

TRANSPORTATION MASTER PLAN

2020 – 2024



YUBA COUNTY

DEPARTMENT OF PUBLIC WORKS

February 2020

Note: This plan is a working document that is continually evolving based on funding, environmental, and permitting issues. Projects may be delayed or deleted, and new projects added without prior notice or updating of the plan.

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INTRODUCTION

This Transportation Master Plan describes Yuba County Public Works Department's ongoing transportation program and lists current projects scheduled for 2020 and proposed projects beginning with the 2021 construction season and through the 2024 construction season. The document also includes a financial analysis, which summarizes existing financial sources, and forecasts anticipated revenue for the same period.

The County's transportation plan consists of the following basic components:

- Legislative Update and Current Status of Yuba County's Transportation System
- Secondary Road Maintenance
- Capital Improvement Road and Traffic Operations Projects
- Bridge Replacement and Rehabilitation Projects
- Financial Analysis
- Summary of Recently Completed Projects

This plan summarizes each program component and includes pertinent information regarding the individual program categories. It is important to note that the heart and soul of the County road system is the maintenance program. 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.

In addition to road maintenance funded with gas tax revenues, this plan also includes proposed road maintenance projects funded by Measure D, the County's resource depletion tax. This tax, which is based on 15 cents/ton (now 21.65 cents/ton escalated for inflation) of aggregate base and asphalt concrete produced or mined in the County, is providing a valuable contribution toward road maintenance in the County.

Beyond maintenance of the County roads, this plan also identifies road improvement projects the County will fund through various capital impact fee programs. The County collects road impact fees on a countywide basis as well as within specific plan areas for projects specific to the plan areas. The purpose of these fees is to be able to construct capacity-increasing projects, such as road widening or traffic signals in order to maintain an acceptable level of service on our roads.

The Transportation Master Plan is a five-year document focusing on pavement maintenance, and road and bridge construction projects in the near future. Staff will review and update the plan as needed but no more often than yearly. The overall needs for traffic safety improvements are not included except as covered in a specific project. Yearly projects such as replacing pavement markings, signs, and striping will be determined on a yearly or as needed basis. **These project lists are continuously evolving based on funding, environmental, or permitting issues, and projects may be delayed or deleted, or new projects added as the plan is updated.**

LEGISLATIVE UPDATE AND CURRENT STATUS OF YUBA COUNTY'S TRANSPORTATION SYSTEM

Yuba County road maintenance relies heavily on state gas tax subventions or Highway Users Tax Account (HUTA) funding. Counties and cities share 36 percent of this revenue source for road maintenance, with the remaining percentage going to the state highway system. The State distributes HUTA funding to counties and cities monthly, and bases those distributions on a complex set of formulas pertaining to the number of registered vehicles, road mileage, population, and assessed property valuation. While the gas tax (HUTA) is the anchor of our maintenance budget, the County needs additional revenue sources to keep pace with our road infrastructure maintenance needs.

In 2010, the California legislature implemented the Gas Tax Swap. The Gas Tax Swap, eliminated the sales tax on gasoline (which was funneled through the general fund and often pirated in years past for other general fund obligations) and replaced it with an equitable increase in the gas excise tax (which goes directly to the transportation fund). The Legislature also increased the excise tax on gasoline, which in turn increased the amount of Highway Users Tax (HUTA) money received by cities and counties. The State Board of Equalization (BOE) adjusted this portion of the excise tax annually. The BOE split revenues collected through this “price-based” excise tax as follows: 44% for the State Transportation Improvement Program, 12% for the State Highway Operation and Protection Program (Caltrans), and 44% for local streets and roads (split evenly between cities and counties using existing HUTA formulas).

The first few years after implementation of the Gas Tax Swap, revenues remained relatively stable. Unfortunately, this stability evaporated in 2015, resulting in a 30% decline in gas tax revenues. This was a direct consequence of the “gas tax swap” formulas and the significant reduction in the price of fuel. As a result, Public Works operated in the red, using reserves to balance the budget. Due to the reduced revenues, Yuba County was essentially unable to perform any maintenance overlays between 2015 and 2017, instead relying on patching potholes and performing other routine maintenance activities that did not require extensive materials. The County also significantly reduced staffing levels.

The legislature was keenly aware of the lack of transportation funding, and embarked on a fix. In April 2017 the legislature passed SB-1, a comprehensive transportation bill that dramatically increased revenues to our department. Once SB-1 is fully implemented, we anticipate an approximate 200% increase in transportation revenues from FY 16/17 levels. These new revenues will allow us to significantly ramp up road repairs and overlays. The State is phasing in most of the new revenues, however, so the County will not realize the full amount of new revenues for a few more years. Significant ramping up of road repairs began in FY 18/19. Fiscal year 19/20 brought in approximately \$3 million in additional funding to our department.

SB-1 includes many new funding components summarized below:

- New gasoline fuel excise tax of 12 cents/gal beginning November 2017;
- End Board of Equalization price-based gas tax adjustments (gas tax swap) and reset rate to

17.3 cents in July 2019;

- New diesel fuel excise tax of 20 cents/gal beginning November 2017;
- Diesel sales tax increase of 4% starting November 2017;
- Transportation Improvement Fee (\$25-\$175 per vehicle based on value) starting in Spring 2018;
- Zero emission vehicle fee of \$100/year, starting in 2020; and
- An annual inflationary adjustment to the excise taxes.

SB-1 allocates \$5 billion/year in funding once fully implemented. Some of the primary funding purposes and allocations are:

- \$1.5 billion for the SHOPP to maintain state highways and freeways;
- \$1.5 billion to cities and counties equally for local streets and roads through a new program called the Road Maintenance and Rehabilitation Account (RMRA);
- \$750 million for transit operations and capital;
- \$685 million in General Fund loan repayments split between state highways, local roads, and transit;
- \$400 million for bridge repair and maintenance allocated through Caltrans;
- \$300 million for goods movement/freight projects;
- \$200 million in local partnership funding for self-help counties; and
- \$100 million for the Active Transportation Program to encourage active modes of transportation.

The most sizeable piece of this new funding comes through the newly created Road Maintenance and Rehabilitation Account (RMRA). Cities and counties are required to adopt project lists at the start of every fiscal year showing the following information for RMRA funding: i) description of the work; ii) location of each proposed project; iii) a proposed schedule for each project's completion; and iv) the estimated useful life of the improvement.

Due to immediate road repair needs, Yuba County worked with lobbyists to encourage the legislature to change regulations in order to allow advance road funds. The effort was successful, and the California legislature passed SB 848 in June 2018. SB 848 explicitly allows local agencies to borrow against future RMRA apportionments to advance fund work. Yuba County was the first agency to take advantage of this new legislation, and subsequently borrowed \$9 million from the Yuba Water Agency to fund two road rehabilitation contracts in 2019. These projects targeted 74 different road segments, repairing and resurfacing approximately 70+ miles of roads for a total of \$12 million in work. This approach resulted in savings of nearly \$4 million by reducing unit costs, avoiding escalating construction costs, and avoiding the need for complete reconstruction of roads, which would have been necessary had maintenance been deferred.

Maintained Mileage

The Yuba County Maintained Road System consists of 654.64 miles of roads. The Maintained Road System also includes 76 bridges (greater than 20' in length) plus thousands of culverts and drainage structures. The number of road miles grew steadily for several years with all of the new

housing developments. However, with the slowdown in the economy, maintained mileage has been relatively stable for many years, showing an increase of only 1.357 miles in 2018.

Federal Functional Classification

All of the roads within the County are classified under the Federal Functional Classification System. The County submitted all of the County roads for Federal Functional Classification, and FHWA approved those classifications utilizing FHWA guidelines. 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 SACOG. Once approved by SACOG, the County sends the proposed reclassification to Caltrans for approval, and then forwards the classifications to FHWA for final approval. The functional classification of rural major collector, urban collector, or higher is eligible for Federal Aid funds. Of the County's 654.6 miles of roads, only approximately 172 miles (26%) meet these qualifications. The remaining 482.6 miles are urban or rural local roads, which 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). Located in the appendix is the federal functional classification road map for the County.

Primary Road Network

Within the Maintained Road System are approximately 119 miles of key roadways that constitute the County's Primary Road Network; located in the appendix is a map of these roads. The County chose these primary roads based on their importance of interconnecting the County with other counties and cities, Beale AFB, communities within the County, and having a functional classification that qualifies for Federal Aid funds. The Board of Supervisors approved the primary road network in December of 1998 and updated the network in 2009; this network is a planning tool for the County and changes as needed to better fit the needs of the County.

The remaining 535 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 on than the primary network. Of the 535 miles of secondary roads, approximately 102 miles have a gravel surface. The Public Works maintenance budget, consisting primarily of fuel tax or HUTA funds, pays for all resurfacing of secondary roads as they are ineligible for Federal or State Aid (RSTP, STIP). The best defense against roadway deterioration is a rigorous maintenance program that includes regularly scheduled resurfacing (slurry seals, chip seals, thin overlays and overlays). Resurfacing can add six to twenty years to the life of a road. If done in a timely manner, resurfacing can greatly reduce the need for labor-intensive crack seals, pothole repairs, and for costly reconstruction.

