

*Review* 115775

UNITED STATES GENERAL ACCOUNTING OFFICE

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STATEMENT OF  
HENRY ESCHWEGE, DIRECTOR  
COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION  
BEFORE THE  
SUBCOMMITTEE ON SURFACE TRANSPORTATION  
COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION  
HOUSE OF REPRESENTATIVES

ON

[ HIGHWAY CONDITIONS AND FUNDING ]



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MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

WE ARE HERE TODAY AT YOUR REQUEST TO DISCUSS HIGHWAY CONDITIONS AND HIGHWAY REVENUES. ON MARCH 5, 1981, THE COMPTROLLER GENERAL RELEASED A REPORT ON THIS SUBJECT ENTITLED "DETERIORATING HIGHWAYS AND LAGGING REVENUES: A NEED TO REASSESS THE FEDERAL HIGHWAY PROGRAMS" (CED-81-42). MY STATEMENT TODAY WILL SUMMARIZE AND UPDATE THAT REPORT.

HIGHWAY CONDITIONS

ACCORDING TO THE MOST CURRENT DATA ON HIGHWAY CONDITIONS (1975-78), THE NATION'S HIGHWAYS ARE DECLINING. FOR THE PRIMARY, URBAN, AND SECONDARY SYSTEMS, THE PROPORTION OF PAVEMENT IN GOOD CONDITION DECLINED FROM 36 TO 31 PERCENT, WHILE THE PORTION OF PAVEMENT IN FAIR CONDITION INCREASED FROM 55 TO 61 PERCENT. OVERALL THE AMOUNT OF PAVEMENT IN POOR CONDITION,

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HOWEVER, HAS REMAINED ESSENTIALLY UNCHANGED. THEREFORE, THE GREATEST SHIFT IN THE CONDITION OF THESE ROADS HAS BEEN FROM GOOD TO FAIR.

OF THE HIGHWAY SYSTEMS RECEIVING FEDERAL AID, THE INTERSTATE SYSTEM HAS SHOWN THE MOST SERIOUS WEAR AND TEAR. WHILE THE INTERSTATE REPRESENTS ONLY 1 PERCENT OF THE NATION'S ROADS, IT HANDLES 20 PERCENT OF THE TRAFFIC. IN 1975 ABOUT 73 PERCENT OF INTERSTATE MILEAGE WAS IN GOOD CONDITION. BY 1978 THIS FIGURE HAD DROPPED TO ABOUT 62 PERCENT, WHILE THE PERCENT IN FAIR CONDITION INCREASED FROM ABOUT 23 TO 29 PERCENT. MORE DISTURBING IS THAT THE PERCENTAGE OF MILEAGE IN THE POOR CATEGORY AND IN NEED OF CAPITAL IMPROVEMENT, SUCH AS RESURFACING OR RECONSTRUCTION, HAD MORE THAN DOUBLED. BY 1978, ABOUT 9 PERCENT OF INTERSTATE MILEAGE WAS IN POOR CONDITION--UP FROM ABOUT 4 PERCENT IN 1975.

ROADS IN FAIR CONDITION DETERIORATE FASTER THAN THOSE IN GOOD CONDITION. THEREFORE, THE INCREASING PROPORTION OF PAVEMENT NOW IN FAIR CONDITION, PLUS THE INTERSTATE INCREASE OF PAVEMENT IN POOR CONDITION, FORETELLS A NEED TO INCREASE FUNDS FOR REHABILITATION. THAT IS, MORE MONEY IS NEEDED NOW OR TREMENDOUS AMOUNTS WILL BE NEEDED LATER IF THIS VITAL TRANSPORTATION SYSTEM IS TO BE MAINTAINED.

THE DETERIORATING CONDITION ALSO INCREASES ENERGY COSTS. A DEPARTMENT OF TRANSPORTATION (DOT) STUDY REPORTED THAT FUEL CONSUMPTION INCREASES AN AVERAGE OF 34 PERCENT FOR VEHICLES TRAVELING AT 40 MILES PER HOUR ON A BADLY BROKEN, PATCHED ASPHALT ROAD AS COMPARED TO TRAVELING ON HIGH QUALITY PAVEMENT.

## PRESERVATION COSTS

THE DEPARTMENT IN A 1977 REPORT ESTIMATED THAT A MINIMUM CAPITAL INVESTMENT OF \$14 BILLION (IN CONSTANT 1975 DOLLARS) WOULD BE NEEDED ANNUALLY BY ALL LEVELS OF GOVERNMENT OVER THE NEXT 15 YEARS TO MAINTAIN THE 1975 HIGHWAY CONDITION AND PERFORMANCE LEVEL. THIS INVESTMENT LEVEL WAS REACHED FOR 1975 AND 1976. BY 1979 ONLY ABOUT 61 PERCENT OF THE ANNUAL NEEDED INVESTMENT WAS MADE.

