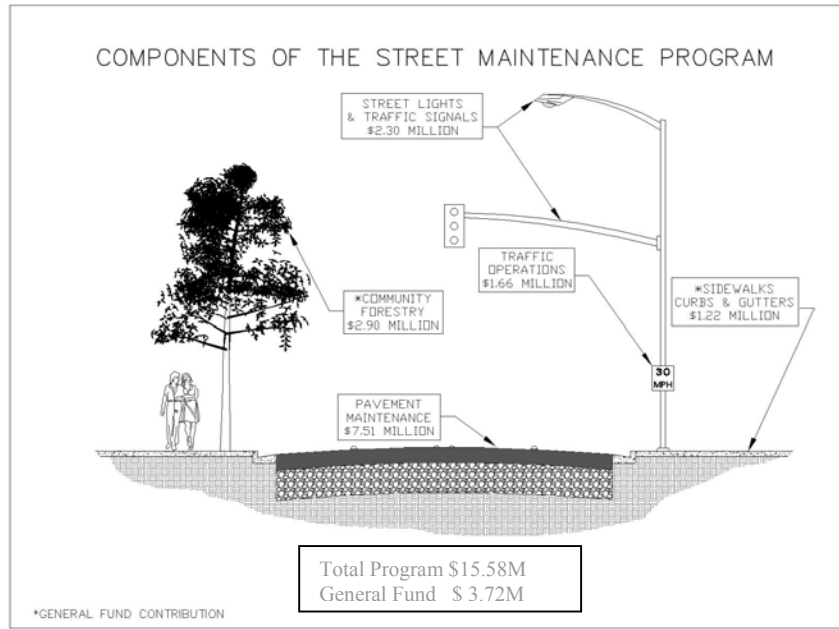


Staff Paper #3:
State of the Streets

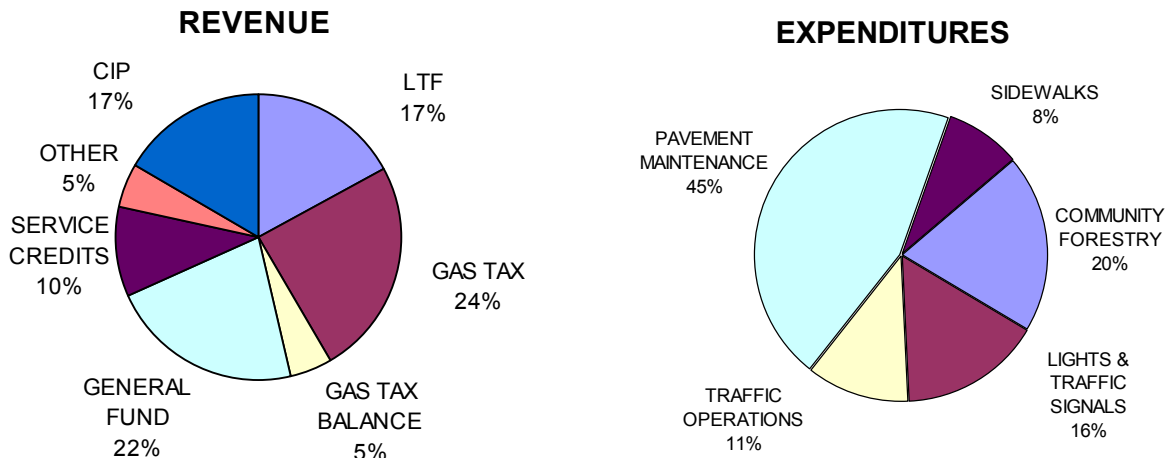
STATE OF THE STREETS REPORT

What is the Problem? Good quality streets support a healthy local economy, reduce the cost of vehicle maintenance, and help improve our quality of life. But, today in Modesto, fifty-one percent (51%) of the streets require substantial work. Due to the State's fiscal crisis, the funding needed to improve the City's streets is being significantly reduced. As a consequence, the City is falling further and further behind in its goal to provide Modesto a high quality transportation system. The bottom line is that there just isn't enough money to adequately maintain Modesto's streets.