Pavement Management System

The County's roads vary widely in their volume and type of traffic, pavement condition, and geometrics such as pavement width. A Pavement Management System (PMS) is a valuable tool used by many agencies in the United States to quantify the overall condition and needs for a road system. In addition to pavement condition, the PMS also provides an accurate database of road

widths, types of surfacing, and last work performed. An up to date PMS provides us with a means of identifying the needed level of pavement rehabilitation for our various roads, as well as a means to help prioritize work. A pavement condition index (PCI) is a numerical index between 0 and 100 that indicates the condition of a roadway. It is a statistical measure widely used in transportation civil engineering and requires manual survey of the pavement. Staff utilizes data collected for the PMS to calculate Yuba County's PCI.

Keeping the PMS database up to date is a challenging task due to Public Works' limited resources and the extensive amount of fieldwork required evaluating the pavement condition. Staff last evaluated pavement conditions in 2015 and the PCI for Yuba County roads at that time was approximately 60.

A PCI of seventy (70) is a minimum desirable target (a PCI of 100 is a new road built to current standards). As the PCI decreases, the cost to improve a road to a desirable PCI increases exponentially. For example, improving a road from a PCI of 50 to 70 may cost \$1 per square foot, but improving a road from a PCI of 30 to 70 may cost \$4 per square foot. Roads below a PCI of thirty (30) require reconstruction, since a surface treatment would not increase pavement life significantly enough to justify the expenditure.

Local Streets and Roads Needs Assessment

In 2008, the League of California Cities and the California State Association of Counties conducted a statewide survey of local road conditions throughout California. The survey included all 58 counties and 478 cities in California. The goal of the study was to educate policymakers at all levels of government about the infrastructure investments needed to provide California with a seamless transportation system. The findings of the study would provide credible and defensible analysis to support a dedicated, stable funding source for maintaining the local road system at an optimum level.

Updates to the Local Streets and Roads Needs Assessment have occurred every two years since the initial authoring, with the most recent in 2018 (report dated October 2018). The results of the surveys indicate that California's local streets and roads are on the edge of a cliff. The statewide average of road conditions in California on the pavement condition index (PCI) is 65 on a scale from zero (failed) to 100 (excellent). Throughout California, 47 counties are in the "at risk category" for pavement conditions on the PCI scale (a PCI between 50 and 70), with eight counties in the "poor" category (a PCI between 0 and 49 points) and only three counties in the "Good" category (a PCI between 71 and 85). No California counties achieved the "Excellent" category, which requires a PCI of 86 or higher.

The findings of the 2018 survey indicate that California needs \$68 billion dollars of additional investment over the next ten years to bring the pavement condition and associated essential components to a level of best management practices. Even with SB-1, there is still an annual funding shortfall of \$3.74 billion to improve the average road condition in California to "Good." There is also a funding shortfall to maintain essential safety and traffic components such as curb ramps, sidewalks, storm drains, streetlights, and signals.

This biannual Local Streets and Roads Needs Assessment was a large contributing factor in finally getting legislation (SB-1) approved to begin addressing our failing roads. Although SB-1 will not provide the projected funding level needs identified in the Local Streets and Roads Needs Assessment, it is a large step in the right direction.

Bridges

According to a 2011 study from Transportation for America, California ranks 18th worst nationally in terms of overall condition of the state's bridges (includes local agency bridges as well as those on the state highway system). In 2018, the American Society of Civil Engineers (ASCE) gave California bridges a grade of C- based on condition, functionality, and age. Approximately 50% of bridges in the state have exceeded their design life and the backlog of recommended maintenance, repair and replacement work continues to grow. California is home to the second largest percentage of "functionally obsolete" (FO) bridges, or bridges with outdated designs that create congestion chokepoints. Almost 7% of California's bridges are structurally deficient and California ranks among the top states for bridges in "poor" condition (by bridge deck area). In addition, over 50% of California bridges are over 50 years old.

Today, one out of every eight bridges that motorists in California cross each day are likely to be deteriorating to some degree and 7% of bridges statewide are rated "structurally deficient". Yuba County has replaced seven bridges over the last nine years, so Yuba County now only has six structurally deficient bridges. Furthermore, we are working through the Federal Aid process to replace the remaining structurally deficient or functionally obsolete bridges; these projects are currently in various phases (design, environmental, right of way). This will allow us to construct one or two bridge replacement projects each year for the foreseeable future.

Several years ago, a change took effect regarding Federal Aid funding through certain programs, allowing the use of State toll credits as a local match. The net result to the County is that the replacement of off-system bridges (bridges on roads that have a Federal Functional Classification of rural minor collector or less) will be 100% funded and will not require a local match. Historically, the local match required for projects funded through the Highway Bridge Program ranged from 11.47% to 20%. That was a sizeable amount of money and directly reduced the amount of funds available for other road projects and maintenance overlays in a given year. The high local match requirement was one of the major factors that contributed to the County falling behind on its bridge replacement program. By eliminating the local match, the new toll-credit policy is helping to accelerate the replacement of Yuba County's aging bridges.

Revenue Trends

Prior to SB-1 and Proposition 69, there had not been a single year in memory where gas tax revenues were not in some form of jeopardy by threat of the legislature, whether it be borrowing to help the State's cash flow, deferring payments, or outright taking the money to shore up an ailing General Fund. Fortunately, through tremendous efforts from CEAC, local governments, and transportation advocates, we have always managed to stave off any outright taking of gas taxes. Albeit, never without a struggle. Historically, the result was a relatively stable annual revenue source (HUTA) over the years (approximately \$2.5 million annually for Yuba), which

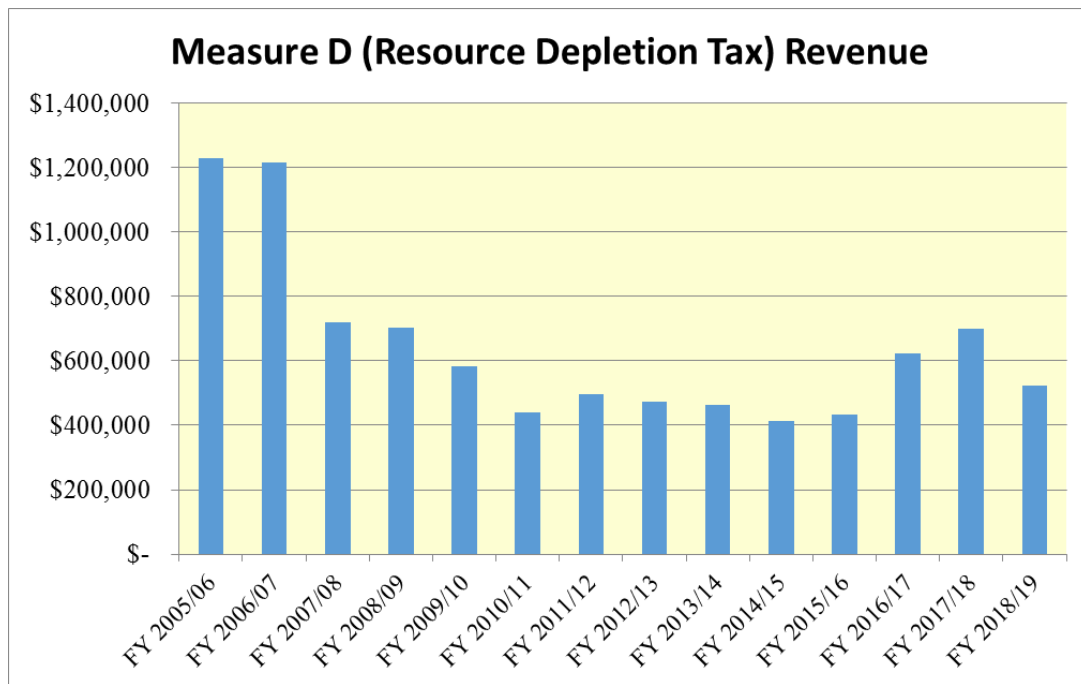
provided for the bulk of the Public Works Department's operating budget.

However, this stability disappeared in 2015, with a marked decline of approximately 30% in HUTA revenues. This was a direct result of the "gas tax swap" formulas and the large decline in the price of fuel. Public Works had to balance the budget during fiscal years 2015 through 2016 by using cash reserves and labor force reductions. Fortunately, after years of talk, in 2017 the legislature passed SB-1, a comprehensive transportation reform bill that will provide much needed additional revenues to fix our ailing roads.

