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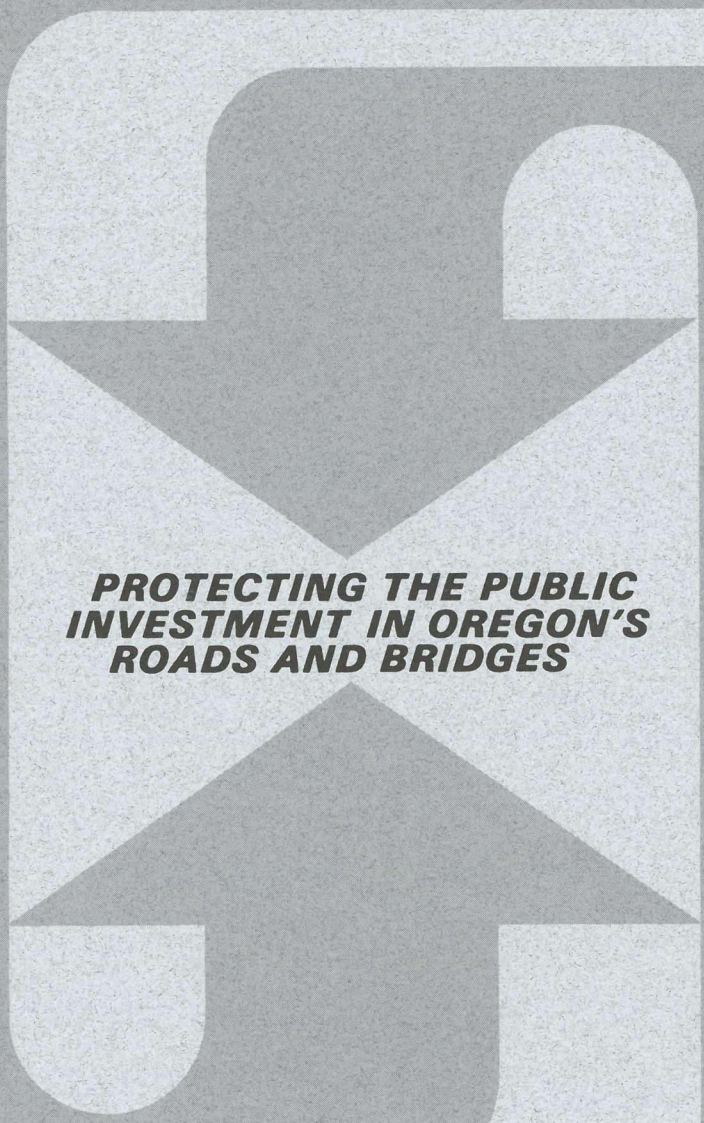
Making the Right Turn :
PROGRESS REPORT



PROTECTING THE PUBLIC INVESTMENT IN OREGON'S ROADS AND BRIDGES

An update of a joint study by the League of Oregon Cities, Association of Oregon Counties, and the Oregon Department of Transportation

Prepared by
Barney & Worth
FEBRUARY 1991

PROGRESS REPORT II:
MAKING THE RIGHT TURN

February 13, 1991

Prepared by
Public Financial Management, Inc.

Executive Summary

MAKING THE RIGHT TURN IN LOW GEAR

Oregon is slowly turning the corner toward an improved statewide highway system. But the momentum gained in the past four years is not yet adequate to assure long-term protection of the public's investment in Oregon's roads and bridges.

That's the conclusion from a new look at road revenues and spending by State and local governments throughout Oregon.

There is progress to report with several priority programs:

1. Economic development and tourism goals of the Goldschmidt Administration have accelerated road access and capacity improvements in nearly every region of the state through the Oregon Access Highways Program.

2. Traffic congestion on some heavily travelled streets and roads in growing cities and urban counties is being addressed.

3. Work has begun at all levels of government to reduce road maintenance backlogs and head off the need for costlier improvements.

But while some headway has been achieved, Oregon is not holding the line on long-term objectives for improving roads and bridges statewide.

These objectives were set in a 1986 comprehensive roads study sponsored by the Oregon Department of Transportation (ODOT), the Association of Oregon Counties and the League of Oregon Cities.

WHY ARE WE STRUGGLING?

Reasons for limited gains on long-term objectives include:

1. New demands from unanticipated growth in Oregon have added significantly to the unmet need for road improvements.

The 1986 study was completed in a post-recession period of guarded optimism about growth. But Oregon's economy saw high annual growth of 8-9 percent a year in the late 1980's. Its population rose nearly 2 percent a year between 1987 and 1990.

2. Inflation eats away at available roads revenues, accounting now for one cent of the state gasoline tax per gallon per year.

The inflation rate was up to 6.3 percent in 1990 according to the Oregon Economic Development Department, and is expected to be higher this year.

3. Available road revenues are inadequate to cover unmet needs for improvements.

Steady increases of 2 cents annually in the state gasoline tax, authorized by the State Legislature over the past four years, have greatly helped to stimulate selected road programs. Added to this was a commensurate increase in the weight/mile tax, and a $5 increase in the annual state vehicle registration fee.

But as this update of the 1986 study shows, overall progress is running below targets for levels of improvement set in that study. There's a growing urgency for capacity expansion on urban arterials, and for structural improvements on roads in rural areas.

For cities and counties, the catalogue of unmet road maintenance requirements still is thick, along with unaddressed demands for repair work to prevent major road reconstruction.

THE CHALLENGE AHEAD

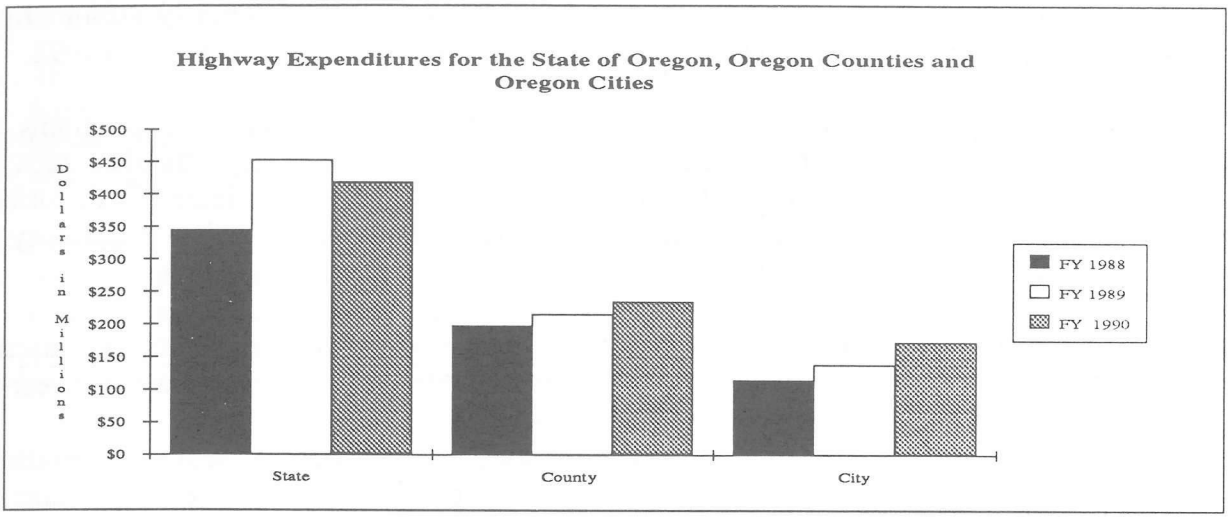
Now Oregon must find ways to increase the momentum of the roads improvement effort, building on the progress already achieved.

This 1986 study update indicates that a more aggressive funding initiative will be required by state and local governments to achieve the primary objective of protecting the public's road investment.

Another comprehensive look at the basic needs for roads and bridges in Oregon is also warranted to ensure that long-term objectives are well founded.

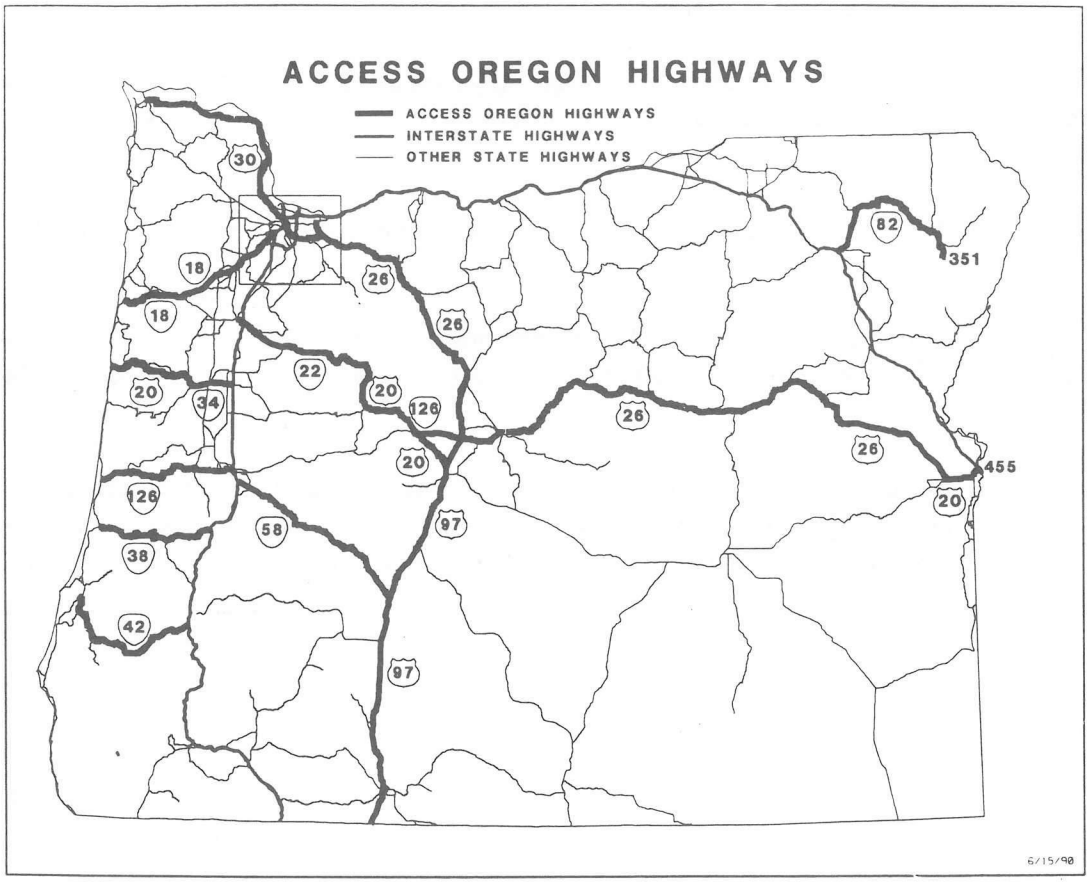
PROGRAM HAS MADE GAINS

Spending on roads and bridges by the State and local government has jumped ahead. The State reports an average annual increase of 12 percent since fiscal 1988, the counties 9 percent and cities 22 percent, as seen in the figure on the next page.



Within the two years ending this June, about 190 miles of State highway lanes will have been added or widened, and some 900 miles of pavement improved.

Under the Access Oregon Highways program, ODOT has helped create jobs and achieve other economic development goals of the State by improving access to new industrial properties and tourist destinations. These improvements have been made statewide on such State Highways as 97 in central Oregon, 34 in the mid-Willamette valley and 26 across the state.



Spending on the Access Oregon Highways program is expected to total nearly $250 million, accounting for more than 10 percent of State outlays between fiscal years 1989 and 1993.

Cities and counties experiencing growth have responded with expanded programs to maintain more heavily used arterials and collectors in their areas. Communities such as Beaverton and Eugene, as well as Deschutes County, report dramatic increases in surface repairs to combat wear and tear on roads. Multnomah County also is giving top priority in roads spending to basic maintenance.

Local governments in more rural areas, such as the cities of Joseph and Reedsport, indicate they have attacked maintenance backlogs with considerable success over the past four years.

New road construction programs are focuses of fast growing cities. Increasingly, revenues required for funding these new road construction programs are derived from special assessments or charges imposed at the local level.

YET THE UNMET NEED GROWS

While priority setting has produced gains, the State and local governments remain challenged by backlogs of road work and a growing catalogue of new requirements.

For example, Beaverton has identified about $20 million in transportation projects that currently have no funding source, and is looking to raise road dollars locally as well as from outside sources. Development of three-lane streets to help expand current street capacity is a top priority in that fast-growing city.

The unmet funding need in Eugene is now estimated at $76 million. Insufficient funds have created a backlog of reconstruction programs with only a few major projects getting attention.

Multnomah County estimates capital needs for bridges exceeds $130 million over the next 20 years.

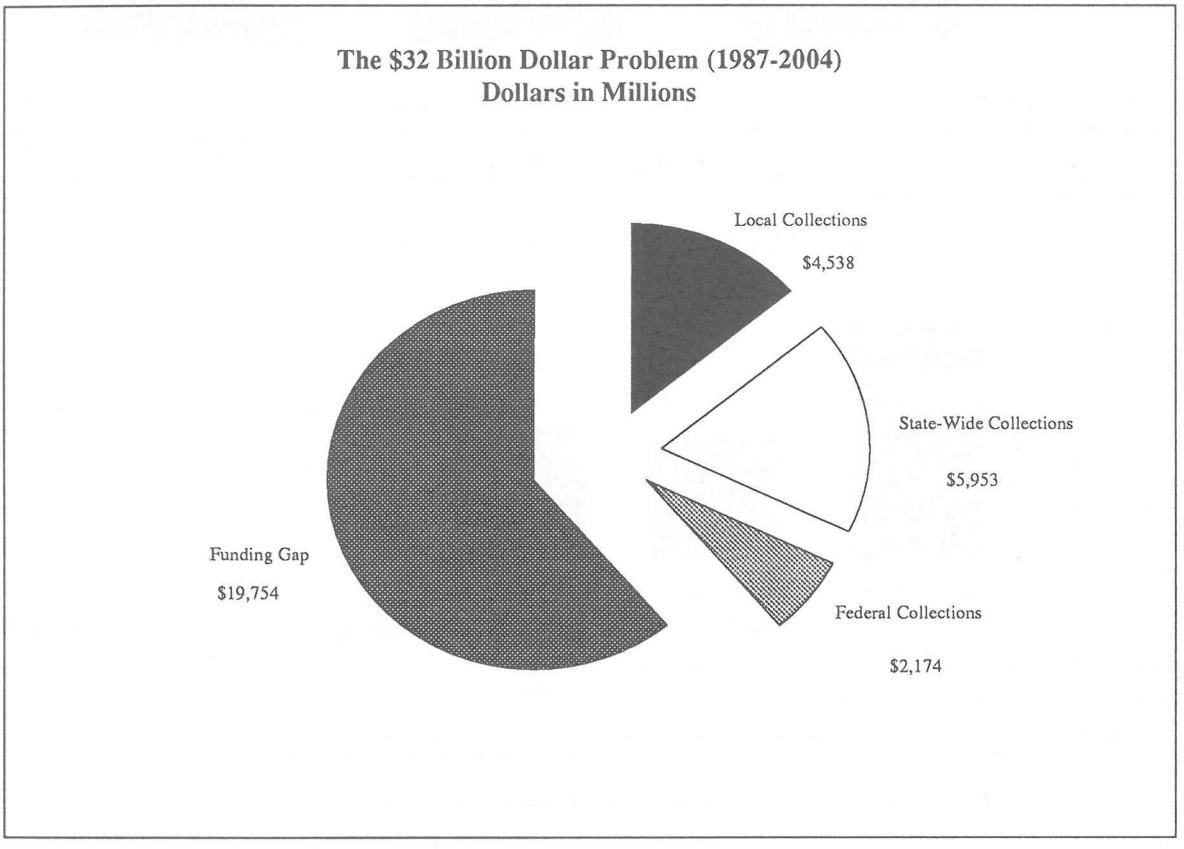
Generally, progress of local road preservation work to prevent serious pavement deterioration has been slow, creating a growing backlog in this category and increasing repair costs.

