Office of the Inspector General
Audit Report

Apportionment of Federal-aid Highway Funds

Federal Highway Administration

Report Number: AS-FH-7-001
Date Issued: October 16, 1996

Memorandum

U.S. Department of Transportation
Office of the Secretary of Transportation
Office of Inspector General

Subject: INFORMATION: Report on Apportionment of Federal-aid Highway Funds, Federal Highway Administration
Report No: AS-

Date:

Reply To
Attn Of: Kerr:X61429

From: Lawrence H. Weintrob
Assistant Inspector General for Auditing, JA-1

To: Federal Highway Administrator

I am providing this report for your information and use. Your September 20, 1996, comments on the June 25, 1996, draft report were considered in preparing this report. A synopsis of the report follows this memorandum.

You agreed with the recommendation. The recommendation is resolved subject to the followup requirements of Department of Transportation Order 8000.1C.

I appreciate the courtesies provided by FHWA officials during this review. If you or your staff have any questions or would like additional information, please contact me on (202) 366-1992 or Alexis M. Stefani on (202) 366-0500.

Attachment

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U.S. Department of Transportation

Office of the Inspector General

Apportionment of Federal-aid Highway Funds

Federal Highway Administration

Report No. AS-FH-7-001 ***October 16, 1996***

SYNOPSIS

Objective

The audit objective was to determine whether the Federal Highway Administration (FHWA) apportionment of Highway Trust Funds for Federal Highway Grant Programs was in compliance with statutory formulas, related appropriations acts, and applicable laws.

Conclusions

Fiscal Year 1995 Federal-aid highway fund apportionments were in compliance with statutory formulas, related appropriations acts, and applicable laws. However, we identified an internal control weakness in the lack of written systems documentation for the apportionment process. The audit also identified a weakness concerning access to the computer system used in the apportionment process. These weaknesses did not affect the 1995 apportionment calculations. During the audit FHWA implemented adequate additional controls to improve computer system security.

Monetary Impact

No monetary impact is associated with the finding. However, implementing the report's recommendation will improve FHWA's controls over the apportionment process.

Recommendation

We recommended FHWA establish written systems documentation on the apportionment process which would establish responsibilities and define tasks and methodology for accomplishing program objectives.

Management Position

FHWA concurred with the recommendation.

Office of Inspector General Comments

Action planned is reasonable and the recommendation is resolved.

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I. INTRODUCTION

Background

The Federal-aid Highway Program provides matching Federal assistance to the states for the construction and repair of highways. The Intermodal Surface Transportation Efficiency Act of 1991 authorized approximately $120 billion for the Federal-aid Highway Program for Fiscal Years (FY) 1992 through 1997. In FY 1995, $18.2 billion of Federal-aid highway authorizations were distributed to the states based on seven statutory formulas and three funding equity apportionments.

Before authorizations are distributed, two deductions are made. The first deduction is a statutory allowance not to exceed 3.75 percent of authorized sums for administrative expenses and conducting research. The second deduction is used to finance metropolitan transportation planning activities. This deduction is equivalent to 1 percent of the authorizations remaining after the administrative deduction is made. Although these are the only deductions applied programwide, other funds are set aside for particular purposes. For example, $100 million of the interstate construction funds are set aside annually as a discretionary fund. Also, there is a set-aside of the Bridge Replacement and Rehabilitation Program authorization each year for a bridge discretionary fund and an annual set-aside from the National Highway System Program authorization for an Interstate 4R (resurfacing, restoring, rehabilitation, and reconstruction) discretionary fund.

After these deductions and set-asides, the Federal Highway Administration (FHWA) apportions the remaining sums among the states. The apportionments are based on formulas and procedures prescribed by law. As examples, interstate construction apportionments are based on the cost to complete the Interstate System in each state; interstate maintenance apportionments are based on the Interstate System lane miles (weighted 55 percent) and vehicle miles traveled on those lanes (weighted 45 percent).