FOR THE INTERSTATE ALONE, THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) ESTIMATED BACKLOGGED REHABILITATION NEEDS OF \$2.6 BILLION IN 1977. ADDITIONALLY, IT ESTIMATED THAT THE STATES WOULD NEED OVER \$18 BILLION FOR THE 20-YEAR PERIOD 1975 THROUGH 1995, OR OVER \$900 MILLION ANNUALLY (IN 1975 DOLLARS) TO KEEP UP WITH INTERSTATE REHABILITATION WORK.

IN A 1980 FOLLOWUP STUDY, FHWA UPDATED INTERSTATE REHABILITATION NEEDS AND ESTIMATED THAT BACKLOGGED REHABILITATION NEEDS HAD INCREASED TO \$7 BILLION. ON TOP OF THAT FIGURE, ABOUT \$14 BILLION WOULD BE NEEDED OVER THE 10-YEAR PERIOD 1980-89 (IN 1979 DOLLARS)--ABOUT \$1.4 BILLION ANNUALLY. THE STUDY CONCLUDED THAT INFLATION AND THE ACCELERATED DETERIORATION OF THE INTERSTATE SYSTEM HAVE AFFECTED THE CURRENT ESTIMATES. FHWA WARNED THAT FURTHER FUNDING DELAYS OR LACK OF SUFFICIENT FUNDS COULD CAUSE A NEED FOR MUCH MORE MASSIVE EXPENDITURES IN THE FUTURE TO RETURN THE ROADWAY TO A REASONABLE AND FUNCTIONAL OPERATING CONDITION.

ANOTHER MAJOR HIGHWAY PROBLEM IS THE NATION'S BRIDGES. AT THE TIME OF OUR REVIEW, THE DEPARTMENT'S LATEST ANNUAL REPORT STATED THAT THE ESTIMATED COST TO REHABILITATE OR REPLACE WELL OVER

100,000 DEFICIENT BRIDGES ELIGIBLE FOR FUNDING UNDER THE FEDERAL HIGHWAY BRIDGE PROGRAM WAS \$33.2 BILLION. WE HAVE NOW LEARNED THAT THE MOST RECENT ESTIMATED COST HAS INCREASED TO ABOUT \$41 BILLION. ABOUT 70 PERCENT OF THE BRIDGES THAT NEED TO BE REPLACED OR REHABILITATED AT AN ESTIMATED COST OF ABOUT \$20 BILLION ARE NOT ON THE FEDERAL-AID SYSTEM. THESE BRIDGES ARE ELIGIBLE FOR FUNDING UNDER THE FEDERAL BRIDGE PROGRAM.

#### HIGHWAY FINANCING

WHILE FUNDING NEEDS FOR HIGHWAY CONSTRUCTION AND MAINTENANCE HAVE INCREASED RAPIDLY, HIGHWAY FINANCING HAS NOT KEPT PACE WITH THESE INCREASES. USING 1970 AS A BASE YEAR, HIGHWAY REVENUES INCREASED ABOUT 60 PERCENT BY 1979. REVENUE GROWTH, HOWEVER, LAGGED CONSIDERABLY BEHIND HIGHWAY CONSTRUCTION AND MAINTENANCE COSTS WHICH INCREASED 145 AND 105 PERCENT, RESPECTIVELY.

ALTHOUGH TOTAL EXPENDITURES HAVE BEEN INCREASING, IN CONSTANT DOLLARS THEY HAVE DECLINED. CAPITAL OUTLAYS FOR CONSTRUCTION AT THE STATE LEVEL FELL DRAMATICALLY, WHILE MAINTENANCE SPENDING INCREASED SLIGHTLY. STATES ARE DEFERRING MAINTENANCE, REDUCING HIGHWAY PERSONNEL, AND REDUCING CONSTRUCTION PROJECTS THAT ARE TOTALLY STATE FINANCED. SOME STATES ALSO ANTICIPATE DIFFICULTY IN MATCHING AVAILABLE FEDERAL FUNDS, COMPOUNDING THEIR HIGHWAY FINANCING PROBLEMS.

STATES DERIVE THE REVENUES USED FOR THEIR HIGHWAY PROGRAMS FROM A VARIETY OF SOURCES BUT RELY PRIMARILY ON STATE CENTS-PER-GALLON MOTOR FUEL TAXES AND FEDERAL AID. IN TURN, FEDERAL AID IS ALSO DERIVED PRIMARILY FROM FEDERAL CENTS-PER-GALLON MOTOR FUEL TAXES. IN THE PAST, REVENUE FROM THIS SOURCE INCREASED AS FUEL CONSUMPTION INCREASED, THUS KEEPING PACE

WITH INCREASED HIGHWAY COSTS. HOWEVER, REVENUE IS NO LONGER KEEPING PACE WITH COST.