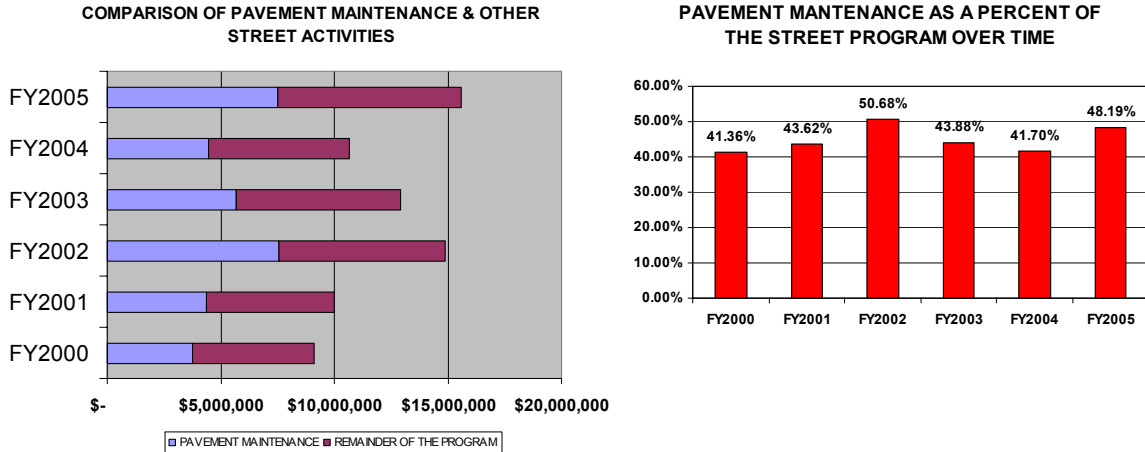
What is Street Maintenance? When most people think of street maintenance, they usually think about repairing the pavement. But, repairing the pavement is only one component of the program to maintain the Modesto street system. A wide range of activities is needed to make the street system work to reduce the impact of increased traffic on everyone's quality of life. Other essential components of street maintenance are traffic management, intersection improvements, curb and sidewalk restoration, street light maintenance, street tree preservation, and pavement repair. The following diagram identifies each program component and its share of the 2005 street budget.



The following charts summarize expenditures and revenues for the entire program. Pavement "maintenance" is the largest expenditure at forty-five percent (45%) of the budget. The largest source of funding is the State gasoline tax that provides twenty-nine percent (29%) of the revenues. The Capital Improvement Program (CIP) is usually funded through a combination of State and federal revenue sources and constitutes seventeen percent (17%) of the revenues. The City's Local Transportation Fund (¼ cent of the State sales tax) and General Fund Transfers provide thirty-nine percent (39%) of the remaining budget, but have been decreasing over time due to the State's financial problems.



How much Money do we spend on Street Maintenance? Between 2000 and 2004, the City spent an average of \$11.5 million annually for street maintenance of which \$5.2 million was spent on pavement maintenance. In Fiscal Year 2005, the City has budgeted \$15.5 million for street maintenance of which \$7.5 million is allocated to pavement maintenance. Due to delays in project delivery, Modesto has historically expended seventy-seven percent (77%) of the funding budgeted each year. These unexpended funds are carried over into the next Fiscal Year. In the bar chart below, the amount shown for Fiscal Year 2005 is the budgeted amount while the amounts for the other Fiscal Years are actual expenditures. Due to historic delivery rates, the actual amount that will be expended by the end of Fiscal Year 2005 is likely to be less than shown in this chart.

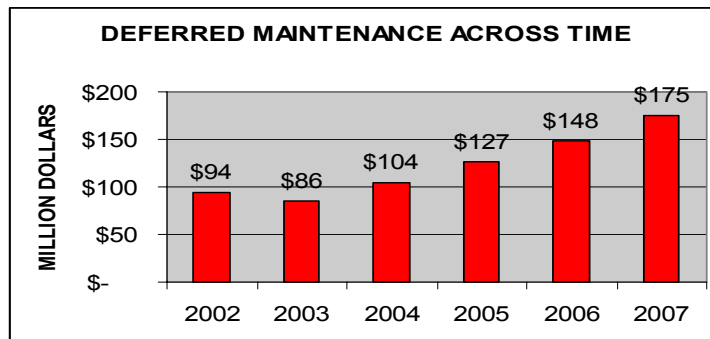


What is the Condition of Modesto's Streets? The City of Modesto has 578 centerline miles or 1252 lane miles of streets within it borders. For maintenance purposes, engineers have identified three types of roads: local streets, collectors, and arterials. Sixty-four percent (64%) of Modesto's streets are two-lane neighborhood streets. Arterial streets, like Briggsmore Avenue, handle a large volume of traffic but only make up eleven percent (11%) of the City's streets. Collector streets, like Orangeburg or Scenic Avenues, allow commuters to go from local streets to arterials.