FHWA apportioned and distributed about 84 percent of the FY 1995 authorization to states based on seven statutory formulas: Interstate Construction, Interstate Maintenance, Interstate Highway Substitution, Bridge Replacement and Rehabilitation, National Highway System, Surface Transportation Program, and the Congestion Mitigation and Air Quality Improvement Program. An additional 16 percent of the FY 1995 authorization was distributed by formulas in three funding equity categories of Minimum Allocation, Donor State Bonus, and Hold

Harmless. The intent of the funding equity is to address the concerns of states that contribute more in highway user taxes than they receive in Federal-aid highway funds and provide each state with the same relative share of overall funding that it had received in the past.

Objective, Scope, and Methodology

The objective of the audit was to determine whether the FHWA apportionment of Highway Trust Funds for Federal Highway Grant Programs was in compliance with statutory formulas, related appropriations acts, and applicable laws. The audit, which covered FY 1995 apportionments, was conducted between November 1995 and March 1996 at FHWA Headquarters in Washington, D.C.

The audit evaluated the effectiveness of FHWA's apportionment process by reviewing FHWA's methods for acquiring, reviewing, and ensuring the accuracy of data used in apportionment calculations and by verifying the actual apportionment calculations. The apportionment criteria in Title 23 of the United States Code and related appropriation acts were compared to the apportionment formulas used in the actual calculations. The internal controls used by FHWA in the apportionment process were also reviewed. The audit independently calculated apportionments and compared the output to FHWA apportionments.

Four apportionment calculations and one funding equity calculation were selected for review based upon (1) the dollar size of the FY 1995 apportionment and (2) the type of apportionment factors. The four apportionments and one funding equity category reviewed accounted for $10.5 billion of the $18.2 billion (58 percent) of the FY 1995 apportionments. Exhibit A shows the apportionments examined together with the factors applicable to the apportionments. The apportionment formulas which were not examined use either similar calculations or similar factors as those examined.

The audit was performed in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States and included such tests of procedures and records as we considered necessary in the circumstances. Audit steps were designed to provide reasonable assurance of detecting abuse or illegal acts.

Management Controls

We reviewed the internal controls used by FHWA in apportioning Federal-aid highway funds. As part of our review, we determined whether (1) the apportionment formulas included the specific factors and weights established by statute, (2) data used to calculate the apportionment formulas were obtained from appropriate sources and tested to ensure that they were accurate and current, (3) apportionments were accurately computed in accordance with prescribed formulas, and (4) states were apportioned no less than the minimum allocations guaranteed in accordance with allocation formulas.

In addition, we reviewed and independently calculated each state's apportionments for the programs included in our audit and tested computer security controls over access to FHWA's Financial Management Information System (FMIS). The audit did not examine FHWA's regional and division office controls or state controls over data used in apportionment formulas. Part II of this report discusses a management control weakness.

Prior Audit Coverage

The accuracy of Federal-aid highway apportionment was previously reviewed in an Office of Inspector General (OIG) survey, Report No. AS-FH-0-023, dated May 7, 1990. The OIG found no material differences in FHWA's computations for FY 1989 Federal-aid highway fund apportionments and did not disclose any internal control weaknesses.

An OIG audit report titled, "Bridge Sufficiency Rating Development" (Report No. R7-FH-5-003, dated April 3, 1995), disclosed that FHWA monitoring did not ensure the accuracy of the state's structural inventory and appraisal input used to calculate sufficiency ratings. As a result, errors existed in the National Bridge Inventory data that impacted the apportionment calculations. Region 7 found data on 2 of 147 bridges reviewed were erroneously included in bridge apportionment calculation. Region 7 estimated that $12 million out of the $1.2 billion annual bridge apportionment (1 percent) was improperly distributed. FHWA agreed to continue its efforts to stress to the states to accurately enter bridge data on a current basis.