THE CHANGE BEGAN WITH THE 1973 FUEL EMBARGO AND HAS BECOME MORE PRONOUNCED IN THE LAST FEW YEARS AS FUEL PRICES, HIGHWAY COSTS, AND THE OVERALL INFLATION RATE HAVE INCREASED WHILE FUEL CONSUMPTION AND THE RELATED TAX REVENUES HAVE NOT KEPT PACE. OTHER FACTORS AFFECTING REVENUES ARE THE ELIMINATION OR REDUCTION OF FUEL TAXES ON GASOLINE AND INCREASED USE OF HIGHWAY REVENUES FOR HIGHWAY PATROL, ADMINISTRATION, AND BOND INTEREST.

TWENTY YEARS AGO THE AVERAGE STATE AND FEDERAL GASOLINE TAXES WERE 19 AND 13 PERCENT, RESPECTIVELY, OF THE RETAIL PRICE OF GASOLINE; TODAY THEY ARE ABOUT 7 AND 3 PERCENT, RESPECTIVELY. AVERAGE STATE TAXES ROSE FROM 6 TO ABOUT 8-1/2 CENTS PER GALLON WHILE THE FEDERAL TAX HAS REMAINED AT 4 CENTS.

STATES ARE TRYING TO INCREASE HIGHWAY REVENUES IN A VARIETY OF WAYS WITH MIXED SUCCESS. THERE HAS BEEN LITTLE ACTION TO INCREASE FEDERAL HIGHWAY TAXES.

A NUMBER OF STATES ARE LOOKING AT VARIABLE MOTOR FUEL TAXES THAT AUTOMATICALLY INCREASE AS PRICES INCREASE. SOME STATES ARE ALSO USING GENERAL TAX REVENUES FOR HIGHWAY PURPOSES OR ARE RAISING REGISTRATION, LICENSE, OR OTHER RELATED FEES. WHILE THESE ACTIONS HAVE HELPED, MOST OF THE HIGHWAY AGENCY OFFICIALS WE TALKED WITH FORESEE THE NEED FOR FURTHER STEPS TO INCREASE REVENUES.

INTERSTATE COMPLETION COSTS  
HAVE INCREASED

COMPLETING THE INTERSTATE SYSTEM IS ONE OF THE MAJOR HIGHWAY CONSTRUCTION COSTS STILL FACING THE NATION. ALTHOUGH 94 PERCENT OF THE SYSTEM IS OPEN TO TRAFFIC, THE COST AS OF

JANUARY 1980 TO COMPLETE THE SYSTEM WAS ESTIMATED AT \$53.8 BILLION. THIS IS NEARLY DOUBLE THE INITIAL ESTIMATE FOR THE ENTIRE SYSTEM OR A 27 PERCENT INCREASE IN JUST 2 YEARS.

AS COMPLETION IS CURRENTLY DEFINED, IT INVOLVES MORE THAN SIMPLY BUILDING A MAJOR HIGHWAY BETWEEN TWO POINTS. ONLY 53 PERCENT OF THE ESTIMATED COMPLETION COST IS FOR BUILDING THE 2,500 OR SO MILES NEEDED TO CLOSE GAPS IN THE SYSTEM. THE REMAINDER IS FOR IMPROVEMENTS DEFINED AS INITIAL CONSTRUCTION ON SEGMENTS ALREADY SERVING TRAFFIC. THESE IMPROVEMENTS INCLUDE SEVERAL CATEGORIES OF UPGRADING AND ADDITIONAL FEATURES TO MINIMIZE SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS SUCH AS NOISE-ABATEMENT MEASURES, FRINGE PARKING AREAS, AND PREFERENTIAL LANES FOR BUSES AND VANPOOLS.

THE FEDERAL SHARE OF THE \$53.8 BILLION ESTIMATED COMPLETION COST IS \$48.6 BILLION. IF THIS ESTIMATE IS REASONABLE AND IF HIGHWAY CONSTRUCTION COSTS CONTINUE TO INCREASE AT THE AVERAGE RATE BETWEEN 1977 AND 1980 (ABOUT 17 PERCENT ANNUALLY), AN AVERAGE ANNUAL INVESTMENT OF \$10.4 BILLION WOULD BE NEEDED TO COMPLETE THE SYSTEM IN 10 YEARS. THE CURRENT INTERSTATE FUNDING OF ABOUT \$3.5 BILLION ANNUALLY WILL CLEARLY NOT BE ENOUGH TO MEET THE FEDERAL SHARE OF REMAINING COSTS. EVEN AT A 5-PERCENT INFLATION RATE, THE ANNUAL NEED WOULD BE \$6.3 BILLION.

