
Office of Inspector General

Audit Report

Emergency Relief Program

Federal Highway Administration

Report Number R0-FH-7-009

Date Issued: August 26, 1997





**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

Office of Inspector General

Memorandum

Subject: ACTION: Report on Emergency Relief
Program, Federal Highway Administration
Report No. R0-FH-7-009

Date: August 26, 1997

From:


Lawrence H. Weinrob
Assistant Inspector General for Auditing

Reply to JA-1
Attn of:

To: Anthony R. Kane
Acting Deputy Federal Highway Administrator

We are providing this report for your information and use. After meeting with FHWA staff on June 5, 1997, we revised our draft report to include additional information concerning FHWA's position on several issues. We considered your July 7, 1997, response in preparing this report. A synopsis of the report follows this memorandum.

FHWA agreed with our recommendations but did not fully agree with findings for some individual projects. However, the actions taken or planned by FHWA are responsive to the audit recommendations. With these actions, FHWA can better control highway funds and assure they are put to their best possible use. We consider the recommendations resolved, subject to the followup provisions of Department of Transportation Order 8000.1C.

I appreciate the courtesies and cooperation extended to our staff during the audit. Please call me at (202) 366-1992, or Ronald Hambrick, Regional Manager, at (206) 220-7754, if you have questions or need additional information concerning this report.

#

Emergency Relief Program

Federal Highway Administration

Report Number: R0-FH-7-009

August 26, 1997

Objectives

The objectives of our audit were to determine whether the Federal Highway Administration (FHWA) (i) used emergency relief funds in accordance with program eligibility criteria applicable to projects resulting from natural disasters and catastrophic events, and (ii) pursued and received credits from insurers and responsible third parties when Federal aid was used to pay for repairs to damaged transportation facilities.

Background

The Emergency Relief Program provides financial assistance to help states repair highway facilities seriously damaged by natural disasters such as hurricanes and floods, or by catastrophic events such as a bridge suddenly collapsing after being hit by a barge. The program provides states with funding above and beyond their regular Federal highway funding. Emergency relief projects do not compete against other highway projects for funding. Federal regulations, however, preclude the use of emergency relief funds in correcting non-disaster-related deficiencies or improving highway facilities beyond current standards.

FHWA allocates \$100 million annually to the Emergency Relief Program from the Highway Trust Fund. However, Congress frequently supplements these allocations. FHWA provided emergency relief totaling \$2.7 billion on Federal-aid highways for the period covered by our audit; October 1, 1988, through June 30, 1995. We audited FHWA's administration of emergency relief funds in California, Florida, Georgia, Missouri, and Washington. These states received \$2.3 billion of the \$2.7 billion emergency relief that FHWA provided on Federal-aid highways during the audit period. We reviewed 82 projects, which accounted for \$1.3 billion of the \$2.3 billion emergency relief paid to these states.

Results-in-Brief

FHWA properly pursued and received credits from insurers and responsible third parties when Federal aid was used to pay for repairs to damaged highway facilities. However, FHWA needs to improve program guidance and adherence to existing regulations.

Federal regulations state: “Emergency relief funds may participate in . . . betterments, such as relocation, replacement, upgrading or other added features not existing prior to the disaster, only where clearly economically justified to prevent future recurring damage.” We reviewed 10 emergency relief projects to repair damage caused by the Loma Prieta Earthquake to the Cypress Viaduct in Oakland, California. We found the 10 projects included betterments recommended through the environmental review process. These betterments were not economically justified and included items such as replacing the 1.5 mile, two-tier highway with 5 miles of single-tier freeway and adding new interchanges to improve access to local streets and port facilities. FHWA’s Emergency Relief Manual did not clearly require betterments resulting from the environmental review process to be economically justified to prevent future recurring damage.

Except as noted above, FHWA had adequate guidance for administering the Emergency Relief Program. FHWA did not fully comply with its existing guidance for 27 projects. We found FHWA division offices did not adhere to existing regulations when they:

- exceeded the Federal share payable for 19 projects;
- duplicated assistance available under other Federal programs for five projects;
- did not prepare economic justifications for two projects with betterments, neither of which resulted from an environmental review; and
- did not withdraw funds for one project that was not proceeding timely to construction.