II. FINDING AND RECOMMENDATION

Our survey found FHWA's computations for FY 1995 Federal-aid highway fund apportionments were in compliance with statutory formulas, related appropriations acts, and applicable laws. However, we identified an internal control weakness in the lack of written systems documentation for the apportionment process. The audit also identified a weakness concerning access to the computer system used in the apportionment process. The weaknesses did not affect the 1995 apportionment calculations. During the audit, FHWA implemented adequate additional controls to improve computer system security.

Finding: Systems Documentation

Systems documentation needs to be developed to improve management controls over the apportionment process. Currently, three FHWA officials calculate the apportionments for each state without the benefit of written systems documentation. Systems documentation is required by Department of Transportation (DOT) Order 5100.4B as part of the system of management controls. Systems documentation to define the responsibilities and processes for performing this sensitive function was not prepared because of the lack of personnel resources and higher priority work under tight timeframes. Without this documentation, the ability to perform this function and the integrity of apportionments could be jeopardized by the loss of key officials. Also, the lack of systems documentation hinders independent analysis to verify the accuracy of the apportionments.

Discussion

FHWA's Program Analysis Division in the Office of Fiscal Services (HFS-30) does not have written systems documentation for the apportionment process as required by DOT Order 5100.4B. *DOT Order 5100.4B, entitled "Department of Transportation Management Control Systems," requires Secretarial Offices and Operating Administrations to establish a system of management controls to provide reasonable assurance that their resources are protected against fraud, waste, abuse, mismanagement, or misappropriation. The management control system would include written documentation of policies and procedures, risk assessments, operating procedures, and administrative practices necessary to communicate responsibilities and authorities for accomplishing programs and activities and ensuring adequate controls are in place.*

Three HFS-30 officials are primarily responsible for the apportionment process which includes (1) developing and revising apportionment formulas in response to reauthorization actions by Congress, (2) obtaining information used in apportionment formulas, and (3) making annual apportionment calculations. These activities are time consuming, performed under tight timeframes, and involve a complex set of actions and calculations. HFS-30 officials indicated the development and use of systems documentation are needed, but the office lacks the staff needed to both perform their daily mission and develop procedures. The staff has been reduced from five in FY 1993 to three in FY 1995.

Written systems documentation to document the responsibilities and processes of the apportionment process is needed to ensure the continuing operation of an effective apportionment process during any changes in HFS-30 personnel. Furthermore, documentation provides added assurance that financial resources are safeguarded against errors or irregularities and serves as a reference for persons reviewing program operations and internal controls.

Recommendation

We recommend that FHWA develop written systems documentation on the apportionment process which would establish responsibilities and define methodology for accomplishing program objectives.

Management Response

FHWA concurred with the recommendation. FHWA anticipates substantial changes to the formulas used to apportion Federal-aid highway funds during the upcoming congressional deliberations over the reauthorization of the program. Congressional action is not likely to be completed until late 1997, with the first distribution of funds under a revised program structure using new formulas occurring in FY 1998. FHWA expects to complete development of the documentation following these apportionments in FY 1998. The complete text of management comments is the appendix to this report.

Audit Comments

Action planned is reasonable. The recommendation is resolved.

Other Matters

As part of the audit, the audit staff tested the security over access to the FMIS by obtaining user identifications (user-ids) from the Transportation Computer Center (TCC) and attempting to enter computer system applications for which the staff was not given access. The user-ids provided by TCC should have allowed the staff to access only the FMIS test system. However, one user-id allowed the auditors to access the FMIS production system. This access was possible because a user-id was not deleted from access to the FMIS production system at the same time the user-id was deleted from access to the TCC mainframe computer.

According to FHWA officials, the user-id assigned to the auditor had previously been assigned to an FHWA employee who required access to the FMIS production system. The FHWA employee never accessed the FMIS system and TCC deleted the user-id from access to TCC's mainframe computer because of nonactivity. However, TCC did not delete the user-id from having access to the FMIS production system. Therefore, when the user-id was reactivated for use by the auditor, the auditor inherited the former user's access to the FMIS production system.