AS NOTED, MUCH OF THE COST TO COMPLETE THE SYSTEM IS FOR UPGRADING EXISTING SECTIONS TO CURRENT STANDARDS. REDEFINING COMPLETION TO ELIMINATE THESE COSTS AND FUNDING ONLY ESSENTIAL INTERSTATE GAPS WOULD EXPEDITE COMPLETION BUT WOULD RAISE PROBLEMS AS TO HOW THESE OTHER NEEDS COULD BE FUNDED.

ONE OPTION WHICH FHWA CONSIDERED AT THE TIME OF OUR REVIEW WAS TO MAKE SOME OF THE CURRENT PROGRAM ELEMENTS INELIGIBLE UNDER A REDEFINED INTERSTATE COMPLETION PROGRAM. THIS OPTION WOULD PROVIDE SEPARATE FUNDING FOR THESE ACTIVITIES AND THE 3R (RESURFACING, RESTORING, AND REHABILITATION) PROGRAM WHICH WOULD BE EXPANDED TO INCLUDE RECONSTRUCTION.

SINCE WE COMPLETED OUR REVIEW, THE ADMINISTRATION HAS SUBMITTED PROPOSED LEGISLATION ESSENTIALLY ALONG THESE LINES. TO COMPLETE THE INTERSTATE SYSTEM, THE PROPOSED LEGISLATION WOULD AUTHORIZE ABOUT \$3.3 BILLION FOR 1983 AND \$3.6 BILLION ANNUALLY FOR 1984-90.

WHETHER THE INTERSTATE CAN BE COMPLETED WITHIN 10 YEARS AT THESE FUNDING LEVELS WILL, OF COURSE, DEPEND UPON THE REVISED COST TO COMPLETE UNDER THE NEW DEFINITION AND THE RATE OF INFLATION.

LAST WEEK THE DEPARTMENT INFORMED US THAT USING THE DEFINITION IN THE ADMINISTRATION'S BILL FOR THE INTERSTATE CONSTRUCTION PROGRAM, THE COST TO COMPLETE THE INTERSTATE SYSTEM IS ESTIMATED TO BE \$31.2 BILLION WITH THE FEDERAL SHARE BEING \$28 BILLION. TO COMPLETE THE SYSTEM IN 10 YEARS UNDER THE PROPOSED FUNDING LEVELS, THE INFLATION RATE WOULD HAVE TO BE 5 PERCENT WHICH SEEMS UNLIKELY. AT THE 17-PERCENT ANNUAL INFLATION RATE USED IN OUR REPORT \$6 BILLION WOULD BE NEEDED ANNUALLY TO COMPLETE THE INTERSTATE SYSTEM. EVEN AT 15-, AND 10-PERCENT INFLATION RATES, \$5.6, AND \$4.6 BILLION, RESPECTIVELY, WOULD BE NEEDED ANNUALLY--ALL IN EXCESS OF CURRENT AND PROPOSED FUNDING LEVELS.

RECOMMENDATION TO THE CONGRESS

IN OUR REPORT WE RECOMMENDED THAT THE CONGRESS ADDRESS:

--GIVING PRIORITY TO PRESERVING EXISTING HIGHWAYS WITH EMPHASIS ON THE INTERSTATE SYSTEM.

--ASSESSING THE GOAL OF INTERSTATE COMPLETION AS CURRENTLY DEFINED, POSSIBLY GIVING PRIORITY TO FUNDING ESSENTIAL GAPS.

--ANALYZING STATE EFFORTS AND CAPABILITIES TO INCREASE HIGHWAY REVENUES AND TO PRESERVE HIGHWAYS.

--USING HIGHWAY REVENUES TO FUND THE FEDERAL-AID HIGHWAY PROGRAM.

--REVISING THE FEDERAL MOTOR FUEL TAX AND OTHER HIGHWAY REVENUE SOURCES TO BE MORE RESPONSIVE TO HIGHWAY NEEDS AND THE INFLATIONARY TRENDS IN HIGHWAY COSTS.

IN COMMENTING ON OUR REPORT, THE DEPARTMENT OF TRANSPORTATION REGISTERED BASIC AGREEMENT WITH THE ISSUES WE HAD PRESENTED AND NOTED THAT APPROPRIATE ATTENTION WOULD BE GIVEN TO THEM AS PART OF THE 1981 LEGISLATIVE CYCLE.

THIS CONCLUDES MY STATEMENT. WE WILL BE GLAD TO RESPOND TO YOUR QUESTIONS.