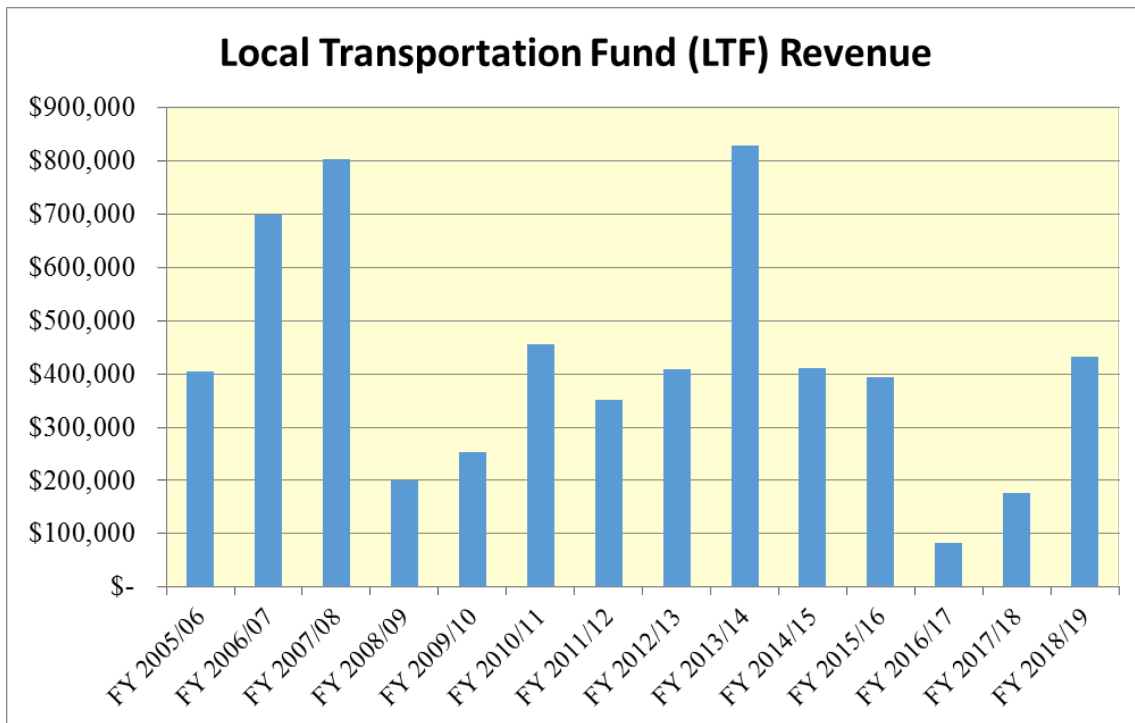
SB-1 was adopted in April 2017, and will ultimately result in an approximate 200% increase in transportation revenues from FY 16/17 levels. These new revenues allowed us to significantly ramp up road repairs and overlays. Most of the new revenues increase over time, however, and we will not realize the full amount for a few more years. The significant ramping up of road repairs began in FY 18/19, and continued in FY 19/20. Once reaching full funding levels, we anticipate an additional \$4.5 million per year.

Two other significant sources of revenue for the Road Fund are Measure D and LTF. Measure D is a voter approved resource depletion tax based on 15 cents/ton (now 21.65 cents/ton due to inflation escalation) of aggregate base and asphalt concrete produced or mined in the County, with the revenue devoted strictly to transportation projects. The primary focus in this plan with the revenue generated by this tax is to rehabilitate the truck routes in the County. To date, Public Works has rehabilitated portions of Hammonton-Smartsville Road, North Beale Road, Lindhurst Avenue, Spring Valley Road, and Marysville Road using Measure D funds. When or if the Measure D revenue is adequate to keep up with the truck route needs, Public Works will look at other roads on which to use this revenue source.

Measure D funds have fluctuated over the past ten years, in direct correlation with the economy. As seen in the chart below, Measure D revenues have declined from a high of \$1,229,258 in fiscal year 05/06 to a low of \$383,366 in fiscal year, 14/15. Fortunately, with the improving economy we have witnessed a slight uptick in Measure D revenues over the last three fiscal years.



In 1971, the Transportation Development Act (TDA) went into effect, dedicating 0.25% of the state sales tax to public transit as administered by a Local Transportation Fund (LTF) created in each county. In our case, Yuba Sutter Transit receives this money. However, once Yuba Sutter Transit meets its revenue needs, any excess LTF revenues become available for local streets and roads maintenance. The Yuba-Sutter Joint Powers Agreement apportions these excess LTF revenues to each local agency within Yuba Sutter Transit's service area. As shown in the chart below, LTF revenues fluctuate significantly. This is a direct result of how much revenue Yuba Sutter Transit requires to meet its needs from year to year.



SECONDARY ROAD MAINTENANCE

In addition to routine road maintenance activities (patching, ditch grading, tree trimming, etc.), Public Works resurfaces County roads to prevent deterioration. Overlays, slurry seals, chip seals, and micro-paving are resurfacing methods that can add 5 to 20 years to the life of a pavement surface. The County prioritizes the roads to receive maintenance surface treatments based on several factors including pavement condition, traffic volume, existing surfacing (AC, road mix, or gravel), roadway width, frequency of surface repairs and various other factors. These surface treatments are typically performed using contractors, however, County personnel sometimes perform thin overlays on secondary roads. The costs shown below and on the following list of projects are for basic materials and equipment only. Crews first prepare the roads that are to receive surface treatments from this program by performing digout repairs of failed pavement sections and repairing or upgrading the drainage culverts and ditches.

Types of Surface Treatments:

- Overlay An overlay is the most effective form of surface treatment and involves the placement of a new layer of asphalt concrete (AC) approximately 1 to 3 inches thick on an existing roadway. The County typically uses private contractors to perform overlays, and the current construction cost to overlay a two-lane road is approximately \$100,000 to \$120,000 per mile (22' wide, 2" depth). Optimally, the County places AC overlays 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 of a road for 10 to 20 years.
- Thin Overlay Thin overlay is a technique that County crews began using approximately 15 years ago. The process involves placing a thin leveling course of AC, typically one inch in thickness, over an existing road with a motorgrader and a tractor with an asphalt float. County crews typically perform placement of thin overlays, and the current construction cost is approximately \$50,000 to \$60,000 per mile. Thin overlays are effective on existing rural roads that have a stable base and low traffic volume, but are too uneven, narrow or rough to apply a chip seal. Properly placed, thin overlays can extend the life of a road an estimated 5 to 10 years. It is good practice for the County to apply a single chip seal within 5 years of a road receiving a thin overlay.
- Chip Seal A chip seal is similar to a slurry seal, except it involves the application of liquid asphalt followed by the placement of rock chips (larger than in a slurry seal) on the existing roadway. County crews sometimes perform chip seals, and the current construction cost is approximately \$30,000 per mile for a single layer of chips and \$50,000 per mile for a double layer of chips. Chip sealing is common on existing AC roads in rural areas. A chip seal is appropriate every 5 to 10 years depending on road conditions and traffic volume.
- Micropave Micropaving is a mixture of asphalt emulsion, graded aggregates, mineral filler, water, and other additives, resulting in a free flowing composite material (slurry) spread via a spreader box over the existing road surface. Micropaving is a thin surfacing

applied at two to three times the thickness of the largest stone in the grading. It is effective for the same applications as slurry seals; however, it uses higher quality aggregates and a fast setting and curing emulsion of higher stiffness allowing thicker layers. Micropaving has the following distinct advantages over slurry seals: it is more capable of filling ruts and minor surface irregularities, has a higher durability, and can accommodate traffic sooner due to the speed of the chemical break. This form of treatment typically costs approximately \$30,000 per mile and lasts 4 to 7 years.

- Slurry Seal A slurry seal is a blend of oil, very small rock and sand applied to the roadway. A slurry seal is a preventive maintenance procedure to seal small cracks that would otherwise allow surface water to penetrate the road base. Private contractors perform slurry sealing, and the current construction cost to slurry seal a residential street is approximately \$25,000 per mile. Slurry sealing is typically appropriate for urban secondary roads. A slurry seal is recommended every 3-5 years depending on road conditions and traffic volume.

Between 2012 and 2016, the County performed very limited maintenance on County roads because of our limited budget. Fortunately, with the passage of SB-1, we have been able to ramp up our efforts. In 2018, the County of Yuba performed overlays on 15.5 miles of roadways using RMRA funds. Subsequently, the California legislature passed SB 848 in June 2018, which explicitly allows local agencies to borrow against future RMRA apportionments to advance fund work. Leveraging this opportunity, the County secured a loan from the Yuba Water Agency to perform overlays on over 70 miles of roadways in 2019. Yuba County essentially performed 5-years of paving in one summer, putting a dent in the County's large backlog of deferred maintenance.

Prior to the passage of SB-1, the County needed an approximate tenfold increase in funding for secondary road resurfacing to accommodate the County's surfacing needs. We anticipate tripling our revenues with SB-1, which will definitely improve the County's overall Pavement Condition Index. However, even with these increased revenues, there will be insufficient funds to maintain all County roads at the desired level of service.

In addition to pavement resurfacing of the secondary 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. County crews are also responsible for maintaining the primary roads until federal, state, or other funds are available to resurface these roads. The funding for this work is primarily from the fuel tax (HUTA), which also funds resurfacing projects on the secondary roads. Resurfacing is a necessary component of maintaining our roads, however, so is maintaining adequate drainage, signs, and pavement markings. Public Works strives to strike a reasonable balance between these functions to ensure the safest (and hopefully smoothest) possible roads with our limited funding.

The goal of the Public Works Department is to implement a maintenance-resurfacing program that maintains the secondary roads utilizing the limited funds available to us. This program will utilize all of the surface treatment techniques that we have mentioned above in the most cost effective and beneficial manner.

The following list contains proposed secondary roads to receive surface treatments over the next five construction seasons (2020 - 2024). The list organizes roads by the most likely year in which the work will occur and includes the road name, location, surface treatment type, length, and estimated cost. The cost is for materials and equipment only. County personnel costs are not included. This list utilizes current and projected revenues and may be increased or decreased based on future revenues or maintenance needs.

