commuters.

SAFE ROUTES TO SCHOOL PROGRAM: Projects which improve the ability of children to walk and bicycle to school.

These types of projects have not been included in the capital improvement plan.

c. Other Funding

Included in the Capital Improvement plan are road improvement projects which will be funded by other sources and constructed and managed by Public Works.

These projects consist of identified projects either within the County Redevelopment Agency or by the Bureau of Indian Affairs.

6. TRANSPORTATION MASTER PLAN FINANCIAL ANALYSIS

The Financial Analysis of the Public Works Transportation Master Plan is intended to discuss the financial sources and forecasts of transportation revenues necessary to implement the master plan. Funding sources for the plan are identified in three major categories - State Funding, Federal Funding and Local Funding. Within each category, sources are further identified in greater detail and estimated revenue projections are provided.

a. Historical Funding

This financial analysis is based upon current anticipated federal and state funds. It is important to note that State and Federal revenue sources fluctuate yearly based on several variables. The following table shows the total revenue over the past five years.

Historic Revenue (\$1000s)

Source	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Property Taxes	\$ 507	\$ 544	\$ 626	\$ 692	\$ 713
Unsecured Prop. Tax	\$ 13	\$ 15	\$ 16	\$ 17	\$ 20
State Highway Users Tax	\$ 2,247	\$ 2,062	\$ 2,092	\$ 1,353	\$ 2,400
State Proposition 42	\$ -	\$ 430	\$ 1,136	\$ -	\$ 885
Federal Forestry Receipts	\$ 422	\$ 431	\$ 435	\$ 435	\$ 392
Construction Impact Fee	\$ -	\$ -	\$ -	\$ 62	\$ 160
General Fund MOE	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
Services to Others	\$ 160	\$ 206	\$ 54	\$ 57	\$ 111
Federal Gax Tax	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345
RSTP (APC)	\$ -	\$ 211	\$ -	\$ 230	\$ 211
Other	\$ 62	\$ 133	\$ 213	\$ 216	\$ 171
Total	\$ 3,771	\$ 4,392	\$ 4,932	\$ 3,422	\$ 5,423

Since State and Federal revenue does fluctuate, the projects proposed in this plan will be adjusted as necessary to accommodate these changing revenue sources. Grant funding has not been included. The costs as well as the funding shown for the projects in the plan are in present value dollars.

b. Funding Plan for the Five-Year Transportation Master Plan

REVENUE	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	% ±
Property Taxes	\$ 731	\$ 746	\$ 761	\$ 776	\$ 792	2.0%
Unsecured Prop. Tax	\$ 21	\$ 21	\$ 22	\$ 22	\$ 23	2.0%
State Highway Users Tax	\$ 1,909	\$ 1,909	\$ 1,909	\$ 1,909	\$ 1,909	0.0%
State Proposition 42	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	0.0%
Federal Forestry Receipts	\$ 353	\$ 345	\$ 333	\$ 300	\$ -	
Construction Impact Fee	\$ 165	\$ 167	\$ 168	\$ 170	\$ 172	1.0%
General Fund MOE	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	0.0%
Service to Others	\$ 120	\$ 122	\$ 125	\$ 127	\$ 130	2.0%
Federal Gas Tax	\$ 345	\$ 345	\$ 345	\$ 345	\$ 345	0.0%
RSTP (APC)	\$ 217	\$ 217	\$ 217	\$ 217	\$ 217	
Other	\$ 193	\$ 191	\$ 187	\$ 183	\$ 181	0.0%
Subtotal Revenue	\$ 5,269	\$ 5,278	\$ 5,282	\$ 5,265	\$ 4,983	
Reserve Balance Forward	\$ 1,900	\$ 1,668	\$ 1,428	\$ 1,168	\$ 991	
Total Funding Availability	\$ 7,169	\$ 6,946	\$ 6,710	\$ 6,433	\$ 5,974	

O&M - Roads Division

Salaries & Benefits	\$ 2,138	\$ 2,181	\$ 2,225	\$ 2,269	\$ 2,314	2.0%
Services & Supplies	\$ 1,909	\$ 1,947	\$ 1,986	\$ 2,026	\$ 2,066	2.0%
ISF Contribution	\$ 220	\$ 224	\$ 229	\$ 233	\$ 238	2.0%
Fixed Assets	\$ 20	\$ 20	\$ 21	\$ 21	\$ 22	2.0%
Total	\$ 4,287	\$ 4,373	\$ 4,460	\$ 4,549	\$ 4,640	