Again, the State has been unable to meet a growing demand for improvements on State urban arterials in major urban areas. ODOT also identifies a growing urgency to upgrade the structural capacity of roads and bridges in eastern Oregon and other rural areas.

MOVING AHEAD, FALLING BEHIND

The 1986 study showed that over the next two decades Oregon would be looking for $32 billion to restore and maintain Oregon's deteriorating roads infrastructure. With just over $11 billion of total revenue projected for that period, a highway funding gap of more than $21 billion was identified.

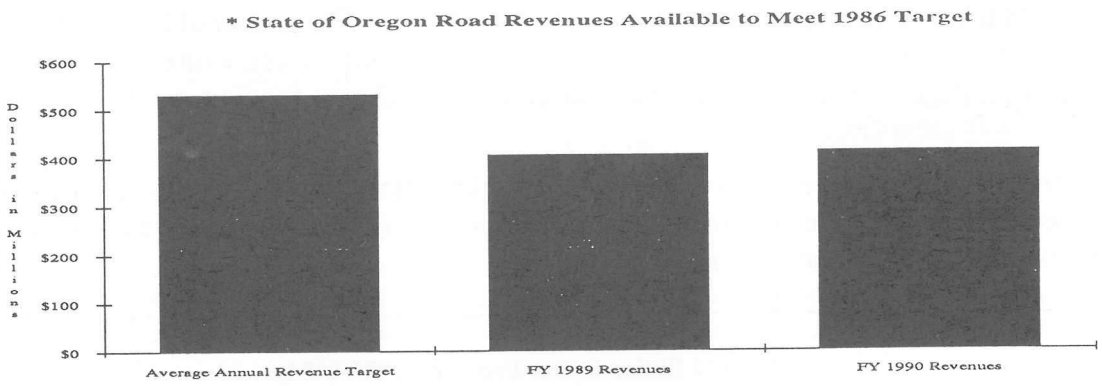
Although some progress has been made in the past four years, the disparity between projected need and available funding appears from this new survey to have narrowed slightly to just under $20 billion (see figure below).



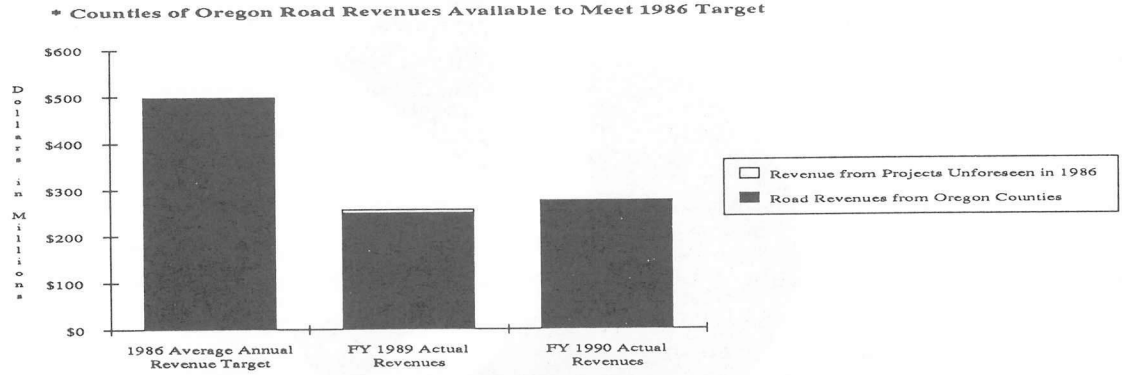
There is danger that the disparity could widen further, with the level of available road revenues in recent years running well below targets set in the 1986 study. Minimum revenue targets were identified to cover priority highway improvements for the first six years (1987-1992) of the long-term program.

Figures on the next page show actual results during the last two years in achieving those target levels at the State, county and city levels.

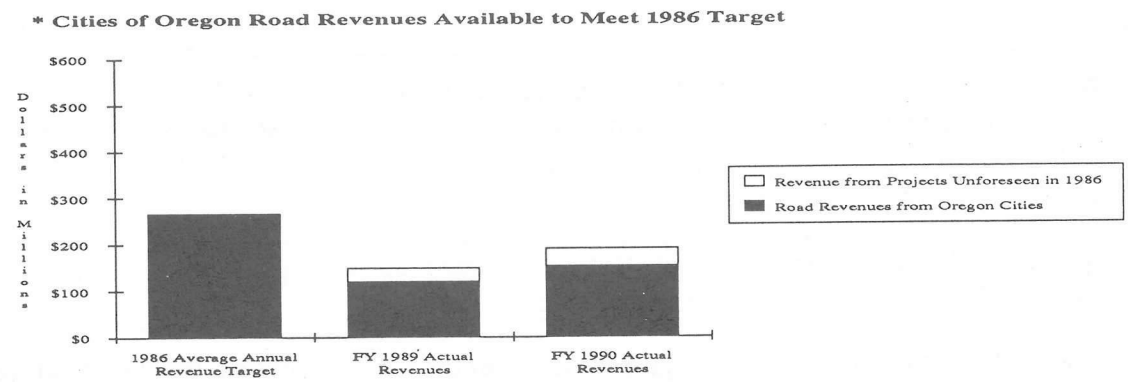
Note: In the graphs on the next page pertaining to cities and counties, revenue from projects unforeseen in 1986 includes revenue derived from special assessments and proceeds from the sale of bonds and notes. Although the 1986 Annual Revenue Target accounts for proceeds from the sale of bonds and notes, it does not take into account revenue derived from special assessments, i.e., system development charges, as the revenue stream was not contemplated in the 1986 study.



* Information gathered for this update indicates that the 1986 targets are understated. The 1987-92 target of $530 million (shown above) was based on 80 percent, rather than 100 percent, of optimum improvements. The average annual targets for the *entire* period from 1987-2004 in the 1986 report were $710 million for the State.



* Information gathered for this update indicates that the 1986 targets are understated. The 1987-92 target of $498 million (shown above) was based on 80 percent, rather than 100 percent, of optimum improvements. The average annual targets for the entire period from 1987-2004 in the 1986 report were $766 million for the counties of Oregon.



* Information gathered for this update indicates that the 1986 targets are understated. The 1987-92 target of $266 million (shown above) was based on 80 percent, rather than 100 percent, of optimum improvements. The average annual targets for the entire period from 1987-2004 in the 1986 report were $325 million for the cities of Oregon.

PROGRESS REPORT II: MAKING THE RIGHT TURN

Introduction

In 1986, the Oregon Department of Transportation, the Association of Oregon Counties, and the League of Oregon Cities jointly sponsored a comprehensive assessment of Oregon's roads and bridges and a study of the ability of the State, the counties and the cities to meet the financial requirements to maintain and improve Oregon's roads and bridges through the year 2004. In 1987, the Oregon State Legislature made a major commitment for improved funding for the State's transportation infrastructure.

The Legislature, addressing the estimated $32 billion requirement over the next 2 decades, enacted HB 2112 in 1987 and in so doing declared the following purpose:

(a) "to enhance the revenue base for the state, counties, and the cities for continued development and maintenance for the road and bridge system; and"

(b) "to enhance the revitalization of this state's economy by implementing a long-term plan for the state, counties and cities that establishes priorities for road and bridge improvements."

In 1988, the Oregon Department of Transportation, the Association of Oregon Counties, and the League of Oregon Cities jointly sponsored the first progress report on the efforts of the State of Oregon, its counties and cities to implement the goals of the 1987 Legislative Assembly. The following study marks the second such progress report.

The 1986 Study

In 1986, the first comprehensive assessment of Oregon's roads and bridges was completed, setting the base for a long-term plan to renew a rapidly deteriorating public investment. The complete range of the statewide road system was surveyed, from freeways in Oregon's metropolitan areas to local roads in the state's rural counties.

Road work in three main categories was surveyed:

Construction and expansion (C& E): right-of-way acquisition and construction engineering, new construction, relocation and reconstruction, major and minor widening, new bridge and bridge replacement work, safety and traffic improvements, and related roadside improvements.

Repair and preservation (R & P): restoration and rehabilitation of roadways, resurfacing, and major and minor bridge rehabilitation.

Operations and maintenance (O & M): includes general condition maintenance, safety and traffic maintenance, snow and ice removal, and extraordinary maintenance.

More than 5,000 field samples of roadways in all 36 Oregon counties and over 225 cities were inventoried by independent consultants. Eighty percent of these samples were taken expressly during the study, utilizing roadway and geometric and condition data from the nationally accepted Highway Performance Monitoring System (HPMS).

The HPMS computer program assessed the needs of each road sample and measured performance and condition for the 20-year period ending in 2005. In the computer model, traffic grows, pavements deteriorate, and deficiencies are identified. Road improvements are selected and costs estimated year-by-year over the 20-year period.

A 90 percent confidence level was achieved in the data assembled for the assessment.

Survey standards

Key factors were established to reflect realistically Oregon conditions. They include minimum tolerable service levels, design standards and unit costs. Design standards used were, in most cases, at the lower end of the range recommended by the American Association of State Highway and Transportation Officials (AASHTO).

Conditions of roads that were examined included access control, number and width of lanes, median type and width, shoulder type and width, surface type and condition, drainage adequacy, volume/capacity ratio, and operating speed.

Data was structured to assure fair comparisons, and allow the development of models and evaluation measures.

These models and evaluation tools continue to serve the State, county and city governments in Oregon as a uniform and equitable basis for determining road conditions and requirements for improvements. They also serve the State Legislature and transportation system users as a means to judge cost effectiveness and increase public accountability in the use of road financing resources.

Financial analysis

In the study's financial analysis, historical funding levels among jurisdictions and revenue flows of individual sources within jurisdictions were obtained from trends at the federal, state and local level over the preceding 5-10 years.

Projected revenue flows by jurisdiction and source were estimated for the two decades up to 2004, using Oregon Executive Department forecasts, as well as independent information from the study team's experts.

Study results

The 1986 study revealed that one-third of Oregon's roads and bridges--nearly 40 percent of roads in urban areas--were found to be in sub-standard condition, Total road system requirements in Oregon through the year 2004 would amount to $32 billion. Of these, $6 billion were current, representing a backlog of roads and bridges in sub-standard condition. Other results of the 1986 study included:

Basic maintenance deferred: As much as 50 percent of basic maintenance had been deferred. This work is critical to enhancing the life cycle of roads and bridges and avoiding costlier repair and reconstruction in the future.

Pavement condition deteriorating: Pavement condition of Oregon roads was found to be generally fair. But for long term, the study concluded that more than 75 percent of road miles statewide would be in poor condition by 2004, given levels of work and funding at the time.

Urban roads congested: Nearly 30 percent of roads in urbanized areas of the state would be in congested condition by 2004 without an expanded effort.

Road revenues fall short: Estimated revenue from current sources at 1986 levels to pay for improvements to Oregon roads and bridges would fall short by $21 billion of meeting identified system targets (see Table 1).

Table 1
THE ROADS FUNDING GAP (1987-2004)
SUMMARY OF 1986 REPORT FINDINGS
(millions of dollars)

	State	County	City	Total
System Targets	$12,772	$13,791	$5,856	$32,419
Current Revenue Sources	$6,385	$3,234	$1,465	$11,084
Shortfall	$6,387	$10,557	$4,391	$21,335

The targets shown in the chart were set lower than would have been projected through annualizing the 18 year system target. These targets were set lower to present a realistic improvement program for the short term.

The 1987 Legislature's Response

The 1986 study was reviewed carefully in both Houses of the Legislature during its 1987 general session, and a commitment to begin a major program of improvements was made.

The first increment authorized by the session was an increase of the statewide gasoline tax by two cents a gallon for each of three consecutive years beginning in 1988, plus increased weight-distance equivalent taxes in 1990.

This increase was estimated to raise an additional $100 million in road revenues annually beginning in fiscal 1991, with 50 percent going to meet State-owned road requirements on the first four cents, 30 percent to county roads and 20 percent to city roads and streets. On the last two-cent increase, the distribution was set at 68/20/12 percent.

The 1988 Progress Report

In 1988, an update of the 1986 study was sponsored. A survey of all of the counties, all of the cities and ODOT was conducted. The State of Oregon provided estimated data for the 1987-89 biennium; counties and cities provided actual data for FY 1988. Estimates for the upcoming fiscal year were also provided by the respondents.

The revenue and spending data were compared to the requirements established by the 1986 study to determine the level of progress that had been made to date. The Progress Report found that the State and county and city governments had increased spending on transportation infrastructure. However, the Progress Report also found that despite these increases in spending, all three levels of government remained well below the levels identified in the 1986 study needed to keep the roads system reasonably uncongested, safe and adequately maintained until 2004.

In summary, the 1988 Progress Report found that $17.65 billion of the original $32 billion in requirements remained unfunded. This estimate implied funding increases had made headway by reducing the 1986 report's $21.3 billion shortfall.

The 1989 Legislature's Response

The 1989 Legislature responded to the 1988 report in a more limited fashion than the 1987 Legislature. Four main items emerged from the session. The most significant of the responses was HB 3447 that added an additional 2 cents per gallon tax on gasoline, effective January 1, 1991. This followed the earlier 2 cent per year additions in 1988, 1989 and 1990 developed in the 1987 session. As with the original fuel taxes, each 2 cent increase results in approximately $40 million in annual revenue. HB 3447 also increased the annual vehicle registration fee January 1, 1990 by $5, resulting in approximately $21 million additional annual revenue. Finally, HB 3447 increased the weight/mile tax rate for trucks by 12.6 percent effective January 1, 1992. The rate, however, may be subject to alteration when the State completes its Cost Responsibility Study. The total revenue generation from this bill is approximately $61 million per year.