Further, we found eight of the 27 projects included \$1.9 million overpayments caused by billing errors. The overpayments were included in seven projects where FHWA exceeded the Federal share payable and one project where emergency relief duplicated assistance available under another Federal program.

Monetary Impact

FHWA could have made better use of \$104 million (22 percent) of the \$463 million emergency relief provided for the 27 projects where division offices did not follow regulations. FHWA did not have detailed cost estimates available for us to make a similar determination for the 10 projects valued at \$879 million under the Cypress Replacement Project.

FHWA is taking action to recover the \$1.9 million overpayments caused by billing errors. We did not recommend FHWA recover funds for any additional projects because states acted in good faith based on FHWA advice.

Recommendations

In addition to recovering overpayments caused by billing errors, we recommended the Acting Administrator, FHWA:

- update program guidance to ensure betterments recommended by the environmental review process are economically justified in accordance with Federal regulations,
- direct headquarters staff to regularly monitor and consult with field staff to ensure adherence to existing regulations, and
- direct field staff to closely monitor emergency relief projects and reprogram funds for those projects not progressing in a timely manner.

Management Position

We revised the draft report to include additional information concerning FHWA's position on several issues. FHWA agreed with all the recommendations in the revised draft report but did not fully agree with our findings for some individual projects.

FHWA expects to update its Emergency Relief Manual by March 1998 to provide funding on a consistent basis among states, clarify eligibility matters, and improve program administration. Also, FHWA plans to develop a training course on the Emergency Relief Program by October 1998, while continuing workshops to discuss regulations and guidance with Federal, state, and local agency personnel involved in the program. Further, FHWA will more closely monitor emergency relief projects.

Office of Inspector General Comments

The actions taken or planned by FHWA are responsive to the audit recommendations. With these actions, FHWA can better control highway funds and assure they are put to their best possible use. We consider the recommendations resolved and no further FHWA response is required.

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I. INTRODUCTION

Background

The Federal Highway Administration's (FHWA) Emergency Relief Program was established to provide financial assistance to states for repair of Federal-aid highways and highway facilities damaged by natural disasters and catastrophic events. The Emergency Relief Program requires FHWA and states to follow certain procedures when a natural disaster or catastrophic event occurs. First, a state develops evidence that damaged Federal-aid highways qualify for emergency relief. Then, the state petitions FHWA to declare the conditions eligible for emergency relief. When FHWA's Administrator makes an affirmative finding on a state's petition for emergency relief, FHWA Headquarters allocates funds to the region having jurisdiction over the state. Within each region, state division offices administer the program by assessing and inspecting damages, authorizing repair projects and funds, coordinating with other agencies, and monitoring project work.

The Emergency Relief Program provides states with funds beyond their annual highway apportionments. FHWA allocates \$100 million annually to the Emergency Relief Program from the Highway Trust Fund. Moreover, the Congress frequently supplements these allocations for unique and unusually costly emergencies. FHWA provided emergency relief totaling \$2.7 billion on Federal-aid highways in 40 states, American Samoa, Guam, Puerto Rico, and the Virgin Islands between October 1, 1988, and June 30, 1995.

Objectives, Scope, and Methodology

The objectives of our audit were to determine whether FHWA (i) used emergency relief funds in accordance with program eligibility criteria applicable to projects resulting from natural disasters and catastrophic events, and (ii) pursued and received credits from insurers and responsible third parties when Federal aid was used to pay for repairs to damaged transportation facilities.

We audited FHWA's administration of emergency relief funds obligated for Federal-aid highways during the period October 1, 1988, through June 30, 1995, in the states of California, Florida, Georgia, Missouri, and Washington. These five states accounted for \$2.3 billion of the \$2.7 billion emergency relief provided for Federal-aid highways during the audit period.

FHWA provided us with a list of 3,985 Federal-aid highway projects for which emergency relief funds were obligated during the audit period. This listing included 1,719 projects for the five states audited. The Office of Inspector General's statistician divided the 1,719 projects into six strata by project dollar amounts; gave each project an identification number; and statistically selected 82 projects for our audit. Emergency relief obligations totaled \$1.3 billion for the

82 projects. Exhibits A and B to this report show emergency relief obligations and projects audited, respectively, for the period covered by our audit.