5-Year Transportation Master Plan

						Annual Reductions
STIP - Local Project Match	\$ 100	\$ 92	\$ 85	\$ 78	\$ 72	-8.0%
Crack Sealing	\$ 191	\$ 176	\$ 162	\$ 149	\$ 137	-8.0%
Rejuvenating Fog Seal	\$ 484	\$ 445	\$ 410	\$ 377	\$ 347	-8.0%
Chip Seal/Overlay	\$ 228	\$ 210	\$ 193	\$ 178	\$ 163	-8.0%
Reconstruction	\$ -					
Total Pavement CIP	\$ 1,003	\$ 923	\$ 849	\$ 781	\$ 719	28%
Bridge Prevent. Maint. Plan						
Long Span	\$ 101	\$ 106	\$ 111	\$ -	\$ -	-8.0%
Short Span	\$ 8	\$ 9	\$ 9	\$ 15	\$ 18	-8.0%
Bridge Repl./Rehab Plan						
Long Span	\$ 102	\$ 107	\$ 113	\$ 68	\$ 85	-8.0%
Short Span	\$ -	\$ -	\$ -	\$ 29	\$ 36	-8.0%
Total Bridge CIP	\$ 211	\$ 222	\$ 233	\$ 112	\$ 139	
TOTAL 5-Year TMP	\$ 1,214	\$ 1,145	\$ 1,082	\$ 893	\$ 858	
Reserve	\$ 1,668	\$ 1,428	\$ 1,168	\$ 991	\$ 476	

iii. Federal Funding Sources

Regional Surface Transportation Program (RSTP), \$740,000

In 2005, SAFETEA-LU continued the RSTP program that began in 1991 with ISTEA, part of which is allocated at the regional level through a

formula for local, statewide, and transportation enhancement activities. The State Streets and Highways Code Section 182.6 allows eligible counties to exchange RSTP funds for non-Federal funds (STATE). Lake County is eligible for this program and annually requests that the funds be exchanged. These exchange dollars can then be used for any transportation purpose authorized by Article XIX of the State Constitution. Annually, \$148,000 of these funds are dedicated to capital projects or to match Federal dollars.

Highway Bridge Replacement and Rehabilitation Program (HBRRP), \$1,658,400 for Capital Projects and \$400,000 for Bridge Preservation

Funds are available for rehabilitation and replacement of bridges selected jointly by Lake County and Caltrans based on a bridge rating system. Funds can also be used for Bridge preservation projects (20ft span or greater). The Federal share is 88%, matched by 12% local funds.

Transportation Enhancement, \$536,000

Eligible projects include sidewalk, pedestrian and bicycle facilities. The local Area Planning Council receives the allocation and requests proposals from the County and Cities.

iii. State Funding Sources

State Transportation Improvement Program (STIP), \$2,900,000

STIP funds are State and Federal Gas tax dollars that are allocated at the state level by the California Transportation Commission. Projects are nominated by the County and approved by the APC.

Proposition 42, \$6,000,000

This proposition was passed by the voters in March of 2002. To date the County has received irregular payments of these funds due to the State's fiscal crisis. The County will receive approximately \$1.2 million each year for road general purposes and road preservation projects.

Proposition 1B, \$2,500,000

This proposition was passed by the voters in November of 2006. The County has already received approximately \$1.8 million that has been allocated to the maintenance and rehabilitation of local streets and roads. These funds will be dedicated to capital improvement projects.

State Match, \$500,000

These funds are provided by Section 182.9 of the Streets and Highways Code, \$ 100,000 is granted to Lake County annually. These funds can be used to match federal funds or can be used for any transportation purpose. Public Works Department policy has been to utilize these funds to match Federal dollars.

iii. Local Funding Sources

Road Impact Fees, \$100,000

In FY 2007-2008 the Board of Supervisors adopted the Road Impact Fee Program. These funds are used to mitigate the cumulative impacts on the transportation system by construction vehicles and franchised solid waste providers. These funds have been programmed for road preservation projects. It was anticipated that this program would generate up to \$365,500 annually. However, with the current downturn in the economy, it is unlikely that the County will experience sluggish construction activity for the next five years. Therefore, the FY 2009-2014 projection is based on annual revenue of \$100,000.

*** END ***