In addition to these two statewide funding mechanisms, the 1989 session passed HB 3446 which allows voter authorization of local option vehicle registration fees. While a companion legislation was submitted to the voters which would have allowed these local fees

to be used on transit failed, the authority still remains for localities to increase registration fees for roads and bridges.

Lastly, while revenue neutral, HB 2737 revised the weight/mile taxation system by incorporating recommendations of the Motor Carrier Taxation Task Force.

1990 Study Methodology

The organization of this study is similar to the original 1986 study and the 1988 update. The policy committee which included representatives of the Oregon Department of Transportation, the Association of Oregon Counties, and the League of Oregon Cities and which guided the two earlier efforts, was still in place for this update, and was chaired by Tom Walsh of Portland.

The consulting team for this report was headed by Don Barney of Barney & Worth, while the main body of this report was completed by Public Financial Management, Inc. which analyzed and processed the data and produced this report. During the fall of 1990, the consultant team met with the policy and technical committees to set the direction for analysis.

A major portion of the report is based on survey information conducted on behalf of the State, the Association of Oregon Counties and the League of Oregon Cities. The data was specifically collected by the Oregon Department of Transportation and by the League of Oregon Cities. The survey format used in this update was the same as the format used in the prior two surveys. In the surveys, cities and counties reported receipts and disbursements for road and street purposes for the FY 1989 and FY 1990 by means of responding to questionnaires. The layouts of the questionnaires to which the cities and counties reported are included in Appendix III. The State reported estimated revenues and expenditures for FYs ending 1989 and 1990.

In addition to the general survey information, the consultant team contacted several communities throughout the state to make a more in depth analysis of road expenditures in individual communities.

The following section includes summary tables and graphs of the road survey information collected from Oregon cities, counties, and the Oregon Department of Transportation. Finally, an analysis of the findings follows in the section entitled "Analysis: Road Revenues and Expenditures."

Fifty-one out of fifty-six cities of populations over 5,000 responded to the FY 1989 road and street questionnaire, while fifty responded to the FY 1990 questionnaire. All thirty-six counties responded to the FY 1989 road and street questionnaire, while thirty-five responded to the FY 1990 questionnaire.

If a city (excluding cities under 5,000) or county failed to respond to the 1990 questionnaire, yet did respond to the 1989 questionnaire, the FY 1989 data was substituted for the FY 1990 data.

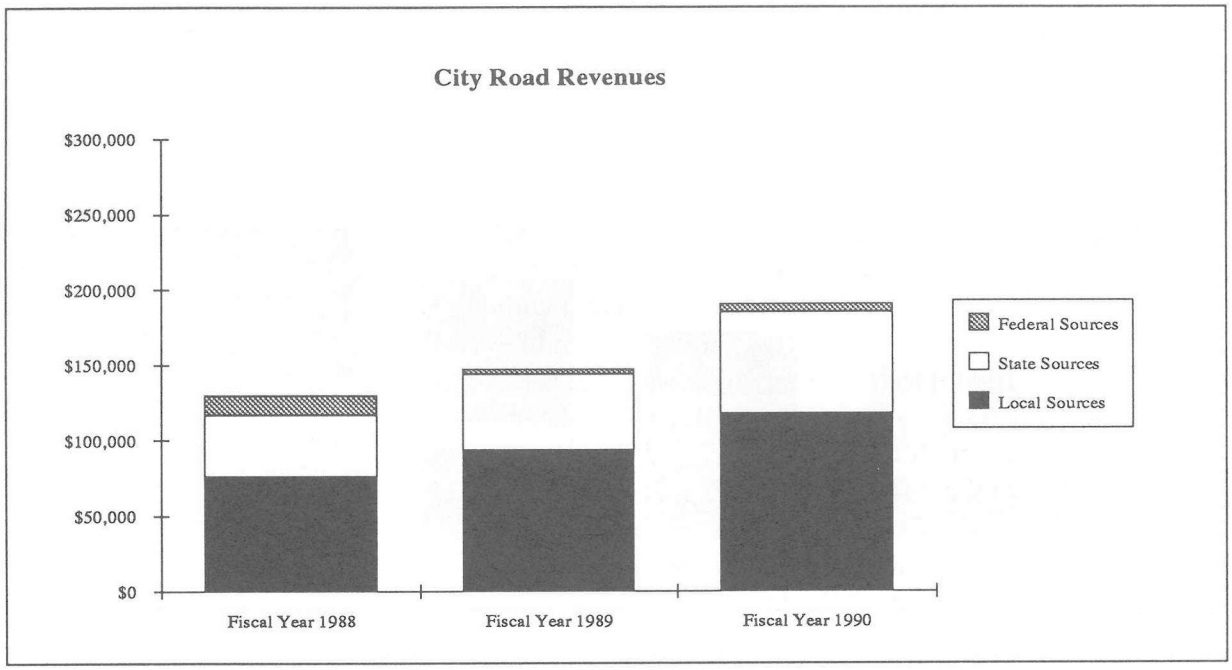
It should be noted that the city data includes a category entitled "cities under 5,000 population." The cities with a population under 5,000 responded to a slightly different road and street questionnaire. Reporting of these small cities for FY 1989 and FY 1990 amounted to just over 60 percent of the total population for the 200 such cities in Oregon. Reporting was assumed to be the same revenue and expenditure mix for the remaining 40 percent of the small cities which did not report. Therefore the actual "60 percent" numbers were increased to reflect a 100 percent reporting.

An additional fact should be noted regarding county data associated with the General Fund category. In the 1989 questionnaire, *some* counties included in their reporting of revenues received by the General Fund, revenue associated with Highway and Traffic Police activities, while other counties excluded revenues associated with Highway and Traffic Police activities from the General Fund category. A similar pattern of events occurred when counties completed the 1990 questionnaire which was changed slightly. For both the FY 1989 and the FY 1990 General Fund numbers, efforts have been made to subtract out the Highway and Traffic Police factor. Any inconsistencies in these numbers for FY 1989 and FY 1990 may be attributable to the different reporting methods employed by the various counties.

It should be mentioned that like the General Fund category, county reporting for the Administration and General Engineering category varied, particularly from FY 1988 to FY 1989. Some counties contacted, stated that where costs could not be allocated to other categories, these costs were placed in the Administration and General Engineering category. Finally, it was found that some services provided were incorrectly placed in the General Engineering category altogether. Any inconsistencies in these numbers, therefore, may be attributable to the different county reporting methods.

FINDINGS
($ in 000's)
CITIES

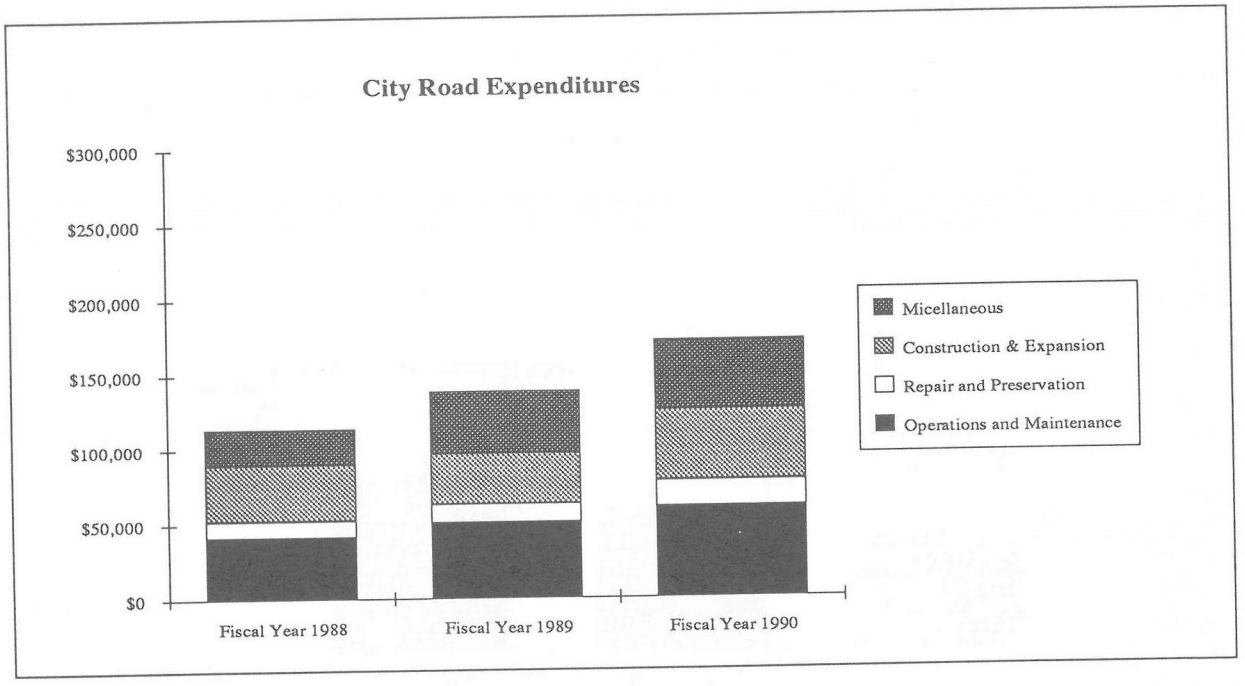
City Road Revenues



	FY 1988	FY 1989	FY 1990
RECEIPTS FROM LOCAL SOURCES[1,2]			
Non-Road[3,4]	$56,000	$31,000	$41,000
Special Assessments & Proceeds from the Sale of Bonds & Notes	$2,000	$30,000	$39,000
General Fund	N/A	$11,000	$11,000
Road User Taxes, Traffic Impact & Development Fees[5]	$2,000	$4,000	$4,000
Receipts from Other Local Governments	$16,000	$17,000	$22,000
SUB TOTAL	$76,000	$93,000	$117,000
Receipts from State Highway Sources & Others[6]	$41,000	$51,000	$68,000
Receipts from Federal Sources	$13,000	$4,000	$5,000
GRAND TOTAL	$130,000	$148,000	$190,000

FINDINGS (continued)
($ in 000's)
CITIES

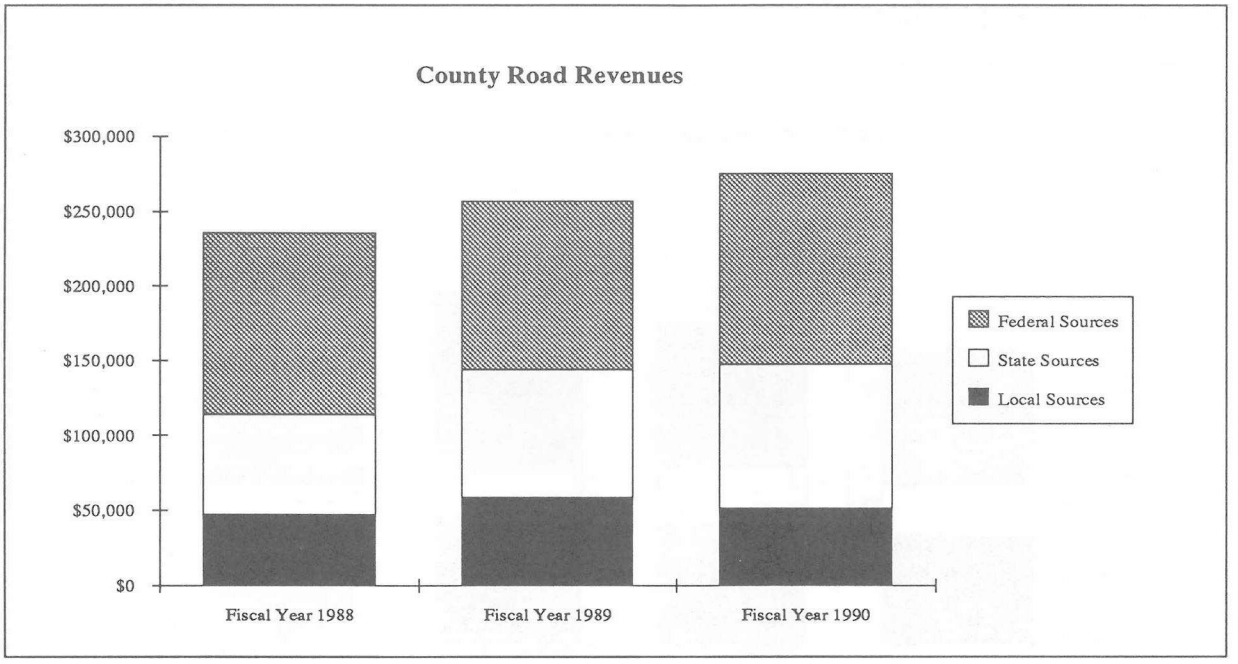
City Road Expenditures



	FY 1988	FY 1989	FY 1990
LOCAL DISBURSEMENTS[1,2]			
Operations & Maintenance	$41,000	$51,000	$60,000
Repair & Preservation	$11,000	$12,000	$17,000
Construction & Expansion	$38,000	$34,000	$48,000
General Engineeering & Administration[8]	$10,000	$11,000	$13,000
Debt Service on Local Obligations	$13,000	$28,000	$30,000
Others	$1,000	$2,000	$3,000
GRAND TOTAL	$114,000	$138,000	$171,000