Scheduled Resurfacing Projects for 2020

Road Name	Limits	Surface Treatment	Length (Miles)	Quantity (AC, tons)	Cost Estimate
2020					
Alberta Avenue	Entire Length	Overlay	0.54	780	\$108,000
Albrecht Avenue	Entire Length	Overlay	0.21	310	\$42,000
Ames Road	Entire Length	Overlay	0.46	670	\$92,000
Ash Way	Park Court to 200 feet West of Wiget	Overlay	0.13	190	\$26,000
Baywood Way	Fernwood to Drainage Ditch	Overlay	0.03	50	\$6,000
Birch Court	Entire Length	Overlay	0.04	60	\$8,000
Boyer Road	Entire Length	Overlay	0.31	450	\$62,000
Chandler Road	Entire Length	Overlay	0.50	720	\$100,000
Country Club Court	Entire Length	Overlay	0.08	120	\$16,000
Deborah Lane	Maywood to Grove	Overlay	0.17	250	\$34,000
Doc Adams Road	Entire Length	Overlay	0.53	770	\$106,000
Ella Avenue	Feather River Blvd to RXR Crossing	Overlay	0.68	980	\$136,000
Elmwood Court	Entire Length	Overlay	0.04	60	\$8,000
Fern Court	Entire Length	Overlay	0.04	60	\$8,000
Fernwood Drive	Entire Length	Overlay	1.04	1,500	\$208,000
Gold Street	Entire Length	Overlay	0.11	160	\$22,000
Grove Avenue	Hmmtm-Smstsville to 225 feet South of Oak Park	Overlay	0.47	680	\$94,000
Jewett Avenue	Entire Length	Overlay	0.48	700	\$96,000
Kenwood Way	Entire Length	Overlay	0.31	450	\$62,000
Laurellen Road	Entire Length	Overlay	1.11	1,600	\$222,000
Magnolia Road	Entire Length	Overlay	1.03	1,490	\$206,000
Maywood Court	Entire Length	Overlay	0.03	50	\$6,000
Maywood Drive	Fernwood to Grove	Overlay	0.19	280	\$38,000
Moon Avenue	Entire Length	Overlay	0.34	490	\$68,000
Moonshine Road	Entire Length	Overlay	5.12	7,380	\$1,024,000
N. Roberta Way	Entire Length	Overlay	0.11	160	\$22,000
S. Roberta Way	Entire Length	Overlay	0.03	50	\$6,000
Noble Road	Entire Length	Overlay	0.69	1,000	\$138,000
Oakwood Drive	Park Court to Drainage Ditch	Overlay	0.24	350	\$48,000
Park Circle	Entire Length	Overlay	0.58	840	\$116,000
Park Court	Entire Length	Overlay	0.02	30	\$4,000
Pinewood Way	Entire Length	Overlay	0.36	520	\$72,000

Redwood Court	Entire Length	Overlay	0.04	60	\$8,000
Second Avenue	Entire Length	Overlay	0.37	540	\$74,000
Star Avenue	Entire Length	Overlay	0.34	490	\$68,000
Sun Avenue	Entire Length	Overlay	0.38	550	\$76,000
Vine Court	Entire Length	Overlay	0.02	1,470	\$204,000
Volk Street	Entire Length	Overlay	0.11	160	\$22,000
Wiget Avenue	Entire Length	Overlay	0.14	210	\$28,000
Wildwood Drive	Park Court to Drainage Ditch	Overlay	0.23	340	\$46,000
Woodland Circle	Entire Length	Overlay	0.15	220	\$30,000
Woodland Drive	Entire Length	Overlay	0.27	390	\$54,000
		Subtotal:	19.1 Mi		\$3,814,000

Proposed Resurfacing Projects for 2021-2024

2021					
Alicia Avenue	Feather River Blvd to Pasado	Overlay	0.76	1,100	\$152,000
Almond Avenue	Entire Length	Overlay	0.09	130	\$18,000
Bevan Road	Loma Rica Rd North 0.44 miles	Overlay	0.44	640	\$88,000
Calvin Lane	Entire Length	Overlay	0.06	90	\$12,000
Cleveland Avenue	Entire Length	Overlay	0.73	1,060	\$146,000
Cohn Avenue	Entire Length	Overlay	0.31	450	\$62,000
Garden Avenue	Entire Length	Overlay	0.57	830	\$114,000
Grand Avenue	Entire Length	Overlay	0.90	1,300	\$180,000
Jackson Street	Entire Length	Overlay	0.24	350	\$48,000
Kimball Lane	Entire Length	Overlay	3.27	4,710	\$654,000
Lago Road	Entire Length	Overlay	0.25	360	\$50,000
Mill Street	Entire Length	Overlay	0.56	810	\$112,000
Pike City Road	850 feet South of Cleveland	Overlay	0.16	240	\$32,000
Plantz Road	Entire Length	Overlay	0.51	740	\$102,000
Poplar Avenue	Entire Length	Overlay	0.31	450	\$62,000
Powell Road	Entire Length	Overlay	0.70	1,010	\$140,000
Riverside Drive	Sycamore to Feather River Blvd	Overlay	0.81	1,170	\$162,000
Road 270	Entire Length	Overlay	1.08	1,560	\$216,000
Scott Grant Road	Entire Length	Overlay	1.56	2,250	\$312,000
Spencer Street	Entire Length	Overlay	0.10	150	\$20,000
Spring Street	Entire Length	Overlay	0.26	380	\$52,000
Stonehedge Drive	Entire Length	Overlay	0.55	800	\$110,000
Sycamore Avenue	Entire Length	Overlay	0.13	190	\$26,000
West Hallwood Blvd	SR 20 to Kimball	Overlay	1.50	2,160	\$300,000
		Subtotal:	15.9 Mi		\$3,170,000

2022					
La Porte Road	Lost Creek north to Barton Hill	Overlay	0.56	810	\$112,000
La Porte Road	Willow Glen to County Line (west)	Overlay	4.85	6,990	\$970,000
Lague Road	Entire Length	Overlay	1.85	2,670	\$370,000
Moran Road	Entire Length	Overlay	1.90	2,740	\$380,000
Oregon Hill Road	Indiana Ranch Rd to La Porte Rd	Overlay	0.43	620	\$86,000
Oregon Hill Road	Marysville Road to Moran	Overlay	5.10	7,350	\$1,020,000

Road 100	Entire Length	Overlay	0.35	510	\$70,000
Willow Glen Road	LaPorte Road to Frenchtown Road	Overlay	0.66	960	\$132,000
		Subtotal:	15.7 Mi		\$3,140,000

2023					
Arboga Road	Broadway to Maplehurst	Overlay	1.16	1,680	\$232,000
Arboga Road	McGowan to Pasado	Overlay	2.57	3,710	\$514,000
Avocet Drive	Entire Length	Overlay	0.20	290	\$40,000
Bernice Avenue	Entire Length	Overlay	0.88	1,270	\$176,000
Dye Road	Entire Length	Overlay	0.55	800	\$110,000
Eagle Lane	Entire Length	Overlay	0.14	210	\$28,000
Evelyn Drive	Lever to McGowan	Overlay	0.17	250	\$34,000
Fairway Drive	Entire Length	Overlay	0.18	260	\$36,000
Fleming Way	14th to McGowan	Overlay	0.39	570	\$78,000
George Avenue	Entire Length	Overlay	0.82	1,190	\$164,000
Harvey Road	Entire Length	Overlay	0.13	190	\$26,000
Linda Avenue	Hmmton-Smrtsvll to N Beale - Goldfields Pwy to 1400 feet south	Overlay	0.97	1,400	\$194,000
Lindhurst Avenue	Olivehurst to North Beale Road	Overlay	1.91	2,760	\$382,000
Mary Avenue	Entire Length	Overlay	0.87	1,260	\$174,000
Ninth Avenue	West of Western to Olivehurst	Overlay	0.25	360	\$50,000
Plumas Arboga Rd	Arboga to Feather River Blvd.	Overlay	1.00	1,440	\$200,000
Plumas Arboga Rd	Algodon west 1.52 Miles	Overlay	1.52	2,190	\$411,000
Sky Harbor Drive	Entire Length	Overlay	0.28	410	\$56,000
Hile Avenue	Entire Length	Overlay	0.40	580	\$80,000
McLaughlin Way	Entire Length	Overlay	0.17	250	\$34,000
Mapes Way	Entire Length	Overlay	0.20	290	\$40,000
Farrell Way	Entire Length	Overlay	0.20	290	\$40,000
Skyway Drive	Entire Length	Overlay	1.30	1,880	\$260,000
		Subtotal:	16.3 Mi		\$3,359,000

2024					
Erle Road	Edgewater Circle to Griffith Road	Overlay	1.15	1,660	\$230,000
Pendola Road	Entire Length	Overlay	3.25	4,680	\$650,000
Pendoloa Extension	Remaining Section	Overlay	0.44	640	\$88,000
Peoria Road	Scott Forbes to Dolan Harding	Overlay	3.94	5,680	\$788,000
Plumas Avenue	Entire Length	Overlay	0.49	710	\$98,000
Plumas School Road	Entire Length	Overlay	0.75	1,080	\$150,000
Rancho Road	Entire Length	Overlay	3.53	5,090	\$706,000
Simpson Lane	Entire Length	Overlay	1.88	2,710	\$376,000
Timbuctoo Road	Entire Length	Overlay	2.07	2,990	\$414,000
		Subtotal:	17.5 Mi		\$3,500,000

2020-2024 Totals: 84.4 Miles \$16,983,000

CAPITAL IMPROVEMENT PROJECTS

Projects included in this part of the program include roadway reconstruction, pavement rehabilitation, bridge replacement or rehabilitation, safety improvements, traffic, bicycle and pedestrian enhancements, traffic signals, and freeway interchanges. There are numerous funding sources for these projects; these sources fall into two primary categories, Fuel Tax Funded and Locally Funded. The following two tables arrange projects into these two categories.