We conducted our audit from July 1995 through June 1996 in accordance with the Government Auditing Standards prescribed by the Comptroller General of the United States. We reviewed legislation, regulations, and FHWA's Emergency Relief Manual to understand program requirements. To determine how well FHWA carried out its oversight responsibilities, we (i) interviewed program managers and reviewed records for selected emergency relief projects at FHWA Headquarters, and (ii) interviewed key program officials and reviewed cost information, project files, and documents such as eligibility determinations, work authorizations, environmental impact statements, and progress reports in FHWA division offices and at state and local highway agencies.

We tested FHWA management controls for the Emergency Relief Program. These controls included measures for assessing and reporting natural disasters and catastrophic events, determining eligibility for emergency relief, verifying damage, documenting cost estimates to restore or reconstruct damaged Federal-aid facilities, coordinating with other agencies, authorizing emergency relief funds, and monitoring emergency relief projects. Part II of this report discusses management control weaknesses.

Prior Audit Coverage

The Office of Inspector General has not audited FHWA's Emergency Relief Program during the past 5 years.

General Accounting Office (GAO) Report No. GAO/RCED-96-136, Emergency Relief: Status of the Replacement of the Cypress Viaduct, dated May 1996, disclosed the replacement project was more extensive and costly, and posed greater schedule risks, than rebuilding the Cypress Viaduct along its original alignment. GAO questioned whether improvements and costs resulting from significantly shifting the project from its predisaster location to a new location, while changing its scope, should have been funded through FHWA's Emergency Relief Program. Also, GAO questioned whether FHWA guidance establishes clear limits on funding projects through the Emergency Relief Program, particularly when an environmental review recommends enhancements to a facility beyond its predisaster condition.

FHWA disagreed with GAO's characterization of the Cypress Replacement Project as a betterment. Also, FHWA indicated it did not have statutory authority to cap emergency relief funding for the project. When responding to FHWA, GAO reiterated that significantly altering the Cypress Viaduct's original alignment was a betterment. Further, GAO responded it believes existing regulations provided FHWA with sufficient authority to limit the use of emergency relief

funding to a replacement facility built to current design standards on its original alignment, and the state should have used its Federal-aid highway apportionments to cover any costs not funded through the Emergency Relief Program.

GAO recommended that the Secretary of Transportation direct the FHWA Administrator to modify the emergency relief guidance to (i) make the agency's emergency relief regulations and manual consistent, and (ii) clearly define what costs can be funded through the emergency relief program, particularly when an environmental review recommends improvements or changes to the features of a facility from its predisaster condition in a manner that adds costs and risks to the project. FHWA agreed to review the emergency relief guidance, identify any areas needing revision, and update the materials as necessary by March 1998.

II. FINDING AND RECOMMENDATIONS

Finding. Emergency Relief Funds Not Used in Accordance With Program Criteria

FHWA properly pursued and received credits from insurers and third parties responsible for damage to Federal-aid facilities. However, FHWA needs to improve program guidance and adherence to existing regulations. FHWA's program guidance does not address economic justifications for betterments resulting from environmental reviews. Also, FHWA division offices did not adhere to existing program guidance for 27 of the 82 projects audited. We questioned emergency relief costs totaling nearly \$104 million for the 27 projects where division offices did not follow existing program guidance.

Discussion

We questioned emergency relief totaling \$103.9 million for 27 projects where FHWA did not adhere to existing program guidance. These totals include (i) \$3.0 million for two projects where states and FHWA did not show improvements were economically justified to prevent future recurring damage, (ii) \$13.4 million for 19 projects where payments exceeded the normal Federal share payable for emergency relief, (iii) \$28.0 million for five projects that duplicated assistance available under other Federal programs, and (iv) \$59.5 million for one project that was not proceeding timely to construction. Exhibit C summarizes questioned emergency relief funds for the 27 projects. We also questioned 10 projects where FHWA did not have guidance for addressing economic justifications for betterments resulting from environmental reviews. However, we could not determine the extent to which emergency relief funds should have been limited for the 10 projects because FHWA had not developed detailed estimates for replacing the Cypress Viaduct along its original alignment.