FINDINGS (continued)
($ in 000's)
COUNTIES

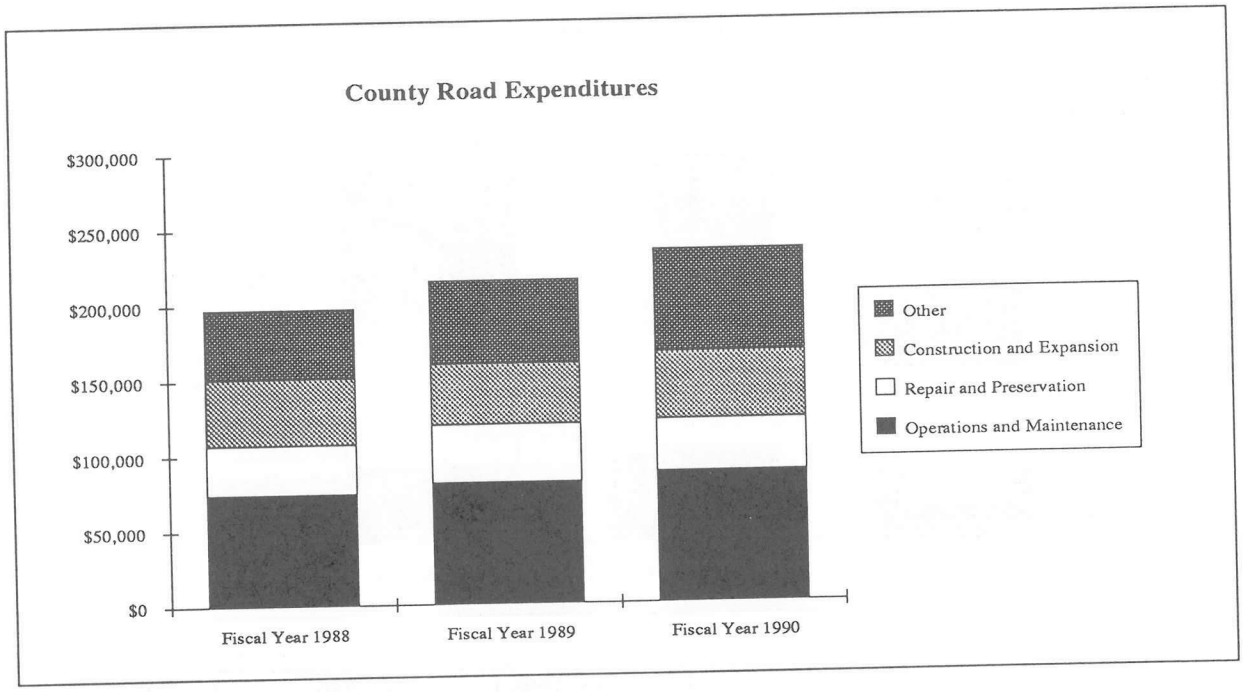
County Road Revenues



RECEIPTS FROM LOCAL SOURCES[1,2]	FY 1988	FY 1989	FY 1990
Non-Road[3,4]	$29,000	$37,000	$33,000
Special Assessments	$2,000	$8,000	$5,000
General Fund	N/A	$3,000	$2,000
Road User Taxes, Traffic Impact & System Development Charges[5]	$9,000	$9,000	$10,000
Receipts from Other Local Governments	$7,000	$1,000	$1,000
SUB TOTAL	$47,000	$58,000	$51,000
Receipts from State Highway Sources & Others[7]	$67,000	$85,000	$96,000
Receipts from Federal Sources	$122,000	$113,000	$128,000
GRAND TOTAL	$236,000	$256,000	$275,000

FINDINGS (continued)
($ in 000's)
COUNTIES

County Road Expenditures



LOCAL DISBURSEMENTS[1,2]	FY 1988	FY 1989	FY 1990
Operations & Maintenance	$74,000	$81,000	$86,000
Repair & Preservation	$33,000	$39,000	$35,000
Construction & Expansion	$44,000	$41,000	$45,000
General Engineering & Administration[8]	$14,000	$24,000	$27,000
Debt Service on Local Obligations	$5,000	$8,000	$8,000
Payments to Other Gov'ts & Others	$27,000	$23,000	$33,000
GRAND TOTAL	$197,000	$216,000	$234,000

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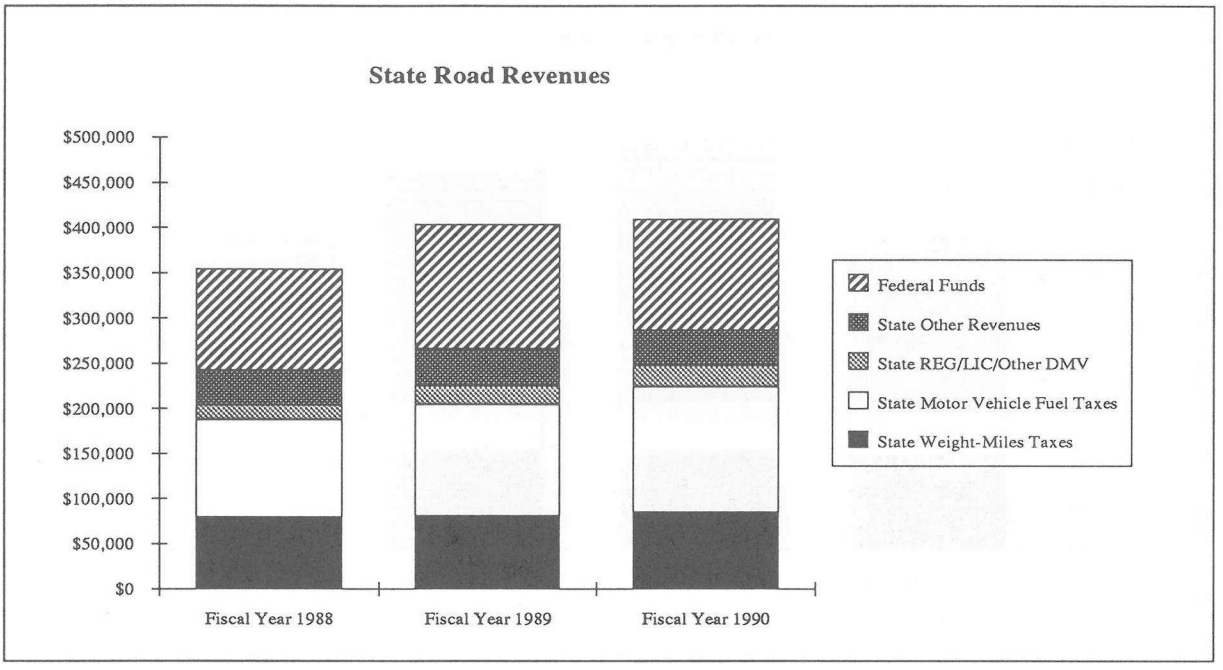
FINDINGS (continued)
($ in 000's)
STATE

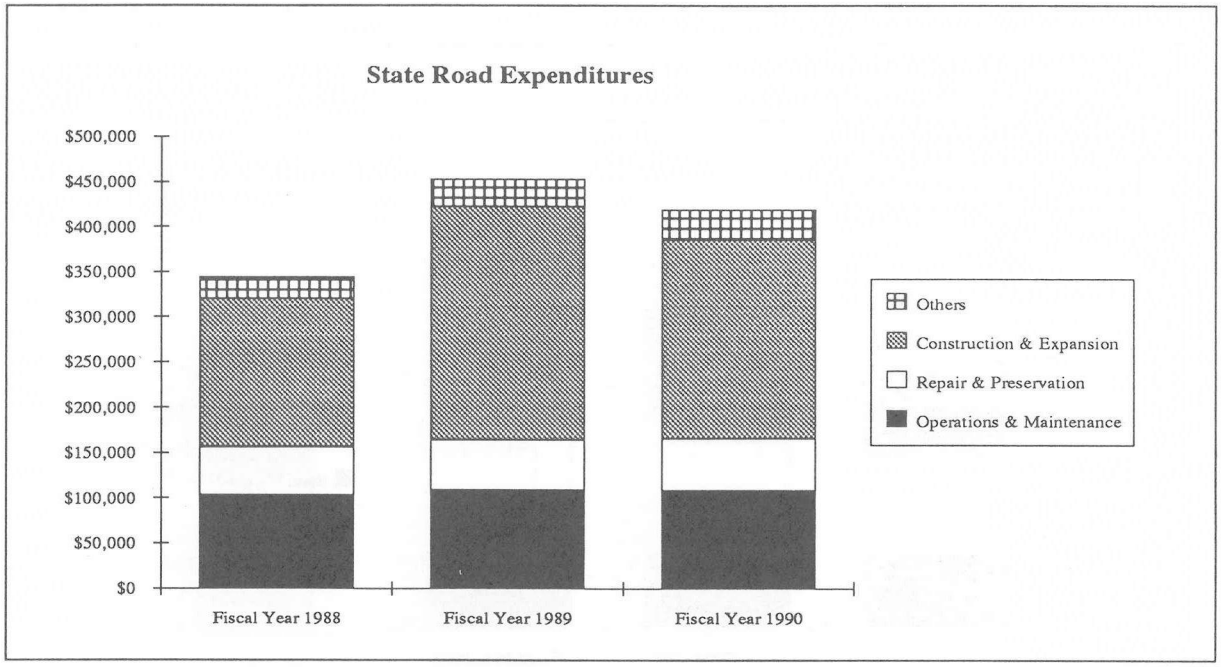
State Road Revenues (1,2,9)



	FY 1988	FY 1989	FY 1990
Revenues (Highway Share)			
State Weight-Miles Taxes	$79,000	$80,000	$85,000
State Motor Vehicle Fuel Taxes	$108,000	$125,000	$140,000
State REG/LIC/Other DMV	$16,000	$21,000	$23,000
State Other Revenues	$39,000	$41,000	$38,000
Federal Funds	$112,000	$137,000	$123,000
TOTAL REVENUES	$354,000	$404,000	$409,000

FINDINGS (continued)
($ in 000's)
STATE

State Road Expenditures (1,2,9)



State Highway Expenditures

	FY 1988	FY 1989	FY 1990
Construction & Expansion	$164,000	$258,000	$220,000
(i) Development	$39,000	$52,000	$48,000
(ii)Construction	$126,000	$206,000	$172,000
Repair & Preservation	$53,000	$55,000	$57,000
Operations & Maintenance	$103,000	$109,000	$109,000
Administration	$8,000	$9,000	$7,000
Debt Service	$8,000	$16,000	$16,000
Reimbursable Expenditures	$5,000	$6,000	$6,000
Capital Construction (10)	$4,000	$100	$4,000
TOTAL EXPENDITURES	$345,000	$453,100	$419,000

FOOTNOTES FOR FINDINGS

As many identical and detailed footnotes may apply to city, county, and state findings, they are listed once, below:

(1) All numbers contained in the tables are rounded to the nearest $100,000. The numbers used in the graphs and in the analysis section which follows are actuals and therefore do not match exactly those contained in the data parts of the Findings section.

(2) The 1988 data are not findings of this update, but are included for comparative purposes.

(3) Receipts from the General Fund and the Special Assessments categories are combined in the Non-Road category for FY 1988, but are separated into the General Fund and the Special Assessments categories for FY 1989-90.

(4) Non-Road revenues includes Levies within a 6 percent limitation, serial levies, one-year special levies, local or other special benefit area assessments, interest income, traffic fines, parking meters and fines, land sales and rentals, permits, hotel/motel tax, franchise fees, and other.

(5) Road User Taxes are made up predominantly of traffic impact or system development charges.

(6) City "Other" receipts from State Highway Sources includes funds derived from revenue sources including private contributions, grants, State revenue sharing programs, special city allotment programs, State landscaping, Community Development Block Grant Program, and Oregon Traffic Safety Commission.

(7) County "Other" receipts from State Highway Sources includes funds derived from revenue sources including private contributions, grants, State revenue sharing programs, special city allotment programs, State landscaping, Community Development Block Grant Program, and Oregon Traffic Safety Commission.

(8) The primary expenditure in the General Engineering and Administration category is revenue spent on planning and development, preliminary to beginning design engineering work.

(9) State Expenditures and Revenues do not balance due to cash carryovers and beginning fund balances.

(10) The drop in the State Capital Construction category from FY 88 to FY 89 may be attributable to the normal pattern of spending during the first year of the FY 87-89 biennium.

Analysis: Road Revenues and Expenditures

Revenues

Cities

The 1986 report projected that in order for priority road projects to be completed over 18 years, total revenues generated by cities must equal at least $5.85 billion or $325 million annually. In FY 88, 89, and 90, cities in Oregon generated revenues representing only 40 percent, 45 percent, and 58 percent of the annual amounts necessary to meet the 18 year goals. The 1986 report also projected that in order for priority road projects to be completed over 6 years, total annual revenues generated by cities must equal at least $266 million. In FY 88, 89, and 90, cities in Oregon generated revenues representing only 49 percent, 55 percent, and 71 percent of the target levels. Despite the fact that city revenue fell short of both the 18 year and 6 year 1986 targets, overall city revenues did grow an average of 21 percent from FY 1988 to FY 1990.

Non-Road revenues made up one of the greatest proportion of receipts from *local sources* for cities. City Non-Road revenues increased almost 32 percent from FY 1989 to FY 1990. A majority of the revenues generated from *Non-Road* sources are derived from levies within the six percent limitation, serial levies, and one year special levies. In fact, for cities in FY 1989 alone, revenue from levies as a proportion of total *Non-Road* revenues equaled over 78 percent. For FY 1990, the percentage dropped to 76 percent. The heavy reliance of this revenue source on levies should be of great concern to cities, especially as the passage of Ballot Measure 5 will likely decrease the total revenues received from levies in the future.

City *General Fund* revenues as a percentage of the total revenues received for FY 1989 and FY 1990 amounted, on average to, less than 7 percent annually. It is likely that the decrease from property tax receipts which will result from Ballot Measure 5 will create great uncertainty as to the future reliability of revenues derived directly from the General Fund. The passage of the measure also may create some concern as to the future reliability of *other Non-Road* revenue sources which might be reallocated to flow into the General Fund to finance other governments services, thus reducing the amount of monies available to cities for street purposes.

The *Road User Tax* for cities has increased dramatically from FY 1988 to FY 1989, some 83 percent and then increased 10 percent more the following year. It should be underscored that the definition of "Road User Tax" for the FY 1988 data was not known and, therefore, the 83 percent increase from FY 1988 to FY 1989 should be taken with some caution. This study defined the Road User Tax for FY 1989 and FY 1990 as receipts collected from local fuel taxes and registration and, most predominantly traffic impact or system development charges. Although the revenue source provided on average less than 3 percent annually of the total city revenues, it appears that a trend is emerging. Cities in the future may well opt to impose more Road User Taxes when granted the authority to do so.

Like receipts from Road User Taxes, *Receipts from Other Local Governments* increased noticeably from FY 1988, an average of almost 18 percent during FY 1989 and FY90. Significantly, the proportional amount of funds that the source provided remained very constant at an average slightly under 12 percent. Given the rather flat nature of the revenues collected for cities from the Receipts from Other Local Governments in the last two fiscal years, it would appear that cities in the future must rely further on their own abilities to raise needed revenue, and less on the aid of other local governments which are themselves financially bound.

Aside from receipts from local sources, cities have received progressively increasing revenues from state-wide tax revenue collections via the State Highway Trust Fund. The magnitude, rate of increase of revenues, and overall proportional funding from the State to the cities has in fact increased from FY 1989 through FY1990. Revenue received from the State Government for the three fiscal years 1988-1990 equaled $41 million, $51 million, and $68 million, respectively. The average rate of increase in revenues from the State for FY 1989 to FY 1990 equaled 28 percent, while the percentage funding from the State Government as a function of all city receipts for FY 88, 89, and 90 equaled 32, 34, and 35 percent, respectively. As these state-wide funds are generated from gas taxes, weight/mile taxes and vehicle registration fees, future legislation would be required to continue the pattern of increasing these revenues.