Fuel Tax Funded

The main fuel tax source for funding these projects is through the Federal Transportation Act referred to as Fixing America's Surface Transportation (FAST). The Act, passed in 2015, provides funding for five years and replaces the previous Act, Moving Ahead for Progress in the 21st Century Act (MAP-21). FAST Act funds are federal funds that support numerous programs such as the Regional Surface Transportation Program (RSTP), Highway Bridge Program (HBP), and Highway Safety Improvement Program (HSIP). They require a local match that varies from 0 to 20%.

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 receives funding primarily from a portion of the state excise tax on gasoline. The STIP is broken into two pots, regional and interregional. Caltrans recommends how to allocate the interregional (ITIP) funds, which make up 25% of the STIP and the remaining 75% of regional (RTIP) funds are recommended for programming by each region. The Sacramento Area Council of Governments (SACOG) governs Yuba County and the surrounding region. The California Transportation Commission (CTC) typically adopts the STIP in April of even numbered years. SACOG establishes its recommended list of projects and presents it to the (CTC) for 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.

A road reconstruction or pavement rehabilitation project on our primary roads has a substantially greater cost per mile than our maintenance resurfacing projects on secondary roads. This is due to several factors including: (1) federal funds require that roads be brought to current standards, (2) federal guidelines have more stringent environmental protocols and construction sampling requirements, (3) these projects are on primary roads which typically have a higher volume of traffic, including higher truck volumes than secondary roads, (4) the primary roads are typically wider than the secondary roads, and (5) the projects are typically designed to have a twenty year life. Meeting these requirements causes the typical pavement rehabilitation project on a rural road to cost approximately \$225,000 per mile and a typical reconstruction project to cost approximately \$350,000 to \$450,000 per mile.

An integral element of the County's transportation infrastructure is our network of bridges designed to carry vehicular, bicycle, and pedestrian traffic across rivers, streams, and canals.

There are 75 HBP-eligible bridges (greater than 20' in length) and numerous other culvert and drainage structures owned and maintained by Yuba County. It can take as long as five years to complete a bridge replacement project due to the lengthy and cumbersome federal-aid process, and in particular the painfully slow environmental/permitting process.

The County identifies maintenance tasks through a combination of visual inspections performed by County staff and more formal, in-depth inspections performed by Caltrans. County crews perform routine maintenance and minor repairs using the County's maintenance budget.

The majority of the County's bridges are constructed of reinforced concrete or steel, which require little maintenance, at a minimal cost. The majority of routine maintenance problems for the County include bridges constructed with timber or that have exceeded their expected life. The cost for capital improvement projects needed to upgrade or replace these high maintenance or functionally obsolete structures represents a continuing major investment in the County's bridge infrastructure.

Caltrans is responsible for inspecting local agency bridges on a semi-annual (annual in some cases) basis, as long as the structures meet certain criteria, the primary requirement being a total structure length of 20 feet. After each inspection, Caltrans assigns a Sufficiency Rating to the bridge, or a numeric value indicating the sufficiency 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. Structures that meet a Sufficiency Rating of 80 or less, and structures that potentially have specific service or functional deficiencies (categorized by Caltrans as either Structurally Deficient or Functionally Obsolete) are eligible for funding through the HBP program. The County identifies candidate bridge projects by reviewing the established Sufficiency Ratings. Currently the County has 75 bridges that are of sufficient length (>20') to be eligible for Caltrans inspection. Of these, 28 bridges have a SR below 80 and above 50, which qualify for HBP rehabilitation funds, and 15 bridges have a SR below 50 which qualify for HBP replacement funds.

Locally Funded

Locally funded capital improvement projects primarily consist of projects specified in either the countywide road fee program or road fee programs within the Plumas Lake Specific Plan. These programs have already identified the projects needed. The purpose of including them in this plan is to identify what order and what year projects the County anticipates it will construct, and be able to monitor cash flow and personnel resources for Public Works. The projects included are only those the County anticipates Public Works will construct and manage. In the PLSP area there may be other projects constructed by developers over this same period of time that will require Public Works plan approval and construction inspection.

The County will also use Measure D funds for projects on the Locally Funded Projects list. Measure D revenues have declined from a high of \$1,229,258 in fiscal year 05/06 to a low of \$383,366 in fiscal year, 14/15. Fortunately, with the improving economy we have witnessed a slight uptick in Measure D revenues over the last three fiscal years.

Federal/State Aid Capital Improvement Projects, 2020-2024

Road Name	Limits Description of Work	Length (miles)	Funding Source	Fed/State Funding
2020				
Eleventh Avenue	Curb/gutter/sidewalk/drainage/overlay, Olivehurst Ave to Powerline Rd	0.4	ATP	\$1,505,000
Erle Road	Edgewater Rd to Arboga Rd	1	LPP	\$300,000
Feather River Blvd	Algodon Rd to Ella Ave, fabric/overlay	4	RSTP	\$2,080,000
Iowa City Road	Replace bridge	0.2	HBP	\$2,672,000
Oregon Hill Road	Replace bridge	0.2	USFS	\$650,000
Road Striping	Various Roads - Replace striping		HSIP	\$1,847,000
	2020 Subtotal:	5.8		\$9,054,000
2021				
Alicia Avenue	Curb/gutter/sidewalk/widen/overlay, Alicia Avenue from Feather River Boulevard to Riverside Drive	0.4	ATP	\$1,560,000
Cedar Lane	Curb/gutter/sidewalk/widen/overlay, Cedar Lane from Alicia Boulevard to Garden Avenue	0.3	ATP	\$1,169,000
Feather River Blvd	State of Good Repair/sidewalk/bike lane from Garden Avenue to Alicia Avenue	0.3	RSTP	\$1,701,000
Hammonton- Smartsville Road	Shoulder widening, dig outs, and asphalt over lay from 2.1 miles east of Doolittle Gate to 5.1 miles east of Doolittle Gate.	3.0	LPP	\$750,000
McGowan Parkway	Curb/gutter/sidewalk/widen/overlay, Olive Ave. to SR70	0.6	ATP	\$1,246,000
N. Beale Road	Complete Streets Phase 2, from H-S Road to Linda Ave	0.7	STIP/CMAQ	\$4,670,000
Rices Xing Road	Replace bridge at Oregon House Creek	0.2	HBP	\$4,084,000
Waldo Road	Replace bridge @ Dry Creek	0.2	HBP	\$4,017,000
	2021 Subtotal:	5.7		\$19,197,000
2022				
Los Verjeles Road	Replace bridge at Honcut Creek	0.2	HBP	\$6,464,000
Spring Valley Road	Replace bridge at Little Dry Creek	0.2	HBP	\$2,837,000
	2022 Subtotal:	0.4		\$9,301,000
2023				
Ellis Road	Replace bridge at Simmerly Slough	0.2	HBP	\$1,610,000
Ninth Avenue	Curb/gutter/sidewalk/bike lane/overlay, Ninth Avenue from Western Avenue to Powerline Avenue	0.8	ATP	\$2,866,000
	2023 Subtotal:	1.0		\$4,476,000
2024				
Plumas Lake Blvd	Phase 2 Interchange at Plumas Lake Blvd and SR 70	0.5	STIP	\$10,000,000
	2024 Subtotal:	0.5		\$10,000,000

2020-2024 Total: 13.4 \$52,028,000

Locally Funded Capital Improvement Projects, 2020-2024

Road Name	Limits Description of Work	Length (miles)	Funding Source	Local Funding
2020				
Ardmore Avenue	Drainage improvements, 9 th to 11 th Ave	0.2	YWA	\$250,000
Eleventh Avenue	Curb/gutter/sidewalk/drainage/overlay, Olivehurst Ave to Powerline Rd	Inc. in Fed aid	State Match (Exchange)	\$196,000
Erle Road	Edgewater Rd to Arboga Rd	Inc. in Fed aid	Measure D	\$378,000
Feather River Blvd	Algodon Rd to Ella Ave, fabric/overlay	Inc. in Fed aid	Measure D	\$100,000
Lake Francis Road	Overlay and two curve corrections south of Old Dobbins Road	2.8	YWA	\$950,000
Plumas Lake Blvd Interchange	Environmental, design, and ROW for Phase 2 of the interchange at Plumas Lake Blvd and SR 70	Inc. in Fed aid	PLSP Road Fee	\$1,600,000
Wiget Avenue	Drainage improvements	0.2	YWA	\$250,000
	2020 Subtotal:	3.2		\$3,724,000
2021				
Alicia Avenue	Curb/gutter/sidewalk/widen/overlay, Alicia Avenue from Feather River Boulevard to Riverside Drive	0.4	State Match (Exchange)	\$146,000
Cedar Lane	Curb/gutter/sidewalk/widen/overlay, Cedar Lane from Alicia Boulevard to Garden Avenue	0.3	State Match (Exchange)	\$110,000
Goldfields Parkway	N. Beale to Hammonton-Smartsville Rd, Design	N/A	Cnty Cap Fee	\$200,000
Hammonton- Smartsville Road	Shoulder widening, dig outs, and asphalt over lay from 2.1 miles east of Doolittle Gate to 5.1 miles east of Doolittle Gate.	3.0	Measure D	\$1,200,000
McGowan Parkway	Curb/gutter/sidewalk/widen/overlay, Olive Ave. to SR70	Inc. in Fed aid	Measure D	\$313,000
N. Beale Road	Complete Streets Phase 2, from H-S Road to Linda Ave	Inc. in fuel tax	YWA	\$900,000
	2021 Subtotal:	3.7		\$2,869,000
2022				
Marysville Road	Left turn pocket at Browns Valley School Road	0.2	Cnty Cap Fee	\$300,000
	2022 Subtotal:	0.2		\$300,000
2023				
Goldfields Parkway	Construct two lanes between N. Beale to H-S Rd	0.5	Cnty Cap Fee	\$2,000,000
Ninth Avenue	Curb/gutter/sidewalk/bike lane/overlay, Ninth Avenue from Western Avenue to Powerline Avenue	0.8	State Match (Exchange)	388,000
	2023 Subtotal:	1.3		\$2,388,000