FHWA Did Not Show Improvements Were Economically Justified to Prevent Future Recurring Damage.

Title 23, Code of Federal Regulations, Part 668 (23 CFR 668) establishes policy and provides guidance for the administration of emergency relief funds for the repair or reconstruction of Federal-aid highways. 23 CFR 668.109, Eligibility, states:

Emergency relief funds may participate in: Repair to or reconstruction of seriously damaged highway elements as necessary to restore the facility to predisaster conditions. . . . Betterments, such as relocation, replacement, upgrading or other added features not existing prior to the disaster, only where clearly economically justified to prevent future recurring damage. Economic

justification must weigh the cost of the betterment against the risk of eligible recurring damage and the cost of future repair.

These regulations also include funding limitations for replacement highway facilities. 23 CFR 668.109 states:

Replacement highway facilities are appropriate when it is not technically and economically feasible to repair or restore a seriously damaged element to its predisaster condition and are limited in emergency relief reimbursement to the cost of a new facility to current design standards of comparable capacity and character of the destroyed facility.

FHWA's Emergency Relief Manual includes additional guidance for administering emergency relief funds. The Manual states:

Emergency relief funds are not intended to replace other Federal-aid, State, or local funds for new construction to increase capacity, correct non-disaster related deficiencies, or otherwise improve highway facilities. . . . The emergency relief program facilitates repair and restoration of highway facilities to predisaster conditions. Restoration in kind is therefore the predominate type of repair expected to be accomplished with emergency relief funds. Any additional features or changes in character from that of the predisaster facility are generally not eligible for emergency relief funding unless justified on the basis of economy of construction, prevention of future recurring damage, or technical feasibility.

FHWA did not show improvements were economically justified to prevent future recurring damage for 12 of the 82 projects audited. For 10 of the 12 projects, we could not determine the extent to which emergency relief funds should have been limited because FHWA did not have detailed estimates for replacing the Cypress Viaduct with a facility built to current design standards along the original alignment. For the two remaining projects, we identified unjustified improvements totaling \$3.0 million: \$1.4 million for a Loma Prieta Earthquake project and \$1.6 million for a Northridge Earthquake project.

1. Loma Prieta Earthquake

During October 1989, the Loma Prieta Earthquake crumbled freeways and bridges in the San Francisco, California area. We audited 15 Loma Prieta projects. We found neither the California Department of Transportation (Caltrans) nor FHWA showed whether improvements included in 11 projects were economically justified to prevent future recurring damage. This total includes ten projects under the Cypress Replacement Project and one project under the San Francisco Ferry Terminal Building Project.

a. Cypress Replacement Project

On October 17, 1989, the Loma Prieta Earthquake collapsed the Cypress Viaduct in Oakland, California. FHWA and Caltrans engineers promptly inspected the viaduct and prepared a damage assessment report, estimating it would cost \$306 million to replace the destroyed facility along its predisaster alignment. This estimate included costs for items such as removing the old structure, managing traffic, building a new structure, and engineering.

FHWA and Caltrans recognized that detailed engineering would be required to refine the cost estimate for rebuilding the Cypress Viaduct as it existed prior to the earthquake. However, neither FHWA nor Caltrans completed this estimate. Instead, Caltrans completed a detailed environmental impact statement, including cost estimates, for alternative alignments in September 1991. FHWA approved the Cypress Replacement Project in January 1992. Caltrans estimates it will cost \$1.13 billion to complete the Cypress Replacement Project. FHWA will finance 90 percent (\$1.01 billion) of project costs from the Emergency Relief Program.

The Cypress Replacement Project differs significantly from the Cypress Viaduct destroyed by the Loma Prieta Earthquake. It replaces the destroyed 1.5 mile, two-tier structure with roughly 5 miles of single-tier freeway, and relocates the structure out of residential neighborhoods into rail yards. Exhibit D compares the design and location of the replacement project to the destroyed structure. The replacement project comprises seven separate construction projects, A through G, that are expected to be completed in late-1998.