Finally, it should be noted that Federal highway aid to cities dropped sharply almost 73 percent from FY 1988 to FY 1989 and then rose about 50 percent in FY 1990. The rise in FY 1990 is attributed to the funding of large projects. The latter two fiscal years reflected that Federal funding as a proportion of all revenues received was level at about 2.6 percent annually.

Counties

According to the 1986 Report, county highway demands over 18 years equaled a total revenue target of $13.8 billion or $766 million, annually. In FY 88, 89, and 90, counties in Oregon generated revenues representing only 30 percent, 33 percent, and 36 percent of the annual amounts necessary to meet the 18 year goals. The 1986 report also projected that in order for priority road projects to be completed over 6 years, total annual revenues generated by counties must equal at least $498 million. In FY 88, 89, and 90, counties in Oregon generated revenues representing 47 percent, 52 percent, and 55 percent of the target levels. Despite the fact that county revenue fell short of both the 18 year and 6 year 1986 targets, overall county revenues did grow an average of 8 percent from FY 1988 to FY 1990.

As with the cities, *Non-Road revenues* made up a great proportion of receipts from local sources. County Non-Road revenues declined almost 12 percent from FY 1989 to FY 1990. Also, County Non-Road revenues, as a proportion of the total revenues received by counties, decreased from just over 14 percent in FY 1989 to just over twelve percent in FY 1990. It is important to note that Washington County explains, in part, the decline in Non-Road revenues. In FY 1989, Washington County alone made up about 32 percent of the category's revenues, and then in FY 1990, the County's share of the category's revenue declined to

about 12 percent. The decline in FY 1990 was a result of the County's Major Street Improvement Program (MSTIP) which was a serial levy that expired in FY 1989 and was followed by a one year gap in FY 1990. The serial levy has been approved for another six year period.

In addition to the declining proportion of revenues collected from Non-Road purposes over the past few fiscal years, it is important to note, as before, that a majority of the revenues generated from Non-Road purposes are derived from levies. In FY 1989 alone, county revenue from levies as a proportion of total Non-Road county revenues equaled nearly 55 percent. For FY 1990, the percentage dropped to 28. Further, from FY 1989 to FY 1990, *General Fund receipts* dropped over 24 percent. The declining proportion of revenues collected from Non-Road sources, and the significant reliance of the revenue source on levies, should be of concern to local governments, in particular counties, since the recent passage of Ballot Measure 5 will likely decrease further the total revenues received from levies.

The passage of Ballot Measure 5 not only will impact county receipts from property taxes, but the Measure will also create pressure on the local governments' flow of receipts from General Funds for highway purposes. Although county revenue derived from the General Fund only made up on average about 1 percent of the revenues, this figure could easily drop further.

With regard to another local revenue source, the Road User Tax, it should be re-stated that the definition of "Road User Tax" for the FY 1988 data was not known and, therefore, the 83 percent increase from FY 1988 to FY 1989 should be taken with some caution. This study defined the Road User Tax for FY 1989 and FY 1990 as receipts collected from local fuel taxes and registration and, most predominantly traffic impact or system development charges. While growth in the magnitude of the revenues collected averaged just under 4 percent from FY 1988-1990, the growth as a proportion of total county revenues remained surprisingly constant at about 3.6 percent. It can be expected that more counties will opt to impose more user-related taxes in the future as other funding sources are cut and highway needs escalate.

County *Receipts from Other Local Governments* was rather irregular for the fiscal years from 1988 through FY1990; receipts equaled $7 million, $0.8 million, and $1.2 million, respectively. The increase from FY 1989 to FY 1990 can be accounted for, in part, by the fact that Washington County, during this period, engaged in a highway project with the City of Beaverton which provided much of the funding. Though revenue magnitudes were seemingly erratic, the overall funding level as a function of all county highway revenue remained constant. As with the cities, the rather flat nature of the revenue source for counties may compel the counties to look elsewhere for alternative highway revenue sources.

Further, there are signs that counties may be increasing their use of the debt market. Proceeds from the Sale of Bonds and Notes for highway purposes for FY 1988 only accounted for a little less than one percent of the total revenues collected by counties. The

following fiscal year proceeds from the sale of bonds and notes increased over 48 percent, while the source's proportional weight also increased to just over 1 percent. Finally, in fiscal year 1990, there was a 28 percent drop in the proceeds collected and a corresponding drop in the source's overall proportional weight.

In addition to receipts from local sources, counties, like the cities have received progressively increasing revenue amounts from the State Highway Trust Fund. The overall proportional funding from state-wide collections has increased from FY 1989 through FY1990. Revenue received by counties from the State for FY 88-90 equaled $67 million, $85 million, and $95 million, respectively. The rate of increase in this revenue source from FY 88 to FY 89 equaled about 27 percent, while the rate of increase from FY 89 to FY 90 equaled over 12 percent. Proportionally, these funds played an increasingly significant role in the overall county highway receipts. From FY 88-FY 90 the percentage funding from the State-distributed revenues, as a function of all county receipts, equaled 28, 33, and 35 percent, respectively. As with the cities, increased funding from the Trust Fund will be required to continue the pattern of increasing revenues by the Legislature.

Finally, a principal source of highway funding for counties has come from the Federal Government. FY 1988 receipts from the Federal Government as a proportion of total receipts collected equaled almost 52 percent. The following fiscal years experienced a decline of 7 percent, while FY 1990 experienced an increase of about 13 percent. However, overall proportional Federal funding has remained rather constant from FY 1988 to FY1990 at about 47 percent of total revenues collected by the counties. Almost 98 percent of the Federal funds came from Oregon-California Land Grant Revenue and National Forest Reserve Revenue. Both of these particular sources are predicted to decline rapidly over the next few years as a result of the diversion of funds and lower overall timber sales.

State

State Trust Fund revenues continue to be derived principally from five sources: federal revenues, fuel taxes, weight-mile taxes, vehicle registration fees, and other sources including fines, interest on fund balance, developer fees, and miscellaneous income. From the period 1977-1985, State Trust Fund revenue dedicated to State purposes increased about 60 percent - an average annual increase of 7.5 percent. From FY 1988 though FY 1990, State Trust Fund revenues, dedicated to State purposes, increased about 18 percent - an average annual increase of over 8 percent.

According to the 1986 Report, State highway demands over 18 years equaled $12.8 billion or $710 million, annually. In FY 88, 89, and 90, the State of Oregon generated revenues representing only 49 percent, 56 percent, and 58 percent of the target levels. The 1986 report also projected that in order for priority road projects to be completed over 6 years, total annual revenues generated by the state must equal at least $530 million. In FY 88, 89, and 90, the State of Oregon generated revenues representing 66 percent, 76 percent, and 77 percent of the target levels. The State did fare better than both the cities and counties of Oregon in matching the 18 year and 6 year 1986 targets. Overall State revenues grew

slightly more than did county revenues, averaging almost 9 percent from FY 1988 to FY 1990.

In the period 1977-1985, State gas taxes grew at an average annual rate of less than four percent. With the advent of increased gas taxes by two cents annually starting in 1988, State gas tax earnings from FY 1988-90 increased annually almost 14 percent. Given the current crisis in Middle East, the U.S. dependence on imported crude oil from the gulf, and the increase in the Federal gas tax, gas prices have increased and may increase further, thus reducing gas use and revenue generated from the source.

In the period 1977-1985, State Weight Mile tax revenues grew most rapidly, at an average annual rate of almost 12 percent. State weight/mile tax earnings from FY 1988-90 averaged increases annually in revenue of almost 4 percent. That increase is attributable, in part, to the authorized increase in the tax beginning in 1990. Assuming a slowing of the nation's economy and increased gas prices, the State weight/mile tax will grow, but at a reduced rate. As long as fuel prices increase, trucking companies will move to more fuel-efficient vehicles of higher registered weights. The higher weights will thus produce more revenue from the Weight Mile tax.

The average annual rate increase in revenue for Vehicle Registration taxes from 1977-1985 equaled 2.7 percent, while rate increases in revenue from FY 1988-90 averaged about 22 percent. The increase is attributable, in large part, to the 1989 legislative action which increased vehicle registration fees by $5. If further authorized increased vehicle registration fees are not imposed, return to the prior rate of 2.7 percent should be expected.

Also, it is important to note that the registration fee law may change with the passage of Ballot Measure 5. Whether the Measure will have an effect on the amount of money collected from motor vehicle registration fees is unclear.

Finally, it should be noted that Federal Highway Trust Fund Revenues in the form of apportionments flowing to the State dropped noticeably from FY 1989 to FY 1990, almost 10 percent, with an even more drastic cut in Federal Highway bridge and replacement programs. A trend of a declining or leveling revenue stream from the Federal Government is likely to become more apparent in the future. Taking into account inflation, increased gasoline prices, potential increases in car prices, and the offsetting effect of increased population, real increases in the level of revenue generated from the State Trust Fund are expected to be minimal.

Expenditures

Cities

The 1986 report showed that in order for priority projects to be completed over the next six years, total annual city expenditures must equal at least $266 million. It should be noted that since the 1986 annual requirements only accounted for expenditures associated with operations and maintenance, repair and preservation, and construction and expansion, only city expenditures of the same categories can be compared. Therefore, city expenditures for FY 1988, FY 1989, and FY 1990 associated *only* with operations and maintenance, repair and preservation, and construction and expansion equaled $90 million, $96.9 million, and $125.4 million, respectively. As shown in the chart below, expenditures for cities for FY 1988-90 were far under the targeted annual spending level.

Expenditures by Cities

	Annual Target	% of Target met in 1988	% of Target met in 1989	% of Target met in 1990
Total	$266 Million	34 %	36 %	47 %

It should be of particular concern that all priority city road needs in Oregon were not met during the past three fiscal years; therefore, roads have quite possibly deteriorated further and their corresponding costs have escalated.

Finally, the surveys found city expenditures for General Engineering and Administration as a proportion of total city expenditures remained relatively constant at slightly over 8 percent from FY 1988 to FY 1990.

Counties

The 1986 report showed that in order for priority highway projects to be completed over the next six years, total annual county expenditures must equal at least $498 million. It should be noted as before that since the 1986 annual requirements only accounted for expenditures associated with operations and maintenance, repair and preservation, and construction and expansion, only county expenditures of the same categories were compared. Therefore, county expenditures for FY 1988, FY 1989, and FY 1990 associated *only* with operations and maintenance, repair and preservation, and construction and expansion equaled $151 million, $159.9 million, and $166.1 million, respectively. Like cities, county spending levels were under the required expenditures for FY 1988, FY 1989, and FY 1990.

Expenditures by Counties

	Annual Target	% of Target met in 1988	% of Target met in 1989	% of Target met in 1990
Total	$498 Million	30%	32%	33%

The type of underspending shown above will likely result in significantly higher requirements in the long run as roads and bridges deteriorate further and repair costs inflate.

Also, it should be noted that like cities, county expenditures for General Engineering and Administration as a proportion of total expenditures remained relatively constant, especially from FY 1989 to FY 1990 where the average percentage equaled 11.3 percent. From FY 1988 and FY 1989, county expenditure for Administrative and General Engineering increased sharply from $14 million to almost $24 million and a 71 percent increase. The reason for the large increase from FY 1988 to FY 1989 reflects in part the different reporting methods and assumptions used by various counties, as mentioned earlier, as well as increased spending for the planning of new projects. Also debt service on local obligations increased in FY 1988-90.

State

The 1986 Report showed that in order for priority projects to be completed over the next six years, the State must spend annually at least $530 million. As before, it should be noted that since the 1986 annual requirements only accounted for expenditures associated with operations and maintenance, repair and preservation, and construction and expansion, only city expenditures of the same categories were compared. Therefore, State expenditures for FY 1988, FY 1989, and FY 1990 associated *only* with operations and maintenance, repair and preservation, and construction and expansion equaled $320 million, $422 million, and $385.5 million, respectively. As with the cities and the counties, the spending requirement necessary for highway purposes was not satisfied in any of the three fiscal years.

Expenditures by the State

	Annual Target	% of Target met in FY 88	% of Target met in FY 89	% of Target met in FY 90
Total	$530 Million	60%	80%	73%

The State came closer to meeting the annual targets than did both cities and counties. However, as noted earlier in the report, this finding may result from the fact that the acceleration of spending through the Access Oregon Highways program was not anticipated in the 1986 Report and, therefore, the targets estimated would be low. Another study completed by the Oregon Department of Transportation subsequent to the 1986 Report, makes the case for even higher spending targets. The Oregon Highway Division Interim Highway Plan showed that $15.6 billion would be needed over the next 20 years or an average annual target of $780 million. If such is the case, more significant underspending has occurred as reflected in the table which follows.

***Adjusted* Expenditures by the State**

	Annual Target	% of Target met in FY 88	% of Target met in FY 89	% of Target met in FY 90
Total	$780 Million	41%	54%	50%

In addition, it should be noted as before that deferral of maintenance and repair will likely increase further the overall requirements identified both in 1986 Report and the recently updated ODOT data, due to continued deterioration of roads and bridges and increases in the cost of such repairs due to inflation.

The Gap

The 1986 study identified a funding gap of $21 billion between road requirements and anticipated revenues for the 1987-2004 period. The 1988 study estimated that the gap would narrow by 1991 to $17.65 billion. The estimated current funding gap equals $19.7 billion.

The methodology used to determine the funding gap for the 1988 Update was calculated based on estimates presented in the 1986 study, as well as projected revenues resulting from increases in state-wide gasoline and weight/mile equivalent taxes subsequently approved.

Based on the 1990 update, the funding gap appears to have narrowed to $19.7 million. The Gap was calculated using *actual* city and county revenue numbers for fiscal years 1988, 1989, and 1990 which were inflated (or deflated in the case of fiscal year 1987) at a six percent inflation rate to generate an accurate revenue pattern through fiscal year 2004. Also, *actual* State and Federal revenues for fiscal years 1987 through 1989 were used in conjunction with Oregon Department of Transportation Policy and Finance Division's Long-Range Highway Revenue Forecasts to generate future revenues. The $32 billion of highway infrastructure needs from fiscal year 1987-2004, less the aforementioned revenue totals from cities, counties, the state, and the Federal Government, leaves a remaining funding gap of $19.7 billion.