2024				
Plumas Lake Blvd Interchange	Construct Phase 2 of the interchange at Plumas Lake Blvd and SR 70	0.5	PLSP & Cnty Cap Fee	\$10,000,000
	2024 Subtotal:	0.5		\$10,000,000

2020-2024 Total: 7.7 miles \$19,281,000

TRANSPORTATION MASTER PLAN FINANCIAL ANALYSIS

The Financial Analysis of the Public Works Transportation Master Plan discusses the financial sources and forecasts of transportation revenues necessary to implement the master plan. Funding sources for the plan term fall within three major categories - State Funding, Federal Funding and Local Funding. Within each category, the Analysis further identifies funding sources in detail and provides revenue projections.

This financial analysis follows the trends of federal and state funds over the past few years and funds anticipated in the specific plan areas based on the current rate of development. It is also important to note that State, Federal, and Local revenue sources fluctuate yearly based on several variables. Accordingly, the County will adjust the projects proposed in this plan as necessary to accommodate the changing revenue sources. The costs, as well as the funding shown for the projects in the plan, are in present value dollars.

Funding Required to Implement Plan 2020 - 2024

State Fuel Tax Funding	\$29,694,000
Federal Funding	\$22,334,000
Local Funding	\$19,281,000
TOTAL	\$71,309,000

Following is a description of the different funding sources that we anticipate using to meet the funding needs of the plan.

STATE FUNDING SOURCES:

Highway Users Taxes (HUTA) & Road Maintenance and Rehabilitation Account (RMRA) - Apportionments of fuel and other taxes are derived under the Motor Vehicle Fuel License Tax Law. Counties are allocated funds for specific and general purpose road fund activities as defined by the Streets and Highways Code. Some allocations are fixed by purpose, and others are dependent upon factors such as prior year expenditure, number of relative vehicles to total vehicles in the state, and number of miles maintained. Funds are restricted to road purposes. The bulk of HUTA revenues go toward salaries and benefits for the Road Crew as well as maintenance surfacing projects (thin overlays, seal coats) discussed previously in this plan. The most sizeable piece of funding from SB-1 comes through the newly created Road Maintenance and Rehabilitation Account (RMRA). The State distributes RMRA funds to cities and counties using the same formulas as HUTA funds. The revenues shown below are only the HUTA / RMRA portions attributed to overlay projects (greater thickness than maintenance surfacing), and

not those attributed to salaries and benefits.

2020 – 2024
\$16,983,000

State Match - Provided by Section 182.9 of the Streets and Highways Code, the California Transportation Commission grants \$200,000 to Yuba County annually. The County uses these funds to match federal funds or for any other transportation purpose.

2020 – 2024
\$1,000,000

State Transportation Improvement Program (STIP) - STIP funds are State and Federal Gas tax dollars that the California Transportation Commission allocates at the state level. The County nominates projects and SACOG must approve STIP projects.

2020 – 2024
\$12,670,000

Active Transportation Program (ATP) - California State legislation created this program in 2013. The purpose of this program is to encourage increased use of active modes of transportation (i.e. bicyclists and pedestrians). Several former programs including the Bicycle Transportation Account (BTA), Safe Routes to School (SR2S), among other programs, consolidated into the single ATP program. A portion of this money goes to local agency projects through Caltrans, while SACOG distributes other portions of ATP funds.

2020 – 2024
\$8,346,000

Local Partnership Program (LPP) – The Road Repair and Accountability Act (SB-1) created the Local Partnership Program and continuously appropriates \$200 million annually to the program. There are two types of Local Partnership Program (LPP) funds available; these are formulaic and competitive funds. The primary objective of the formulaic LPP is to provide funding to counties, cities, districts, and transportation agencies in which voters have approved fees or taxes dedicated to transportation improvements. All taxing authorities eligible for formulaic funding will receive a minimum annual amount of \$200,000. In addition to the

formulaic funds, the CTC also distributes funds on a competitive basis for improvements to local road systems and road rehabilitation. The proposed budget anticipates \$700,000 of competitive LPP funding for the period from 2020 through 2024; however, it is possible that the County will obtain either more or less (competitive) LPP funding during that period.

2020 – 2024
\$1,700,000

FEDERAL FUNDING SOURCES:

Regional Surface Transportation Program (RSTP) - In 2015, the FAST Act continued the RSTP program that began in 1991 with ISTEA, part of which funds projects at the regional level through a formula for local, statewide, and transportation enhancement activities. RSTP funds are eligible for safety projects, road overlays, and bicycle and pedestrian projects, as well as bridge projects. SACOG allocates these funds to projects throughout the Sacramento region.

2020 – 2024
\$3,781,000

Congestion Mitigation & Air Quality Improvement (CMAQ) – Originally created under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and then reauthorized under TEA-21, SAFETEA-LU, MAP-21, and the FAST Act, this program provides funding to support surface transportation projects and other related efforts that contribute toward air quality improvements and provide congestion relief. This funding is more highly targeted for areas that are not in compliance with air quality conformity standards.

2020 – 2024
\$2,000,000

Highway Bridge Program (HBP) - Funds are for repair and replacement of bridges selected jointly by Yuba County and Caltrans based on a bridge rating system. Federal share is 88%, matched by 12% local funds for on-system bridges, and 100% Federal/State share (with the use of state toll credits for the local match portion) with no local match for off-system bridges.

2020 – 2024
\$21,684,000

Highway Safety Improvement Program (HSIP) - Funds are for the elimination of eligible safety hazards on the roadway system. The County identifies specific safety problems for correction. The program goal is to reduce fatalities and severe injuries by focusing resources on the greatest needs. The County justifies need through data and strategic planning. The federal share for this type of project is 90%. The HSIP replaced the Hazard Elimination Safety (HES) Program, and is currently authorized under the FAST Act. The former High Risk Rural Roads (HR3) program is now under the HSIP program umbrella.

2020 – 2024
\$1,847,000

Federal Lands Access Program (FLAP) – Under MAP-21, the Federal Lands Access Program replaced the Public Lands Highways Discretionary (PLH-D) and Forest Highways (PLH-FH) Programs. FLAP provides funding for projects that improve access to Federal lands on infrastructure owned by States and local governments, and the funding continues under the FAST Act. Funds are distributed by formula based on recreational visitation, Federal land area, Federal public road mileage, and the number of Federal public bridges. In past years, the County received allocations through the PLH-D program to fund improvements to Beale AFB access roads, including over \$3 million to improve Smartsville (Chuck Yeager) Road. More recently, the County received over \$2 million in FLAP funding to improve a segment of Hammonton-Smartsville Road, with construction completed in 2016.

The County is currently looking for FLAP funding for the proposed South Beale Road Interchange project and other improvements to Hammonton-Smartsville Road. While the budget includes \$0 of FLAP funding for the period from 2020 through 2024, it is possible that the County will obtain funding during that period.

2020 – 2024
\$0

Emergency Relief (ER) – Congress authorized the Federal Highway Administration's (FHWA) Emergency Relief (ER) Program to repair or reconstruct federal-aid routes that have suffered serious damage as a direct result of a declared event (see Title 23, United States Code, Section 125). The program is available to State and Local Agency transportation departments with roads suffering serious damage from natural disasters or catastrophic failures from external causes. The intent for ER funding is to supplement resources from States, localities and other Federal agencies to help in the repair of facilities damaged by eligible events. At this time, the County does not have any pending or planned emergency repair projects as we recently finished construction on damages from the 2017 winter storm disasters.

2020 – 2024
\$0

Federal Transit Administration’s New Freedom Program (FTA) - The New Freedom program goals are to provide new public transportation services to overcome existing barriers facing Americans with disabilities seeking integration into the workforce and full participation into society while expanding the transportation mobility options available to persons with disabilities beyond requirements of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101, et seq.).

2020 – 2024
\$0

United States Forest Service (USFS) - Several County-maintained roads in Yuba County also act as Forest Service roads. Historically, the County has worked collaboratively with the USDA Forest Service to maintain/improve these roads.

2020 – 2024
\$650,000

LOCAL FUNDING SOURCES:

Countywide Traffic Mitigation Fee Program - Used to mitigate the cumulative impacts on the transportation system by land development projects. The County earmarks funds for specific capital improvements identified in the nexus study.