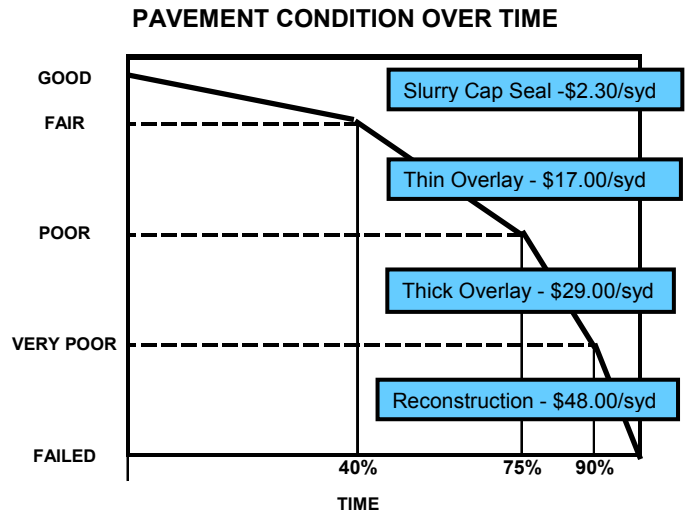
FUNCTIONAL CLASSIFICATION OF MODESTO STREETS		
FUNCTIONAL CLASS	TOTAL MILES	PERCENTAGE OF TOTAL
ARTERIALS	66	11.42%
COLLECTORS	146	25.26%
LOCAL	366	63.32%
TOTAL	578	100.00%

THE CONDITION OF MODESTO STREETS		
ROAD CONDITION	DESCRIPTION	PERCENT
GOOD CONDITION	NO CRACKS OR RIDGING	49%
FAIR CONDITION	A FEW CRACKS	23%
POOR CONDITION	SOME CRACKS AND RIDGING	21%
VERY POOR CONDITION	EXSTENSIVE CRACKS & RIDGING	7%

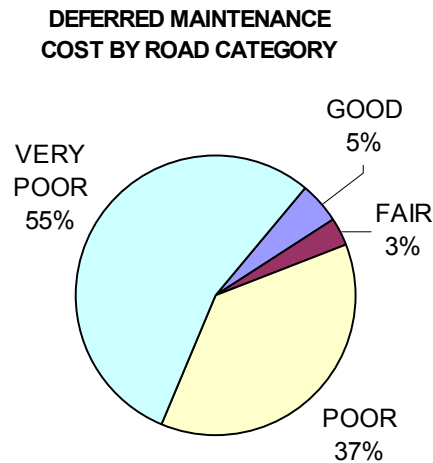
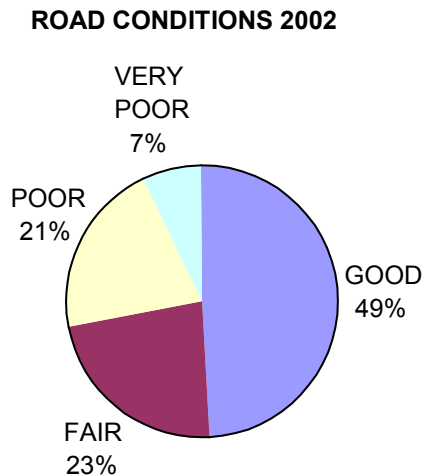
In 2002, the City completed an extensive survey of the condition of its streets. Of the 578 total miles of street, forty-nine percent (49%) were in "good condition" with no cracks or potholes. Of the remaining roads, twenty-three percent (23%) were in "fair" and twenty-eight percent (28%) were in "poor" to "very poor" condition. If the streets are not maintained, a street has a usable life of about thirty years depending on the volume of traffic it handles. During that time a road would deteriorate in a non-linear fashion similar to the curve found in the subsequent diagram. When a road deteriorates, the amount needed to repair the road to "good" condition is commonly referred to as deferred maintenance. The total deferred maintenance for Modesto was estimated at \$104 million in Fiscal Year 2004. The majority of deferred maintenance is on residential (local) streets, not the heavily traveled arterials. Even under the present investment level in pavement maintenance (roughly \$8 million each year), deferred street maintenance will increase substantially to \$175 million by 2007. The following chart shows the expected increase in the cost of deferred maintenance over time.