Appendix I

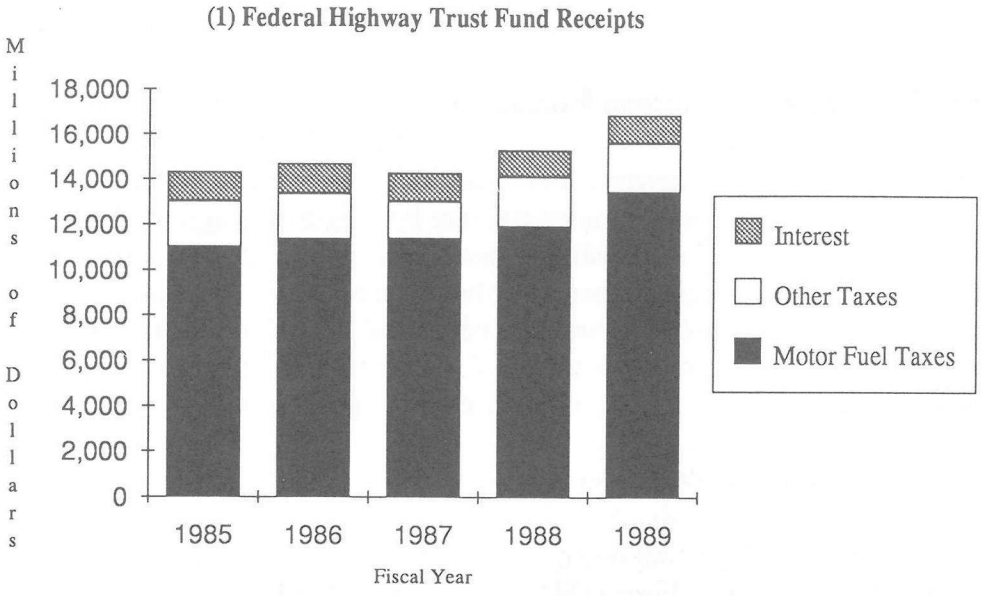
National Trends in Transportation Funding

As transportation infrastructure maintenance and repair needs have escalated throughout the nation, the level of Federal support for infrastructure has begun to stagnate in real terms. As a result, greater financial responsibility has been imposed on state and local governments to seek out new strategies to generate the revenue required to fill the chasm created by both the cost increases for infrastructure needs and the reductions in Federal support. The following analysis examines the general, current trends governing highway infrastructure funding at the federal, state, and local levels of government.

Infrastructure Funding at the Federal Level

The Federal Government provides about one quarter of the financings for highways and bridges. The Federal Highway Trust Fund (FHTF), created by the Highway Revenue Act of 1956, is the Federal Government's primary mechanism to provide revenue to help build and improve the 847,000-mile federal aid highway system, including 43,000 miles in the Interstate highway network. Since 1956, the fund has allocated more than $205 billion to the states, which in turn financed improvements to more than 525,000 miles of roads and 18,000 miles of bridges.

The Federal Highway Trust Fund is financed from the proceeds of a number of Federal excise taxes levied on highway users in each state and includes a Federal fuel tax, taxes on automobile products (e.g. tires, inner tubes), taxes on new trucks and trailers, taxes on heavy vehicle use, and interest realized on investments. By far the largest source of income for the FHTF has been and continues to be the motor fuel tax. The growing reliance on motor fuel tax for revenues earmarked for infrastructure certainly marks one the most significant trends of infrastructure funding at the Federal level. Indeed, as the graph below illustrates, the motor fuel tax component of the total revenues received by the FHTF has for the most part increased over the years and has consistently provided the greatest source of FHTF dollars. In addition, it should be noted that the Trust Fund has as a whole grown progressively throughout the years.



(1) Data obtained from the Federal Highway Administration Highway Statistics, 1988 and Our Nations Highway's: Selected Facts and Figures, 1990.

Since 1957, the amount of traffic on America's roads has more than tripled, while motor fuel consumption has only increased one and a half times. Since vehicles have become more fuel efficient the FHTF has been receiving proportionally less tax revenue than in the past for every penny of the motor-fuel tax. In the future, the pre-existing trend of progressively rising Federal fuel taxes will likely continue. The question remains, however, whether there will be any *real* increase in receipts collected by the Federal Government, excluding inflationary effects.

Infrastructure Funding at the State Level

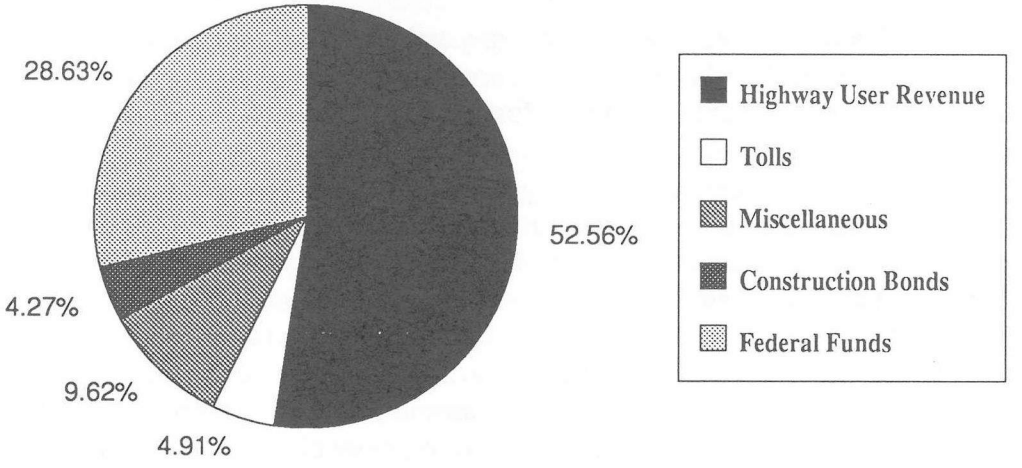
While Federal spending is likely to continue to focus on health, social programs, defense, and national debt service, state and local governments must expect to finance a larger share of infrastructure needs with their own revenue sources. Indeed, state and local governments have dramatically increased their roles with regard to highway funding. In fact, in 1988 the state portion nationally of highway receipts accounted for 49.7 percent of the total highway receipts and accounted for over 60 percent of the total highway expenditures.

One principal group of revenue source includes benefit or user taxes and fees, which in turn may include fuel taxes, registration fees, tolls, and ticket taxes. Additionally, some states engage in public/private partnerships, while many other states opt to issue debt backed by property tax revenues or other sorts of revenue.

Finally, virtually all states continue to rely on Federal support in the form of apportionments. Apportionments are calculated in accordance with formulas that give

weight not only to the needs of the Interstate systems, but also to population, area, and mileage. In addition to apportionments, states may receive funds from various other government programs such as the Appalachian Development Program, as well as Federal grants. A breakdown of the general state funding sources and a discussion of some of them follows. It should be noted that the the total funding souces of the chart below adds up to 99.99% instead of 100.00% because the numbers used to create this chart were rounded to the nearest 1/100.

(1) State Infrastructure Funding Sources



(1) Data obtained from the 1988 Federal Highway Statistics book

Highway User Fees

Certainly one of the most prevalent infrastructure funding themes today is the concept of cost responsibility. The guiding principle of the approach dictates that road users should pay for the cost of the highway system in an amount proportional to their use of the highway system and, in turn, the road user revenues should be dedicated and used primarily for the operation, construction, and maintenance of highways. Highway user fees are commonly classified into three categories: motor fuel taxes, registration fees, and weight/mile taxes. States use different combinations of these categories to generate revenue to maintain and construct their highways; however, most states do not employ the third tier of funding and, as a result, rely mostly on road user fees from motor fuel and registration fees.

Motor fuel taxes continue to serve as the primary source of funds for state transportation programs. In 1988, federal, state, and local gas taxes provided $29 billion of the $52 billion state and local governments spent on highways. The growing reliance on the gas tax

at all levels of government has certainly become one of the most pervasive trends of infrastructure funding. The trend is perhaps most noticeable during the 1980's when state gas taxes increased, often progressively on an annual basis, in 47 states (all except Alaska, Georgia, and New York). And, since 1980, the average state gas tax has increased 78 percent. In 1989 alone, nineteen states and the District of Columbia increased motor fuel taxes, adding more than $1 billion in buying power for improved highways. The State of Illinois, for instance, estimates that its 6 cent per gallon motor fuel tax increase approved June 1989 will generate $2.5 billion in additional highway investments over five years, not to mention the 50,000 new construction related jobs. Nonetheless, studies have shown that current gas taxes, expressed in adjusted dollars, are below their 1965 levels; in order to bring the purchasing power of the tax up to its 1965 level, an average increase in each state of 2 to 4 cents per gallon would be needed. As long as states' revenues from the gas tax do not keep pace with inflation, the trend of increasing the fuel tax is likely to continue.

Fees for driver's licenses, vehicle registration, inspections, truck weights, record checks, and vanity license plates serve as additional sources of revenue to states. The basis for these fees vary considerably among states. Most states assess the fees on a *flat* rate basis. Increasingly, however, more states are imposing taxes on users based on a *variable* rate basis. For instance, some states are imposing taxes on the gross weight of their vehicles and often on the distance their vehicles travel. The states' reasoning for such charges is clear: heavy vehicles like trucks cause more damage to roadways than other vehicles; thus the trucking industry should pay a greater share of the cost of maintaining the roadways. The State of Idaho which employs the gross weight distance tax forecasts that the tax will grow, but at a reduced rate. The State reasons that as fuel prices rise, trucking companies will opt to move to higher weights. The higher rates in turn will produce more revenue from the gross weight/mile tax. The trend of capturing more closely the cost responsibility of different sizes and weights of vehicles and the distances they travel by having a balanced mix of registration, fuel, and weight-mile taxes is likely to become an even more apparent trend in the future.

Tolls

One of the oldest mechanisms of financing highways and bridges is through the collection of tolls. Currently, 28 states operate 36 toll roads. In most cases, tolls pay the debt service on state and local revenue bond issues used to finance the construction and often the maintenance and operation of a specific road. Frequently, as is the case in the State of New York, tolls are removed from the facility once the debt obligation is met. The New York State Thruway Authority, which now generates $220 million annually, is scheduled to retire its debt in the mid 1990's. Finally, although the Federal Government is prohibited from funding tolls on federally financed highways, the 1987 Surface Transportation and Uniform Relocation Assistance Act permitted 9 states to use federal funds to cover up to 35 percent of the costs for various test projects; the revenues generated by the tolls themselves would cover the balance. The growing popularity of tolls financing of roads and bridges at the state level, combined with interest and encouragement from the Federal government, marks a significant and growing trend for infrastructure financing.

Miscellaneous

A large number of other miscellaneous sources of revenue are available to State governments for infrastructure needs. A number of states collect revenues from general sales taxes as well as from more motor-user-fee related sales taxes such as taxes on motor vehicles and trailers and lubricants. Other states collect revenues from motor vehicle excise taxes and cigarette taxes. Over nine states collect severance taxes on natural resources, while still other states use net revenues from lotteries and revolving fund programs for infrastructure purposes.

Some states, particularly in the Northeast, impose "ad valorem" (in proportion to the value) personal property taxes on motor vehicles, typically in addition to motor vehicle registration fees. These personal property taxes are based on the value of the vehicle, with the tax decreasing as the vehicle ages; and significantly, these taxes remain deductible against the federal and state income tax.

Appropriations from the state general funds serve as additional infrastructure revenue sources for states. In 1988, about six percent of state transportation capital expenditures came from general funds. Because general appropriations require legislative action and are subject to changing state priorities, they are not a reliable, long-term source of revenue.

Certainly one of the more interesting trends of infrastructure financing available to state governments involves greater involvement of the private sector in the funding of transportation improvements. Increasingly, state governments are beginning to emulate their local government counterparts by engaging in public-private cost-sharing programs. In 1986, nineteen states had statutes specifically authorizing privatization of one or more types of infrastructure. A recent study estimates that, nationally, the potential private revenues for such partnerships could amount to about $550 million per year, or enough to assist with 8 to 16 percent of the yearly improvements needs for local roads.

To date, many agreements have been reached with the private sector to provide joint public/private funding for improvements which benefit both the specific developer and the public in general. To extend and formalize the public-private partnership practice, many states have approved the formation of special transportation assessment districts. The county in which the district resides would thus be empowered to assess developers a fee based on their usage or benefit of transportation improvements. The developers in turn may be granted authority to recoup their investments through toll investments or through the value added by the transportation facility to the developed area. Such is the case with California which, recently began to solicit proposals from private developers to design, build, and operate four right-of-way projects.

What are Some Western States Doing to Increase Funding for Highway Infrastructure?

The progressive increase in the gasoline tax marks by far the most prevalent trend with regard to increasing funding for highway infrastructure. The State of Washington, for instance, recently authorized a 4 cent increase over last year in the state motor fuel tax to 22 cents a gallon.

In Arizona, gasoline taxes this year as compared to last year increased 1 cent to 18 cents per gallon. The State of Arizona estimates that the 1 cent increase will generate $20.5 million, some of which will be distributed to cities and counties in the State.

In addition to the increase in revenues generated from the gasoline tax, other *dedicated* or *user* related highway revenues sources have increased, as well, perhaps most notably the gross weight tax. The State of California projects that this year weight fees will increase some 50 percent. Similarly, the State of Washington will increase for the first time in twenty years its gross weight fees by 40 percent.

Increasing user fee related taxes is nothing new; however, the concept of piggy backing a sales tax on top of the fuel tax can create an important revenue source for states. In June 1990, California legislation not only allowed for an increase in the previous gasoline tax of 9 cents per gallon to 14 cents per gallon, but *also* provided for an increase in the pre-existing one-half cent local sales tax on gasoline by 1 cent per year for the next ten years. The County of Sacramento, among other California counties, currently imposes the sales tax.

The State of California, however, certainly is not unique in its pursuit of a sales taxes to fund highway infrastructure needs. Indeed, the State of Arizona may be considered a bellwether of the practice. In 1986, the State allowed Maricopa County to levy a one-half cent sales tax. The revenues from the sales tax were earmarked for the construction of a 231- mile freeway system to be built over a twenty year period. The State projects the sales tax this year alone will generate some $117 million. Although the sales tax thus far has been successful, the State contends that reliance on the sales tax creates some risk, as the tax provides a rather volatile revenue stream in terms of it being more sensitive to fluctuations in the economy than a user tax, for example.