2020 – 2024
\$7,500,000

PLSP/NASA Road Fee Program – Road Impact Fees are collected in the Plumas Lake Specific Plan and North Arboga Study Area pursuant to a nexus study that allocates the costs of the needed road improvements to the new development.

2020 – 2024
\$6,600,000

Measure D – In November of 2004 Yuba County voters approved this measure which establishes a \$0.15 per ton fee (now 21.65 cents/ton due to inflation escalations) on all aggregate and asphalt concrete produced in the County. Based on previous production rates, Public Works has seen a revenue source between \$400,000 and \$1,200,000 per year for road improvement projects. For planning purposes, we conservatively used the mid-range for this 5-year plan based on recent trends.

2020 – 2024
\$1,991,000

Yuba County Water Agency (YCWA) – YCWA funds storm drainage components of several County road projects.

2020 – 2024
\$2,350,000

COMPLETED PROJECTS

The list below contains all sizeable road projects completed by Public Works beginning with projects completed during the 2010 construction season. The list does not represent all work performed by Public Works, such as minor road, bridge or drainage repairs.

Year	Road Name	Description of Work
2010	Chuck Yeager/Smartville Rd	Cold Foam Reconstruction, curve correction, turn lanes, and drainage improvements
2010	Spring Valley Road	Overlay, Hwy 20 to Sperbeck Quarry
2010	Challenge Cutoff Road	Overlay (w/ fabric), entire length
2010	Willow Glen Road	Overlay (w/ fabric), Frenchtown Rd to 1.5 miles south
2010	Forty Mile Road	Overlay (w/fabric), Dairy Road to Plumas Arboga Rd.
2010	Simpson Dantoni Road	Overlay, Simpson Lane to Dantoni Road
2010	Olive Avenue	Overlay, entire length
2010	Griffith Avenue	Overlay/drainage improve, Linda Ave to N. Beale Rd
2010	Williams Road	Overlay, entire length
2010	Scott Grant Road	Overlay, Marysville Road to 1 mile west
2010	Ellis Road	Overlay, Hwy 70 to railroad tracks
2010	Vierra Road	Overlay, new pavement to gravel section
2010	McGonnigal Road	Overlay, entire length
2010	Bevan Road	Thin overlay, 2,200 feet of middle section
2010	Skycrest subdivision	Cape seal
2011	Hammonton-Smartville Rd	Install signal at Simpson Lane
2011	Spenceville Road	Curve correction at Camp Far West Road
2011	Marysville Road	Rubberized Overlay, Peoria Road to Willow Glen Rd
2011	Scales Road	Overlay, Lindhurst Ave to Leon Ave
2011	Rose Avenue	Widen west side, install curb/gutter/sidewalk, drainage
2011	Camp Far West Road	Rubberized Overlay, Spenceville Rd to Blackford Rd
2011	Jack Slough Road	Rubberized Overlay, Kimball Ln to Woodruff Ln
2011	State Street	Overlay, SR 65 to Wheatland City Limit
2011	Joy Circle/Old Knox Rd	Thin overlay, LaPorte Road north
2011	Johnson Park Area	Rubber chip, Virgilia, Twain, Martel, Evelyn, Lever, Elton
2011	Feather River Boulevard	Left turn lane at Plumas Arboga Rd
2011	Honcut Road Bridge	Bridge replacement at Honcut Creek
2012	Marysville Road	Rubberized Overlay, Hwy 20 to Peoria Road
2012	Woodruff Lane	Curve correction north of Jack Slough
2012	Fruitland Road	Widen & Rubber Overlay, Loop Rd to Mendosa Way
2012	North Beale Road	Widen shoulders/overlay, Griffith Ave to BAFB
2012	Fifth Avenue	Overlay, Western Ave to Olivehurst Ave

2012	Tenth Avenue	Overlay, Powerline to Fleming Way
2012	Beverly Avenue	Overlay, Ardmore Ave to Fleming Way
2012	Silverwood Estates	Rubberized overlay, Silverwood, Jason, Lisa, Stephenson, Diane, Short
2012	LaPorte Road Bridge	Bridge replacement at New York Creek
2012	Chuck Yeager Road Bridge	Bridge replacement at Vineyard Creek
2013	North Beale Road	Install raised medians
2013	Hammonton-Smartsville Rd	Shoulder wide/overlay, 0.7 to 2 miles west of Gold V.
2013	Rupert Avenue	Road reconstr, curb/gutter/sidewalk, drainage improve.
2013	Marysville Road	Left turn pocket at Loma Rica Rd
2013	Powerline Road	Widen, curb/gutter/sidewalk/drainage, 9 th to Olivehurst
2013	North Plumas Lake Roads	Microsurfaced all roads in North Plumas Lake area
2013	California Heartland Roads	Microsurfaced all roads in California Heartlands
2013	Sixth Avenue	Overlay from Powerline Road to Western Ave
2014	Fountain House Road	Double chip seal from Indiana Ranch to 2 miles east
2014	Rice's Crossing	Double chip seal entire length
2014	Rice's Texas Hill	Double chip seal from Rice's Crossing to 1 mile east
2014	Algodon Road	Overlay from River Oaks Blvd to Plumas Arboga Rd
2014	Dairy Road	Overlay entire length
2014	Oakley Lane	Overlay from Wheatland Road to SR 65
2014	Loma Rica Road	Widen/overlay, Marysville Rd to Los Verjeles Rd
2014	Powerline Road	Widen, curb/gutter/sidewalk/drainage, 9 th to 15 th
2014	Timbuctoo Road Bridge	Replace bridge at Deep Ravine
2014	Marysville Road	Construct left turn pocket at Loma Rica Rd
2015	Feather River Interchange	Construct new interchange at FRB and SR 70
2015	Loma Rica Road	Widen/overlay, Scott Grant Rd to Los Verjeles Rd
2015	Spring Valley Road Bridge	Replace bridge at Browns Valley Ditch
2016	Hamntn Smartsville Rd	Widen/curve correct/overlay, Doolittle to 2 miles east
2016	Hamntn Smartsville Rd	Widen/curve correct/overlay, Chuck Yeager Rd to 1 mile west of S. Golden Parkway
2016	Install traffic signal	McGowan Parkway and Olivehurst Ave
2016	Ellis Road RR Xing	Improve approaches to RR Xing
2016	Olivehurst Ave	Complete street project/utility undergrounding, McGowan Parkway to Seventh Ave
2016	Goldfields Parkway	New two lane roadway from Orchard subdivision to N. Beale Road
2016	Armstrong Road	Thin overlay, Woodruff Lane to 0.3 mile north
2016	Montclair Ave	Overlay entire length
2016	Dodson Ave	Overlay entire length
2017	Scales Road Bridge	Replace bridge at Slate Creek
2017	Olivehurst Ave	Construct roundabout at Powerline Rd

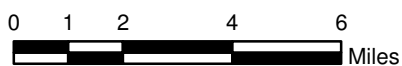
2017	Feather River Boulevard	Curve correction between Rd 512 and Algodon Rd
2017	Feather River Boulevard	Overlay from PLSP south boundary to Algodon Rd
2017	N. Beale Road	Complete street improvements between Lindhurst and Hammonton Smartsville Rd
2017	Alleghany Road Bridge	Rehabilitate covered bridge at Oregon Creek
2017	Seventh Avenue	Widen, curb/gutter/sidewalk/drainage, Powerline Rd to Olivehurst Ave
2018	New York House Rd Bridge	Replace bridge at Dry Creek
2018	Blackford Road	Overlay from Placer Co. Line to Camp Far West Rd
2018	Camp Far West Road	Overlay from Blackford Rd to 600' east of Kapaka Lane, and from Wichita Rd to 1,150' east
2018	Ramirez Road	Overlay from Mathews Ln to Fruitland Rd
2018	Mathews Lane	Overlay from Woodruff Ln to Ramirez Rd
2018	Woodruff Lane	Overlay from UPRR tracks to Jack Slough Rd
2018	Los Verjales Road	Storm damage repair from Loma Rica Rd to Butte County Line
2018	Jasper Lane	Overlay from Spenceville Rd. to Ostrom Rd
2018	La Porte Road	Overlay from Road 100 to Plumas Co. Line
2018	Oregon Hill Road	Overlay from Moran Road to Indiana Ranch Road
2018	Pendola Extension Road	Overlay from State Route 49 to 1.5 miles west
2018	Plumas Arboga Road	Overlay from Arboga Rd to R/R Tracks
2018	Summit Road	Overlay entire length
2018	North Avenue	Overlay entire length
2019	Dolan Harding	Overlay from Marysville Rd (Peoria) to Red Hill Rd
2019	Frenchtown	Overlay Entire Length
2019	Fruitland (Ramirez)	Overlay from Ramirez Rd to Mendosa Rd
2019	Fruitland (Loma Rica)	Overlay from Marysville Rd to Virginia Rd
2019	Honcut	Overlay from Fruitland Road to Butte County Line
2019	Hoover	Overlay Entire Length
2019	Indiana Ranch	Overlay from Marysville to Indiana School
2019	Iowa City	Overlay from Fruitland Rd to Loma Rica Rd
2019	Krosens	Overlay Entire Length
2019	Lambert	Overlay Entire Length
2019	Littlefield	Overlay Entire Length
2019	Loop Road	Overlay Entire Length
2019	Pat, Judy, Neil, Colleen, Vickie	Overlay Entire Length
2019	Red Hill	Overlay Entire Length
2019	Seventh Avenue	Safe Routes to School Project from Olivehurst Ave to 400' east of Arboga Road
2019	Smith	Overlay Entire Length
2019	Township Road	Overlay from Dolan Harding south 2.8 miles
2019	Virginia (hills)	Overlay from Smith road to Fruitland Road

