



# UNITED STATES CENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20048

HESOURCES, COMMUNITY,
AND ECONOMIC DEVELOPMENT
DIVISION

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Mr. Ray A. Barnhart, Administrator Federal Highway Administration Department of Transportation



Dear Mr. Barnhart:

Subject: Better Estimates and State Action Needed on Coal Haul Roads

In our brief survey of the coal road system, we discovered several areas of concern. Past congressional efforts to establish and finance a Federal program for improving the coal road system have not gathered enough support, but interest in such a program continues. Because FHWA will continue to be involved with this program, we believe that you should be aware that (1) projected coal road mileage and improvement estimates may be currently overstated and should be closely reexamined, (2) State efforts to prevent damage caused by overweight coal trucks are inadequate, and (3) funds received by States from coal road users and the coal industry do not appear to be sufficient to fund coal road improvements.

In addition to work at FHWA headquarters office, we visited FHWA division offices and State highway and other department offices in Colorado, Kentucky, and Pennsylvania. We do not plan any additional audit work on the coal road issue at this time.

#### **BACKGROUND**

Prior to 1970, coal was a regional fuel and its transportation was limited to regional needs. After the 1973-74 oil embargo, conversion to coal use from oil and construction of coal-burning facilities were emphasized. The Carter Administration called for almost a doubling of annual coal production by 1985 over 1976 levels. Various DOT and State highway department studies since the early 1970s have shown that many of the coal roads are deteriorating rapidly and are in desperate need of repair or replacement.

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A 1980 FHWA study shows that the projected 1985 national coal road system contains 34,200 miles in 21 coal-producing States with Pennsylvania and Kentucky leading with 8,600 and 7,400 miles, respectively. More than 75 percent of the 34,200-mile coal road system is on the Federal-Aid Highway System. Over 60 percent of the Federal-aid coal roads were identified by the participating States as deficient while 90 percent of the non-Federal-Aid System's coal roads were considered deficient. This 1980 report entitled "Coal Haul Roads Study" is the latest national coal road study and was made in response to a 1976 congressional mandate to the Secretary of Transportation and to the Secretary's 1978 coal road report. The projected 34,200-mile system and its associated costs of \$20.4 billion for improvements were based on unconfirmed information submitted by the States using FHWA criteria.

### PROJECTED COAL ROAD SYSTEM MAY BE OVERSTATED

Identifying a projected coal road system, its mileage, and costs to make needed improvements is extremely difficult because of the ever-changing coal market demand and coal mine locations. The 1980 FHWA study, which identified a coal road system needed by 1985, appears to be overly optimistic in terms of 1982 conditions. The study projected an 8,569-mile 1985 coal road system for Pennsylvania, but in 1982 Pennsylvania transportation officials identified less than 3,000 miles to represent its present and projected coal road system. The study also projected Kentucky with a coal road system of 7,403 miles, but over the past few years Kentucky's coal road mileage has varied from a high of 7,687 miles to a low of 5,644 miles. Furthermore, Colorado was projected to have 454 miles, but coal roads are considered of little concern in relation to other traffic needs. Also, no other information has been developed since Colorado's initial input into the FHWA study.

Cost estimates to improve the coal road system vary considerably. Based on State input, the same FHWA study estimated the improvement cost at \$20.4 billion. Considering 13 possible alternatives, such as not including Interstate highways and certain improvement standards, the FHWA study estimated that the improvement cost could vary from \$3.9 billion to \$20.4 billion. In addition, seven Appalachian States, which account for 87 percent of the maximum improvement cost, developed their own estimate of \$8.8 billion. Their estimate was based on eliminating certain highway design standards, such as widening highway shoulders, and limiting most of the improvement to highway load-carrying capacity.

The Kentucky Department of Transportation commented on the FHWA Coal Haul Road Study by stating that:

"Fluctuations associated with coal production and marketing, and the resulting instability of coal transport patterns significantly affect the accuracy of coal haul road data. Therefore, long range coal transportation decisions are risky at best due to the fact that the data normally the basis for such decisions becomes obsolete almost overnight."