Local option tax revenues for highway infrastructure are not limited to sales taxes. The State of Washington, for instance, allows revenues to be collected from vehicle license fees, street utility charges, commercial parking taxes, and employer taxes. But by far Washington's most reliable and inflation-responsive local options tax is the Motor Vehicle Excise Tax (MVET). The MVET is an ad valorem tax where the owner of the vehicle, in addition to paying registration fees for his vehicle must pay 2.2 percent of the fair market value of the vehicle which depreciates every year. The State of Washington recently authorized King, Pierce, and Snohomiish counties to levy, with voter approval, some of the aforementioned local taxes to accelerate the completion of 75 lane-miles of High Occupancy Vehicle Lanes. Cost of completing the project equals about $550-600 million. Federal funding is expected

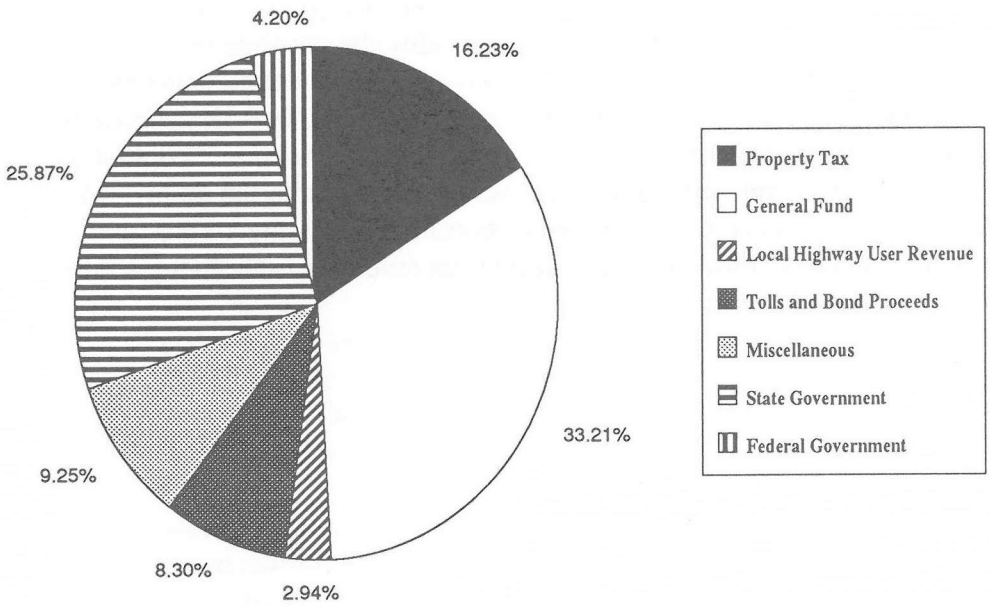
to cover about $250 million of the cost, leaving the remainder to be borne by state and local governments.

Infrastructure Funding at the Local Level

A small handful of states, notably Alaska, Delaware, North Carolina, Virginia, and West Virginia assume virtually complete responsibility for the financing of highway infrastructure needs of their local governments; these states, however, are certainly unique. Most local governments play a major role in maintaining their local roadways. In fact, local governments are estimated to provide close to 30 percent of the total receipts and close to 40 percent of the total expenditures for highway infrastructure purposes.

While states appropriate funds for localities from general funds and miscellaneous state taxes, e.g. severance taxes, sales tax, bond proceeds, state toll revenues, the Federal government provides assistance to localities via revenue sharing, flood relief, highway safety, certain federal aid funds, and other miscellaneous payments. Federal and state funds, however, are available in very limited amounts; invariably, localities encounter shortfalls in funds needs for road and bridge maintenance and repair projects. As a result, the local governments must rely on their own general means to raise the needed revenues. Property tax collection, local highway user fee revenues, tolls, bonds proceeds, and various other revenue sources mark the current trend of highway infrastructure funding at the local level. A graphic breakdown of the funding sources in addition to a discussion of some of the most important funding sources follows.

(1) Local Government Infrastructure Funding Sources



(1) Data obtained from the FHWA Highway Statistics, 1988. Local Governments include cities, counties, and townships.

Property Taxes

The property tax has always been a principal source of revenue for local governments. In 1988, property taxes generated over seventy percent of the tax revenue collected by all local governments. Cities, which have a more diversified tax base, rely on property taxes for as much as 50 percent of infrastructure revenue. Some 41 percent of cities throughout the Nation increased property taxes in 1988 and 1989. State property tax limits seem to have reached their upper boundaries. The trend of relying heavily on property taxes to fund infrastructure is likely to decline in the future.

General Fund

The largest source of funds for infrastructure at the local level is the general fund. Although the fund provides the greatest source of revenues, it is not in itself an earmarked fund. As a result, other needs relating to schooling, corrections, or other services mandated by state governments compete for the same funds needed for infrastructure. As sales tax revenues are placed in the general fund, it is important to mention its usefulness. In addition to property taxes which flow into the fund, revenue generated from the retail sales tax also flows into the fund. The latter tax is considered the most productive local, non-property tax. Some 30 states have levied the retail sales tax; in 1986 these revenues made up approximately 16 percent of the total local income.

Local Highway User Revenue

Until relatively recently, states viewed the power to levy certain taxes as within their sole jurisdiction. Today, however, many counties have been empowered with the authorization to impose various user taxes of their own, most notably the gasoline tax. The State of Florida, for example, has a 1 cent gasoline tax available to its counties if approved by a county's electorate in a county wide referendum. The proceeds of the tax *may* be shared with cities in a proportion agreed upon. Florida has, in addition, a local option gas tax of 1 to 4 cents a gallon; however, these proceeds must be shared with the municipalities. The State of Oregon, like Florida, has empowered its counties with the authority to impose their own local gas taxes. Finally, in addition to gas revenues, vehicle registration fees are often captured at the local level.

Appendix II

Case Studies

Case Study: City of Beaverton

The City of Beaverton is located in Washington County. The City is one of the fastest growing suburban areas in the state. The City has experienced a 3.6 percent annual growth rate in the past ten years. The City maintains approximately 160 miles of streets. The City has seen a great deal of residential development in the past ten years. This development has lead to traffic congestion on many arterials and collectors. The City has instituted various citizen task forces to address the transportation needs of the City and propose various solutions.

Current Transportation Funding

Transportation funding decisions for both new construction and maintenance are set forth in the annual Capital Improvement Plan presented each year to the City Council. Approximately $700,000 per year is allocated for new construction. Funding for new construction comes primarily from system development charges. Signalization is currently one of the highest priorities with expansion of the current street system also a priority. With major intersections now costing approximately $1 million each, the City has been hard pressed to address those needs under the current funding mode.

Maintenance funding comes primarily from gas taxes. With the expanded need for maintenance of streets, a majority of the current revenues have been allocated to purchasing equipment and labor costs. In the past year approximately $100,000 was spent on overlays and another $100,000 was spent on slurry seals. The City uses a pavement management system to identify which maintenance projects will be addressed each fiscal year.

Maintenance vs. Growth Issues

The City has identified approximately $20 million in transportation needs that currently have no funding source. The City hopes to put a ballot measure before the electorate within the next year. Major collector construction and improvements account for a majority of the improvements to be funded with bond proceeds.

If additional monies were available, the City would try to balance the distribution of those monies between increased maintenance of local streets and minor arterials/major collectors. The City sees a great need for construction of 3-lane streets to help expand the current street capacity. The City also has a long list of needed residential overlays that could be addressed with additional funding.

Future Funding Concerns

A major funding concern of the City is the impact of the passage of Measure 5 and the definition of "taxes" under that measure. Washington County recently imposed a Traffic Impact Fee on new construction to address the needs for expanded capacity on local roads. The new fee would increase the system development fees for streets from a current fee of $710 per housing unit to $1350 per unit. This almost doubling of SDC funds would require additional funding be directed first to the construction of arterials and then collectors. The new impact fee disallows use of the newly imposed funds on anything lower than a minor collector. These funding requirements differ from the City's current funding policy concerning street SDC monies which place no restriction on the allocation of funds.

Case Study: City of Eugene

The City of Eugene, county seat of Lane County, serves as the regional center for service and trade, as well as for cultural, academic and recreational activities in southwest Oregon. Over the past several decades the economy of the area has become more diversified. As with other metropolitan areas in the State, Eugene has experienced an increase in population. The City is the second largest city in Oregon with a population estimate of 109,785 for 1989. A number of public projects have added to Eugene's economic base in the recent past, including the expansion of Mahlon Sweet Airport and the development of the Riverfront Research Park.

Current Transportation Funding

Transportation capital improvements are formulated during the annual budgetary process. The Transportation CIP is guided by a long-range metropolitan area transportation plan called *TransPlan* which identifies all the system improvements needed to serve the approved Urban Growth Boundary. The plan identifies the street projects needed to serve population growth to the year 2008 with no worse than a service level of D and assumes that alternative transportation modes will account for an optimistic 14 percent of total trips. Even with these optimistic assumptions, there is projected to be a $76 million unmet funding need from federal, state, county, and city sources for these projects.

To increase the efficiency of the three local governments providing services in the metropolitan area, service agreements and an Urban Transition Agreement has been developed between jurisdictions. These agreements have implemented some service consolidations and the rationalization of street jurisdiction and maintenance. There are no longer any county maintained streets within the cities and, in some cases, the cities maintain county streets where that is more efficient. Eugene has also provided some centralized traffic signal engineering services.

Although the efficiency of the three local governments providing transportation services has been increased, capital funding requests for FY 1991 were pared down from $3.2 million to $2.4 million. Of the $2.4 million, approximately two-thirds is designated for rehabilitation and the remaining one-third for new construction. While competition for new construction dollars is always present, the City continually attempts to leverage local funds as much as possible. Projects which require matching local funds are given priority. The City has recently garnered approximately $10 million of outside project monies from either the state or federal government for funding of major projects.

Current funding for the city transportation system comes from four primary sources. The local gas taxes allocation provides approximately two-thirds of the City's road fund with the remaining one-third coming from Lane County. Transportation projects are also funded by Assessment Funds or SDCs. Most local improvement districts are established for road improvements which are funded directly by the benefiting property owners either through cash payment of assessments or assessment contracts.

Growth vs. Maintenance

Increased gas tax revenue has been one of the most significant factors which has allowed the city to increase dramatically the maintenance of streets. Street surface repairs and crack sealing have increased by 100 percent and 200 percent respectively since1985. All fully improved city streets are on a 8 year cycle of crack sealing. A street maintenance prioritization policy has been implemented so that the most expensive and heavily used streets receive first priority for maintenance, while semi-improved streets that have never been assessed to abutting property owners are given last priority.

The increased funding from the gas tax revenue has also allowed the city to increase preservation expenditures from $200,000 annually to over $1 million. The city has implemented a computerized pavement management system which prioritizes objectively the streets that require preservation work. There still are insufficient funds to take care of all preservation needs and thus prevent part of the street system from deteriorating from age and usage. In an effort to maximize the use of road funds, however, the city is attempting to tighten up on inter-divisional coordination and taking steps to enhance design procedures. As part of the pavement management system, structural design analysis is used to identify the most cost-effective preservation measures.

Collectors and arterials have received much of the street rehabilitation funding. The heavy traffic use on collectors and arterials has led to a backlog of reconstruction projects. The City has been forced to back-off from an extensive reconstruction program and focus, rather, on a few major projects. The City has started a secondary listing of collector and arterial reconstruction projects from the backlog. The heavy demand for rehabilitation on collectors and arterials has also resulted in the creation of a maintenance backlog for residential streets.

The City has experienced increased growth and demand for transportation services. Transportation issues of concern for the future include: funding for alternative modes of transportation, i.e. bike lanes and mass transit; compatibility of planning processes and transportation facilities, that is are the roads designed to handle the increased traffic from development; increased cost of roadways and the impact on property owners' willingness to improve residential streets; and, water quality and run off issues which could increase the cost of transportation infrastructure.

Future Funding Concerns

The City's road fund is totally dependent on outside funds: the gas tax and distributions from the County. Recessionary periods have usually seen lower gas tax collections leading to decreased local dollars. Additionally, if responsibility for state police and state parks is returned to the State road fund, the distribution to local governments could be jeopardized further.

Approximately one-third of the City's road fund monies come from Lane County through a short-term agreement. Half of the transportation monies distributed to all cities in the County come from Lane County's timber receipts. As the County faces increased pressures to fund county services while faced with decreased timber receipts, the road fund distribution from the County could be jeopardized.

Case Study: City of Joseph

Located in the northeastern corner of Oregon, the City of Joseph is home to approximately 1135 persons. The City has depended traditionally on wood-products for employment but is currently experiencing an increase in the "artist" community. The City experiences an increase in tourism during the summer months with visitors to the wilderness areas surrounding the City. The City's has also attracted a number of retirees who make their homes there in the summer. To meet the increased demand for services, the City is currently involved in both water and sewer system expansion.

Current Transportation Funding

The City maintains approximately 7 miles of roads. City-maintained roads are primarily residential, with the higher usage roads maintained by either the State or County. Though the City does not follow a formal CIP process, they do maintain a list which prioritizes road projects within the City. Placement on the list is determined by both usage and condition. The listing is revised periodically as completed projects are removed and new projects added.

Funding for road maintenance comes primarily from gas tax monies. Approximately one-third of the monies are used for administration (which includes minor hole patching) with the remaining two-thirds used for capital construction. Recently the City received special grants from the State which were used for construction of bridges.

Maintenance vs. Growth Issue

The City is currently focusing attention on the rehabilitation of local streets. Four years ago the City had a significant backlog of local-road maintenance needs. The City has made a concerted effort to address road maintenance and feels they have made considerable progress in decreasing the backlog. City roads generally had good bases, therefore maintenance activities meant overlays rather than reconstruction.

The City's ability to "catch-up" on the maintenance needs was greatly enhanced by working with Wallowa County. The County built an asphalt plant within six miles of the City and the City has been able to utilize that plant. Access to asphalt results in the City doing most of their own maintenance work.

Since progress has been made in addressing the maintenance backlog, the City now anticipates construction of two-block pieces of new roads in fiscal year 1992. The new road pieces will be simple asphalt overlays with neither curbs nor sidewalks. Projects of this type will be targeted in the future. The City has a number of projects that are two-to-three block pavement sections. These road sections were previously graveled serving one or two houses. The roads now serve eight to ten houses and restrictions on the use of oil for dust control, make these roads good candidates for paving.

Future Funding Concerns

Since State road monies are based on population, the major funding issue confronting the City is the accurate tabulation of population. The City states that it must continually argue with the State about the correct population figures for the City. The State maintains that the City is loosing population and the City maintains that population is not declining but rather showing a small increase.

Case Study: City of Reedsport

The City of Reedsport, located in Douglas County, has a current population of approximately 4850 persons. The population base has remained relatively stable over the past ten years with fluctuation of approximately 300 persons. Feasibility studies done in the early 1980's projected 1990 population of 6500 to 7000, but the projected growth did not occur.

Current Transportation Funding

The City currently maintains approximately 18 miles of road: approximately six miles of collectors, four miles of arterials, and eight miles of residential streets. The miles of roads maintained by the City increased this past year by approximately one mile. Local improvement districts were formed to finance the paving of gravel roads in five residential neighborhoods.