When the unauthorized access was brought to the attention of FHWA, FHWA and TCC officials initiated the following procedures to improve computer access controls: (1) whenever TCC deletes user-ids for nonactivity, they will also delete the user-id from the FMIS production system and create a file of deleted user-ids and (2) FHWA will process the file of deleted user-ids against the FMIS database to make sure the deleted user-ids are taken out of FMIS. The Computer Security Act of 1987 requires agencies to establish security measures commensurate with the risk and magnitude of harm that would result from the loss, misuse, unauthorized access to, or modification of the information contained in the system. Based on our analysis of the added controls and on discussions with OIG computer system specialists, TCC officials, and FHWA's computer security officer; FHWA's added security procedures appear adequate for the level of risk to the FMIS.

Apportionments and Funding Equity Categories Reviewed

Program	Apportionment Factors	Apportionment	Percent of total
Interstate Maintenance	Interstate System lane miles Vehicle miles traveled on Interstate System	$2,776,677,750	15.25
Bridge Replacement and Rehabilitation	Relative share of total cost of deficient bridges	$2,549,114,372	14.00
CMAQ[1]	Non-attainment area population	$979,555,500	5.38
National Highway System	Percent share of funds apportioned in FY for: National Highway System, Interstate Maintenance, Surface Transportation Program, and Bridge Replacement and Rehabilitation	$3,331,743,154	18.29
Hold Harmless	The ISTEA[2] establishes a legislative percentage that each state must receive each FY based on the total funding to be distributed.	$912,748,033	5.01
Subtotal of apportionments and funding equity category reviewed		$10,549,838,809	57.93
	Apportionments and Funding Equity Categories not Reviewed		
Interstate Construction	Relative Federal share of cost to complete the system	$1,612,500,000	8.85
Interstate Highway Substitution	Relative Federal share of cost to complete substitute projects	$231,000,000	1.27
Surface Transportation Program	Basically same as for the National Highway System	$3,897,976,000	21.40
Minimum Allocation	For FY 1992-97, each state is guaranteed an amount so its percentage of total apportionments received in the prior year shall not be less than 90 percent of the percentage of estimated contributions to the Highway Trust Fund, not including the Mass Transit Account.	$1,426,822,463	7.83
Donor State Bonus	For each FY 1992-97, donor states are identified by comparing each state's projected contributions to the Highway Trust Fund in the FY to the apportionments that will be received by the state in that FY.	$494,725,000	2.72
Subtotal of apportionments and funding equity categories not reviewed		$7,663,023,463	42.07
Total of apportionment formulas and funding equity categories		$18,212,862,272	100

[1]Congestion Mitigation and Air Quality Improvement Program
[2]Intermodal Surface Transportation Efficiency Act of 1991

AUDIT TEAM MEMBERS

The following is a listing of the team members who participated in the Audit of FHWA Apportionment of Federal-aid highway funds.

Robert Kerr	Program Director
Edward Stulginsky	Program Manager
LaKarla Lindsay	Auditor-In-Charge
Stanwyn Becton	Auditor

U.S. Department of Transportation
Federal Highway Administration

Memorandum

Subject: INFORMATION: Office of Inspector General (OIG) Draft Report: Apportionment of Federal-aid Highway Funds

Date: September 20, 1996

From: Associate Administrator for Administration

Reply to Attn Of: HMS-11

To: Ms. Alexis M. Stefani
Director, Office of Transportation Program Audits (JA- 10)

We have reviewed the draft report on Apportionment of Federal-aid Highway Funds, which recommends that FWA establish written systems documentation on the apportionment process We "concur in the recommendation. However, we do not believe it would be appropriate to complete such documentation at this time. We anticipate substantial changes to the formulas used to apportion Federal-aid highway funds during the upcoming Congressional deliberations over the reauthorization of the program. Congressional action will likely not be complete until late 1997. with the first distribution of funds under a revised program structure using new formulas occurring in FY 1998. We would expect to complete the recommended documentation following these apportionments in FY 1998.

We appreciate the opportunity to comment on this draft report. If there are questions, please contact Kathy Ray, FHWA's audit liaison, at 366-9380

George S. Moore, Jr.