## STATE EFFORTS TO PREVENT DAMAGE BY OVERWEIGHT COAL TRUCKS ARE INADEQUATE

Overweight truck traffic is considered a primary cause of rapid deterioration of highways, yet the three States we visited are not effectively combating the problem. Weight enforcement programs are not effective because of difficulty in apprehending drivers of overweight trucks, low and reduced fines, and dismissed cases. Also, two of these States have limited enforcement budgets and personnel, and one is enacting a law which will allow coal loads in excess of State weight limits.

Kentucky was the only State visited which maintained statistics on the numbers of coal trucks in violation of weight limits. Those statistics showed that 64 percent of the 13,467 overweight citations issued during a 17-month period in the State were for trucks hauling coal. In 14 selected Kentucky counties during April 1982, 215 overweight citations were issued for coal trucks, of which 117 were overweight in excess of 20,000 pounds. Assuming that most of the overweight coal trucks were three-axle dump trucks, an additional 20,000 pounds over the weight limit causes about five times more pavement damage than the same truck loaded to the legal weight limits.

Kentucky has a maximum fine of \$500 for operating an overweight truck. A brief analysis of disposition of overweight citations in eight coal-producing counties of Kentucky for a 2-week period showed that of 146 citations, 34 were dismissed, 8 had fines suspended, and the remaining 104 were fined an average of \$63. In addition, the 1982 Kentucky General Assembly recently passed a bill enabling coal truck drivers to obtain a permit to haul coal loads in excess of State weight limits up to certain amounts on designated routes. State officials were preparing implementation guidelines when our work was completed.

The two other States have limited weight enforcement efforts. Colorado closed 12 of 21 permanent highway scales for

economy reasons and reduced the budgets and personnel of truck weight enforcement offices. In the midst of the Pennsylvania coal mining area, we found that weight enforcement consisted of one mobile team that covered two large counties and worked only a maximum of 40 hours a week.

Overweight truck enforcement problems were addressed in GAO's July 16, 1979, report entitled "Excessive Truck Weight: An Expensive Burden We Can No Longer Support " (CED-79-94) and were also the subject of July 1979 hearings before the House Subcommittee on Oversight, Committee on Ways and Means.

### FUNDS GENERATED BY COAL ROAD USERS ARE LIMITED

Efforts have been made in the Congress to establish a Federal program for funding coal road improvements, but those efforts have not gathered enough support. Federal funding for roads in coal areas is available through the regular Federal-Aid Highway Program, but the States we visited placed no special emphasis on highway projects designed to improve coal roads.

In addition to Federal funds and other State revenue sources, two of the States visited had a tax based on the amount of coal mined—a coal severance tax. Only one designated any portion of the coal tax receipts for coal road projects. Kentucky and Colorado transportation officials told us a greater amount of severance tax receipts should be returned to coal-producing counties to repair damage to roads caused by coal trucks and to finance road improvements. Pennsylvania has a road bonding program in which truck operators pay for road damage resulting from their heavy loads. According to State officials, the income from the bonding was considered insufficient to adequately repair damages.

In August 1978, former Secretary of Transportation
Brock Adams reported to the Congress that (1) there were a
number of revenue sources that States might use to finance
energy-related highway needs, (2) the coal industry should bear
the cost of making the improvements since ultimately coal users
will derive important benefits from coal road improvements, and
(3) a national coal severance tax was recommended as a potential
long-term solution to providing revenues necessary for coal road
improvements under a Federal coal road program. The national
coal severance tax was recommended to keep the costs within the
coal sector, thus maintaining a strong reliance on the "user
pays" principle and allowing the price of coal to more adequately reflect all costs.

#### CONCLUSION

We understand that efforts are continuing within the Congress to establish a Federal program designed to improve the Nation's coal haul roads. We believe the matters discussed above, particularly the potentially overstated mileage and cost estimates, should be closely reexamined before any coal road program is established. In addition, inadequate State efforts to prevent highway deterioration caused by overweight coal trucks and the limited amount of State funds collected from coal road users to cover the cost to repair and improve the coal roads should be specifically addressed when establishing a Federal coal road program. We would be happy to meet with you or your representatives for further discussions on the matters in this report if you desire.

Sincerely yours,

Oliver W. Krueger

Associate Director