How much will it Cost to bring Modesto's Streets to "Good Condition?" The chart, below, suggests that there are a number of points in the life cycle of street pavement that are critical turning points. The diagram on the last page of this report illustrates what a street would look like if it fell into one of these categories. During the first twelve years after construction, the cost to maintain streets in "good" condition is relatively inexpensive (\$2.30 per square yard). Application of a slurry seal to seal all of the small cracks in the asphalt during this stage functionally extends the life of the road another three years. However, if the road is allowed to deteriorate beyond a certain point where there is extensive cracking the slurry seal is not effective, the next level of treatment is a thin overlay of asphalt (\$17.00 per square yard) to improve the street "fair" to "good" condition. As the road deteriorates further and further, cracking becomes more extensive a thick layer of asphalt (\$29.00 per square yard) is needed to restore the road from "poor" to "good" and a reconstruction requires an investment of \$48.00 per square yard. Experts agree that the most cost-effective strategy is to keep streets from deteriorating into a higher priced repair category.

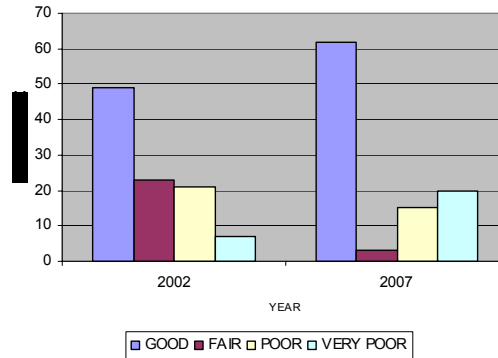


Below are two charts that demonstrate the cost of deferred maintenance. While only seven percent (7%) of the streets are in a "very poor" condition, the cost to repair these streets represents more than fifty-five percent (55%) of the deferred maintenance costs (\$57 million). On the other hand, maintaining the streets that are in "good" condition (forty-nine percent (49%) of Modesto's streets) costs only five percent (5%) of the budget. Despite the large annual maintenance expenditures, it would take an additional \$95 million to bring all of Modesto's "poor" and "very poor" streets to "good" condition.



If the City's investment in street maintenance continues at these levels, the condition of Modesto's streets will deteriorate dramatically over the next five years. Even though the proportion that will be in "good" condition is expected to increase, more local streets will drop to the "very poor" category.

ROAD CONDITION OVER TIME
PAY AS YOU GO



Transportation Policy Issues.

Five issues are impacting the City of Modesto's transportation system.

1. Pavement Management vs. the Rest of the Street System.

A number of past City policies have stressed the importance of pavement maintenance over the operation of the rest of the street system's components. This policy will eventually hurt the overall operation of the street system. All of the components of the street system must work to maximize system efficiency.

2. Funding.

The transportation-funding environment has changed at the State, local and federal level. Some of these changes could have significant impacts on the funds available for pavement management. More than forty-six percent (46%) of the money presently used to fund the City's street system comes from Local Transportation Funds and General Fund sources. The State fiscal crisis has had a significant impact on the City's General Fund. Funding for transportation has decreased by over one million dollars in Fiscal Year 2005. This was caused by a reduction of General Fund transfers to the Gas Tax Fund.

3. Increased Indirect Costs.

The State's financial crisis has required the City to re-evaluate how it charges administrative overhead to capital improvement projects. This policy change would result in a more accurate allocation of administrative costs to street maintenance activities, but would reduce the amount of funding available for actual construction.

4. Cash Flow.

Most federal and State grants are awarded on a cost-reimbursement basis. After the expenses are paid and Caltrans is invoiced, it may take two to three weeks to receive federal reimbursement. This delay could cause a funding gap within the Gas Tax over time.