2019	New York House Road	Overlay Entire Length
2019	Texas Hill Road	Overlay Entire Length
2019	Frenchtown Dobbins Road	Overlay Entire Length
2019	Third Avenue	Overlay Entire Length
2019	Fifth Avenue	Overlay from Canal Street to Western Avenue
2019	Seventh Avenue	Overlay from Arboga Road - Railroad Tracks
2019	Eighth Avenue	Overlay Entire Length
2019	Ninth Avenue	Overlay from Arboga Road to Pacific Avenue
2019	Tenth Avenue	Overlay from Western Avenue to Olivehurst Avenue
2019	Eleventh Avenue	Overlay from Arboga Road to Pacific Avenue
2019	Eleventh Avenue	Overlay from Western Avenue to Olivehurst Avenue
2019	Thirteenth Avenue	Overlay from Olivehurst Avenue to Ardmore Avenue
2019	Arboga Road	Overlay from Erle Road to Feather River Boulevard
2019	Ardmore Avenue	Overlay from McGowan Parkway to Eleventh Avenue
2019	Avondale Avenue	Overlay from Hammonton-Smartville Road to North Beale Road
2019	Bald Mountain Road	Overlay Entire Length
2019	Baugh Street	Overlay from Olivehurst Avenue to Ardmore Avenue
2019	Beverly Avenue	Overlay 600' west of Ardmore Avenue to Ardmore Avenue
2019	Beverly Avenue	Overlay from Fleming Way to Powerline Road
2019	Blue Gravel Road	Overlay Entire Length
2019	Bomann Drive	Overlay Entire Length
2019	Broadway Street	Overlay from Feather River Boulevard to East End
2019	Browns Valley School Road	Overlay Entire length
2019	Canal Street	Overlay from Third Avenue to Fifth Avenue
2019	Church Lane	Overlay Entire Length
2019	College Way	Overlay Entire Length
2019	Cottonwood Avenue	Overlay Entire Length
2019	Country Club Road	Overlay from Golf Course to 1,000' west of Feather River Blvd.
2019	Dantoni Road	Overlay from Hammonton-Smartville Road to Simpson Dantoni Road
2019	Diggings Road	Overlay Smartville north
2019	Dunning Avenue	Overlay Entire length
2019	Ella Avenue & West Ella Avenue	Overlay from Feather River Boulevard to end of West Ella Avenue
2019	Erle Road	Overlay from Virginia Road to 1/3 miles east
2019	Fleming Way	Overlay from Eleventh Avenue to Seventh Avenue
2019	Forty Mile Road	Overlay from SR 65 to Hofman Plumas Road
2019	Georgina Drive	Overlay Entire length
2019	Griffith Avenue	Overlay from North Beale Road to Hammonton-Smartville Road
2019	Hammonton-Smartville Road	Overlay from Avondale Road to North Beale Road

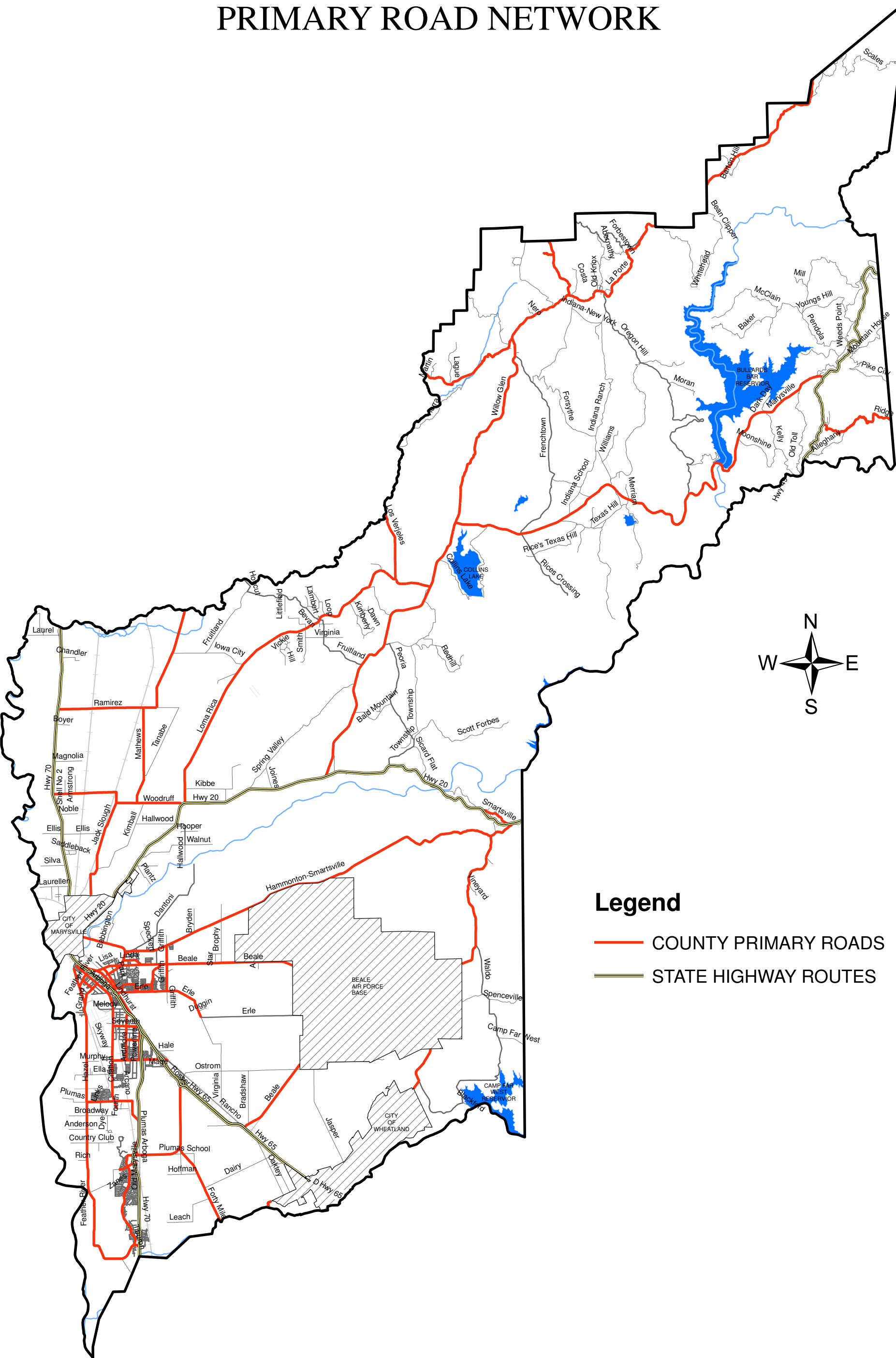
2019	Joines Road	Overlay Entire Length
2019	Laurel Lane	Overlay Entire Length
2019	McGanney Lane	Overlay from Smartsville Road to 0.19 miles north
2019	McGowan Parkway	Overlay from Arboga Road to Railroad Tracks
2019	Meadow Court	Overlay Entire Length
2019	Meadow Way	Overlay Entire Length
2019	O'Brien Road	Overlay Entire Length
2019	Old State Highway	Overlay from Highway 70 to Laurel Lane
2019	Pacific Avenue	Overlay Entire length
2019	Plumas Arboga Road	Overlay from Algodon Road to 1.58 miles north
2019	Silva Avenue	Overlay Entire Length
2019	Smartsville Road	Overlay Entire Length
2019	Spring Valley Road	Overlay from Marysville Road to 2.29 miles north
2019	Sunrise Avenue	Overlay Entire Length
2019	Sunset Avenue	Overlay Entire Length
2019	Sunshine Avenue	Overlay Entire Length
2019	Thome Road	Overlay Entire Length
2019	Warehouse Road	Overlay Entire Length
2019	Western Avenue	Overlay Entire Length
2019	Hallwood Road	Overlay from Walnut to Highway 20
2019	Walnut Road	Overlay from Highway 20 to Hallwood
2019	Algodon	Overlay from Feather River Blvd. to OPUD Plant
2019	Algodon	Overlay from Plumas Lake Blvd. to Plumas Arboga
2019	Fourth Ave	Overlay Entire Length



- Resurfacing - HUTA & RMRA Funds
- Locally Funded Capital Improvements
- Federal/State Aid Capital Improvements



YUBA COUNTY
DEPARTMENT OF PUBLIC WORKS
PRIMARY ROAD NETWORK



YUBA COUNTY

DEPARTMENT OF PUBLIC WORKS

FEDERAL FUNCTIONAL CLASSIFICATION

Legend

- RURAL PRINCIPAL ARTERIAL
- RURAL MINOR ARTERIAL
- RURAL MAJOR COLLECTOR
- RURAL MINOR COLLECTOR
- URBAN PRINCIPAL ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN COLLECTOR

* RURAL MINOR COLLECTOR ELIGIBLE FOR ONLY LIMITED FEDERAL AID FUNDS