In the past five years the City has undertaken a comprehensive rehabilitation program for local streets. Seven or eight years ago, the City received grant monies from Douglas County to analyze road conditions in the City. With these grant monies, the City ran various tests which analyzed the adequacy of road surfaces and degree of decay. This technical data, along with a visual examination of road surfaces, formed the basis of a street maintenance strategy that the City has pursued for the past five years.

Funding for transportation needs in the City comes from two primary sources: gas taxes and City franchise fees. Much of the progress made in addressing the maintenance needs of the City have been funded by the franchise fees. Prior to the allocation of franchise fees for road maintenance, the limited funds available to the City for road maintenance resulted in a large backlog of preservation projects. Prior to 1985, approximately $15,000 was spent each year on overlays. In fiscal year 1989, $70,000 of overlay projects were completed.

Maintenance vs. Growth Issues

The City has no growth-related industries and in fact has seen the closure of many small mills over the past twenty years. The lack of flat land for building is seen as a limiting factor in any expansion of the population or economic base.

The City's five-year CIP identifies approximately $65,000 in road projects for each of the next three years decreasing thereafter to approximately $35,000 per year in years four and five. If additional monies were available, the City would accelerate the overlay program. In the early years of the street maintenance strategy, the City chip sealed most of the upper-town streets to keep them from deteriorating further thus saving the City the expense of costly reconstruction.

Future Funding Concerns

A major funding concern for the City is the impact of Ballot Measure 5 on available revenues. The recent advances in road maintenance have been funded by the City's franchise fees. The decrease in property tax receipts resulting from Ballot Measure 5, may lead to a reallocation of the franchise fees to fund other government services, thus reducing the amount of monies available for street programs. The transportation funding shortfall will result in a scaling-back of the street improvement program and possibly cutbacks in service

since the City will not be looking for alternative local funding to meet the road maintenance shortfalls. A local gas tax is viewed as an unpopular funding option.

Case Study: Deschutes County

Deschutes County, the second fastest growing county in Oregon, has an area of 3,055 square miles and an estimated 1989 population of 70,600. The County maintains approximately 877 miles of roads including 241 miles of collector roads, 192 miles of arterials and 444 miles of local roads. Traditional industries such as lumber and agriculture have shown a decline in prominence recently as the tourism industry has expanded.

Current Transportation Funding

Transportation funding decisions within the County are guided by two major policy vehicles; a five-year capital improvement plan and a road maintenance plan. The capital improvement plan, updated and adopted yearly by the County Commission, addresses such issues as reconstruction and modernization of roads and bridges. Road maintenance policy decisions are addressed in five year plans which address widening, widening and resurfacing, bridge maintenance and replacement, traffic control devices, roadside hazards, and drainage and structures. Many of the maintenance decisions are based on a computerized rating system which assigns points and treatment solutions.

The two major sources of funding for County roads are monies from federal lands and state gas taxes. Approximately 82 percent of the County's road monies are directed toward maintenance activities, with the County focusing almost entirely on the needs of arterials and collectors. Local street improvements are funded through local improvement districts. According to the County, a lack of funding has resulted in inadequate maintenance and modernization of bridges, lack of signage, and declines in road maintenance. If additional monies were available they would be directed toward the reconstruction and modernization of roads and bridges.

Road funding needs have been identified by the County not only on a five year horizon but also funding needs ten years beyond the five year horizon. Needs in the six to fifteen year horizon currently have no funding source identified.

Maintenance vs. Growth Issues

The growth in the County has prompted increased demands for road maintenance. Traditionally the County was able to meet many maintenance needs of County roads through the use of chipsealing. Chipsealing costs only one-third as much as asphalt overlays, but increased urban traffic patterns have magnified the wear and tear on roads. Increased car trips have resulted in tire rutting which cannot be addressed through simple application of chipseal.

The lack of funding has also resulted in the limiting of capital investment in new projects. Most new roads constructed by the County, have no curbs, gutters or blacktop. The costs of new "full" road construction is very prohibitive and rarely done by the County.

Future Funding Concerns

The major funding concern facing the County roads division is the decline in revenues. A decline in forest revenues has taken place, but increases in the state gas taxes have blunted the impact of lost forest revenues. Further decreases in forest revenues could have major impacts on transportation funding.

Forest revenues currently available to the County are threatened by both the designation of lands for spotted owls habitat and political struggles over the allocation of forest revenues. The County currently receives 75 percent of the forest revenues with schools receiving the remaining 25 percent. The Superintendent of Public Education has proposed a redistribution of forest revenues. If forest revenues are split evenly, the County foresees the elimination of all road capital improvements projects. If forest revenues are reallocated to 75 percent schools and 25 percent County, the County would eliminate all road capital improvement programs and begin layoffs of personnel.

Case Study: Lincoln County

Located on the northern Oregon coast, Lincoln County serves a diverse population. The County maintains approximately 350 miles of roads, half of which are paved with the other half graveled. Much of the initial construction of county roads occurred during the 1960s and 1970s. The comparative newness of the road system means that the County is generally able to maintain the road surfaces with overlays, rather than more expensive reconstruction.

Current Transportation Funding

The County has a preservation program which targets maintenance of the current system, response to emergency road needs, and general betterment of the transportation system as a whole. The County's pavement management system, though not formal in nature, determines and prioritizes preservation projects within the County. The County has a strong Citizen Road Advisory Committee which also assists the County in the allocation of resources. This committee provides both technical and political assistance in the development of funding priorities.

The cyclical nature of the timber cut impacts County funding of transportation improvements. The County receives approximately two-thirds of its road funding from

forest timber receipts with the other one-third from gas taxes. The County acknowledges that it is riding a funding wave which has crested and will be diminishing over the next few years. The County received $2.8 million last year from a high of $4.1 million. This year's receipts will likely decrease $2.0 million with future years receipts falling to the $1.5 to $2.0 million range.

Historically funding surpluses last two to three years; the current funding upturn has lasted almost seven years. With the increase in timber receipts, the County has taken decisive steps to position the road fund for future recessionary times. In anticipation of a decreased funding base, the County has spent the last four years upgrading equipment, making needed structural updates, and accelerating the overlay program as much as possible. With recent capital equipment purchases and major capital structures improvements, the County hopes to ride out the funding downturn for several years, possibly as long as five years.

The County has been actively involved in providing two inch overlays in 1990. Limitations on preservation or new construction projects are not caused by lack of funding, but rather lack of facilities. There is only one asphalt plant in the County which must serve the needs of not only the County, but also the State Highway Division, ports and local cities. The weather and topography of the coastal region also limits the construction season to approximately three months, which also taxes the capacity of local contractors to provide the needed services.

Growth vs. Maintenance

The County has not experienced funding pressure brought on by population growth. The County is a heavy forest county with very little urban sprawl. County roads generally serve three purposes: forest access, point to point commuting, or industrial or commercial ingress.

New construction occurring in the County is usually the paving of gravel roads, but new construction has been limited. In 1989, the County only spent $300,000 or five percent of the County's road budget on new road construction.

Future Funding Concerns

Future funding concerns for the County road fund is the exposure of the rest of the County revenue system caused by the passage of Ballot Measure 5. The County's general fund provides overhead services to the Road Fund for which the Road Fund reimburses the general fund. As the County's general fund experiences a decrease in property tax revenues, either the services provided to the Road Fund will decrease causing the Road Fund to internalize overhead services or, the costs of service provided by the general fund may increase substantially. Additionally, the reduction in timber receipts may also be a future funding concern especially if the allocation methods are altered.

Case Study: Multnomah County

Multnomah County is the smallest county in the state, yet supports the largest population base in the State. The County serves as both a commercial and retail center for the State. The County maintains approximately 535 miles of roadway, of which 385 miles are classified as residential. Of the 150 miles of road not classified as residential, approximately 65 miles are arterial roadways and 75 miles are collectors. The County maintains not only roadways but also a number of bridges including bridges which span the Willamette River in the City of Portland.

Current Transportation Funding

Transportation funding decisions are made during the development of the Capital Improvement Plan and Program every two years. The CIP process attempts to identify capacity, safety and maintenance (reconstruction) needs of County roads. The projects listings are then computerized and points allocated based upon safety concerns, economic development potential, and other specific criteria. After prioritizing the projects, the anticipated revenue projection are programmed into the project listing allocating dollars to as many of the prioritized projects as possible.

Prior to finalizing the capital funding list, the County forwards the lists to the cities of Portland and Gresham for review against their anticipated capital projects. Conflicts in funding road projects are especially prevalent now that the cities of Portland and Gresham have undertaken the mid-Multnomah County sewer project. Other road projects in east Multnomah County have been placed on hold until a decision is reached regarding the Mt. Hood Parkway alignment.

The County receives approximately 50 percent of its funding from state highway gas taxes and another 20 percent from the county gas tax. Timber forest receipts account for approximately two percent of the transportation budget with the remaining 28 percent coming from investment income, contract services, permits, and general fund transfers. The County also received monies from contracts with the cities of Fairview, Troutdale, and Wood Village for maintenance services to city streets within the three jurisdictions.

Growth vs. Maintenance

The County does not maintain a computerized pavement management system. County roads are maintained at a visual standard that has been in place for many years. The County's goal is to maintain all roads at the current standard. The County believes that it is keeping up with the road maintenance needs within the County. During the past five years, the County has annually spent $700,000 to $800,000 on overlays. Maintenance needs within the County are given top priority. The allocation of funds to maintenance first has hurt funding for other capital projects including new construction.

Lack of funding has caused a backlog of capital projects. The County has serious concerns regarding bridges maintained by the County. Federal funds available for bridge maintenance are not adequate to meet the current needs of the County's bridges. The County has projected bridge capital needs in excess of $130 million in the next twenty years. These capital needs include: a new Sellwood Bridge over the Willamette River within the next 15 years ($35 million), other capital projects ($50 million), and painting and re-coating ($45 million).

Environmental concerns regarding lead in the paint originally used on the bridges has escalated the cost of repainting almost three times the original estimates. Bridges will need to be containerized prior to removing the old paint to protect the environment. The age of the Willamette River bridges has also increased the cost of maintenance. The bridges are generally movable with old technologies which require specialized training. In the past two years, the County has re-bid six contracts because the capacity of the local contractors was limited, and the training required so specialized, that bids originally received were higher than engineering estimates.

Future Funding Concerns

Two future funding concerns include uncertainty regarding funding at the both the state and national level. As the federal government enters a post-Interstate construction period, the County is concerned about the flow of federal funds to the local governments. The development of region-wide categories for funding could potentially have a negative impact upon the County.

The County is also concerned with funding derived from state sources including state vehicle registration fees. The passage of Ballot Measure 5 will impact the County's road funding also through various general fund transfers and reallocations determined at the state level for both state gas taxes and timber receipts.

Appendix III

Local Road and Street Questionnaire

OREGON DEPARTMENT OF TRANSPORTATION
IN COOPERATION WITH THE LEAGUE OF OREGON CITIES
AND ASSOCIATION OF OREGON COUNTIES
LOCAL ROAD AND STREET QUESTIONNAIRE
FOR FISCAL YEAR ENDING JUNE 30, 1990

I. RECEIPTS FOR ROAD AND STREET PURPOSES

A. RECEIPTS FROM LOCAL SOURCES

1. Property Tax and Special Assessments
- a. Levies within the 6 percent limitation
- b. Serial levies
- c. One year special levies
- d. Local or other special benefit area assessments (LID, EID, other area specific)

2. General Fund and Other Non-Road Fund Transfer

3. Local Road User Taxes
- a. Fuel taxes
- b. Registration fees

4. Other Local Receipts
- a. Interest income
- b. Traffic fines
- c. Parking meters and fines
- d. Land sales and rentals
- e. Traffic impact fees or system development charges
- f. Permits
- g. Hotel/Motel tax
- h. Franchise fees
- i. Other

5. Receipts from Other Local Governments
- a. From Cities
- b. From Counties
- c. Other Albany Redevelopment Agency (ARA)

I. RECEIPTS FOR ROAD AND STREET PURPOSES (CONTINUED)

6. **Proceeds from Sale of Bond and Notes**
   a. Bonds (Must equal item III, B.1)
   b. Notes (Must equal item III, B.2)

B. PRIVATE CONTRIBUTIONS

C. RECEIPTS FROM STATE GOVERNMENT

1. State Highway Fund Apportionment
2. State General Fund
3. Other State Funds (Please specify)

_____

D. RECEIPTS FROM FEDERAL GOVERNMENT

1. Traffic Grants
2. Housing and Urban Development
3. Economic Development Administration
4. National Forest Reserve Revenue
5. Oregon - California Land Grant Revenue
6. 5 percent Distribution of BLM Land Sales
7. Mineral Leases
8. U.S. Taylor Grazing Apportionment
9. Federal Flood Control
10. All other Federal Fund Receipts (Please Specify)

_____

TOTAL RECEIPTS
BEGINNING BALANCE(S)
TOTAL FUNDS AVAILABLE

OREGON DEPARTMENT OF TRANSPORTATION
IN COOPERATION WITH THE LEAGUE OF OREGON CITIES
AND ASSOCIATION OF OREGON COUNTIES
LOCAL ROAD AND STREET QUESTIONNAIRE
FOR FISCAL YEAR ENDING JUNE 30, 1990

II. DISBURSEMENTS FOR ROAD AND STREET PURPOSES

A. LOCAL DISBURSEMENTS

1. Capital Outlay

Construction, Expansion and Preservation

a. Right-of-way
b. Construction engineering
c. Construction and expansion
   (1) Road
   (2) Bridge
d. Repair and preservation
   (1) Road
   (2) Bridge

2. Operations and Maintenance

a. General maintenance of condition
b. Safety and traffic maintenance
c. Snow and ice removal
d. Extraordinary maintenance

3. Administrative and General Engineering

B. DEBT SERVICE ON LOCAL OBLIGATIONS

1. Bonds

a. Interest (including paying fees)
b. Redemption (Must equal item III, C.1)

2. Notes

a. Interest (including paying fees)
b. Redemption (Must equal item III, C.2)

C. PAYMENTS TO OTHER GOVERNMENTS

1. To Counties
2. To Other Local Agencies
3. To Cities
4. To State (Advance payments for state construction)

II. DISBURSEMENTS FOR ROAD AND STREET PURPOSES (CONTINUED)

TOTAL DISBURSEMENTS
ENDING BALANCE
Obligation Reserves
Contingency Reserves
TOTAL FUND ACCOUNTED FOR

HIGHWAY AND TRAFFIC POLICE
From Police Fund or General Fund, please calculate or estimate the amount of police department disbursement applicable to traffic policing.