5. The Absence of a Comprehensive Funding Strategy.

Although the City has recently established a committee to explore alternative revenue sources, the same approach has not been applied to the transportation-funding problem. Given the regional nature of most funding alternatives, the development of a comprehensive may require close coordination with other governments and private associations.

Although of the issues identified above are daunting, the lack of a definite financial strategy has proven to be the greatest challenge for the City of Modesto.

Alternative Transportation Funding Strategies.

A number of funding strategies could be used to fund a comprehensive pavement maintenance program. These strategies are not mutually exclusive.

1. **“Pay-as-you-go”:**

The City presently funds its pavement maintenance and street maintenance on a “pay-as-you-go” basis. Each year, as part of the budgeting process, funds are appropriated to pavement maintenance. No specific amount is identified by any policy and the amount actually budgeted is determined by external factors like the total amount of funds available or by specific Council priorities. Normally, between six and eight million dollars are appropriated each year through the capital improvement program and operations budgeting processes. Street maintenance is funded through a combination of Gas Tax, Local Transportation Funds, Federal grant, and City General Fund appropriations.

ADVANTAGE: With specific policy direction, this approach can be used to appropriate a specific level of funding to high priority projects.

DISADVANTAGE: This may result in an unstable source of funding for on-going projects. Unless pavement maintenance is consistently identified a high priority program, the City’s investment in long-term projects could be lost.

2. **Transportation sales tax:**

Jurisdictions in California can submit a sales tax measure to the voters to fund transportation projects. The most common measure proposed has been a one-half cent sales tax to fund both transportation capital improvements and maintenance. This measure requires a super majority of the electorate to pass (2/3).

A one-half cent sales tax in Stanislaus County would raise about \$33 million annually. It is common for twenty-five percent (25%) of this amount to be returned to the jurisdictions for road maintenance. Since this distribution is usually based upon population, Modesto could expect to receive about \$3.5 million annually.

ADVANTAGE: A sales tax would provide a stable funding source for pavement maintenance.

DISADVANTAGE: Passage of a sales tax requires a clear consensus of both the private and public sectors. It also requires a clear distribution agreement between the cities and the County. Such a consensus takes strong leadership and time to develop. Often the division between maintenance and new construction programs may create programming problems. A sales tax is often passed with a sunset provision and may not provide a perpetual source of maintenance funds.

3. **Long-term debt bonding:**

Long-term debt financing can provide a funding alternative to pavement maintenance. Voters can approve a 30-year bond that could be used for a one-time improvement of the roads. The debt would be paid back over a thirty-year period at about \$5 million annually. A bond in these circumstances could be repaid by a sales tax measure.

In this financing scenario, all of the streets in Modesto would be repaired to “good” condition. And, although the repair requirements would be comparatively low during the first ten years of the period, the annual repair budget would increase over time as the streets age.

ADVANTAGE: The City would save a substantial amount of money by repairing the roads now before they deteriorated further. That savings alone could pay the debt service over a ten-year period.

DISADVANTAGE: The program would require a super-majority (2/3) to pass in Modesto. Although the program would provide a one-time fix to the problem, additional funds would still have to be identified to maintain streets at their highest benefit level.

4. **Landscape and Lighting District:**

The maintenance of street trees and street lighting absorbs more than thirty percent (30%) of the entire street system maintenance budget. The City may establish a landscaping and lighting district for the entire city. In this situation, commercial and resident lots would be assessed a fee collected through the property taxes. Based on the assumption that all 59,770 parcels within the City limits would participate in the District, the City could generate roughly \$3 million dollars through the imposition of a \$50 annual parcel fee. This would be enough to fund the street tree program and allow the funds replaced to be appropriated to pavement maintenance.

ADVANTAGE: This program is eligible for street tree related maintenance costs the program would be allocated to a highly visible program and popular program.

DISADVANTAGE: Establishing the district would require an approved Proposition 218 voting procedure. Citizen acceptance of this additional fee may be difficult to realize at this time.

STAGES OF ROAD WEAR AND RELATED REPAIR COSTS



GOOD
SLURRY CAP SEAL
\$2.30 SQ YD



FAIR
THIN OVERLAY
\$17.00 SQ YD



POOR
THICK OVERLAY
\$29.00 SQ YD



VERY POOR
TOTAL RECONSTRUCTION
\$48.00 SQ YD

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