Through our audit of 10 emergency relief projects with obligations totaling \$879.2 million, we found the Cypress Replacement Project upgrades freeway facilities and adds features that did not exist prior to the Loma Prieta Earthquake. Unlike the destroyed facility, the Cypress Replacement Project includes several new interchanges and direct access to the San Francisco-Oakland Bay Bridge. Also, the replacement project improves access to the Port of Oakland while enhancing access to facilities and industries, alleviating severe congestion at interchanges for several interstate highways, and easing local circulation on city streets by reducing spillover of auto and truck traffic. Nonetheless, FHWA and Caltrans did not show the Cypress Replacement Project was economically justified to prevent future recurring damage.

The FHWA Associate Administrator for Program Development and the Federal-Aid Programs Group Leader do not believe emergency relief

regulations required FHWA to prepare a detailed cost estimate for replacing the Cypress Viaduct with a facility built to current design standards along the original alignment, and limit the use of emergency relief funds to those replacement costs. According to these officials, the detailed estimate and funding limitations were not required because (i) the State could not have repaired or replaced the facility on its prior location; (ii) the replacement facility is comparable to function and service of the predisaster facility and, therefore, there is no betterment issue; (iii) the National Environmental Policy Act and its public involvement process was the appropriate mechanism for developing alternative alignments; and (iv) neither the emergency relief statute nor FHWA implementing guidelines suggests limits on emergency relief funding.

Our review of project files disclosed that public opposition caused Caltrans to abandon its initial efforts to replace the Cypress Viaduct along the original alignment. Shortly after the earthquake, several hundred West Oakland neighbors joined to form the Citizens Emergency Relief Team, which strongly opposed Caltrans' attempts to rebuild I-880 through the Cypress corridor. In December 1989, 2 months after the earthquake, the City of Oakland resolved that:

The City of Oakland will not support an expressway or freeway, interim or permanent, through the Cypress corridor; that the City of Oakland will not offer City rights of way to Caltrans along the Cypress corridor; and that the City of Oakland will insist on the reopening of all streets along the Cypress corridor.

Because of the significant upgrades and added features, FHWA should have shown the Cypress Replacement Project was economically justified to prevent future recurring damage. Our position is consistent with a May 1996 General Accounting Office (GAO) report concerning replacement of the Cypress Viaduct. Therein, GAO stated:

We acknowledge the need to replace the Cypress Viaduct in a manner that addressed the environmental and public concerns, and we do not take issue with the decision to shift the facility to its new location. However, we believe that significantly altering the original alignment - a major relocation - is a betterment because (1) the emergency relief regulations describe a betterment as "relocation, replacement, upgrading or other added features not existing prior to the disaster"; (2) the scope of the replacement project changed the character of the facility by expanding the destroyed 1.5 mile structure to 5 miles of new highway structure; and (3) the new freeway segment adds several interchanges that improve access to local streets and port facilities.

Further, GAO concluded, and we agree, that existing regulations provide FHWA with sufficient authority to limit the use of emergency relief funds, despite procedures established by the National Environment Policy Act. GAO's report states:

Following the regulations, FHWA could have estimated the costs of replacing the Cypress Viaduct with a facility built to current design standards along the original alignment and limited the use of emergency relief funding to those costs. The state would then have had to use federal-aid highway apportionments to cover any costs not funded through the emergency relief program.

Neither FHWA nor Caltrans prepared a detailed estimate for replacing the Cypress Viaduct with a facility built to current design standards along the original alignment. Consequently, we cannot determine which costs associated with Cypress Replacement Project improvements should have been funded through Federal-aid apportionments.

GAO concluded that FHWA's Emergency Relief Manual does not provide consistent program guidance when a more expensive alternative is selected as a result of an environmental review. One part of the Manual states that betterments, including relocations, must be justified quickly without extensive public hearings or environmental, historical, right-of-way, or other encumbrances. Conversely, another part of the Manual states that betterments resulting from environmental or permit requirements beyond the control of the highway agency are eligible for emergency relief funds.

The FHWA Associate Administrator for Program Development and the Federal-Aid Programs Group Leader advised us they would review emergency relief guidance to ensure it is consistent with regulations and clearly defines what costs, particularly those resulting from environmental reviews, can be funded through the Emergency Relief Program.

b. San Francisco Ferry Terminal Building Project

The Loma Prieta Earthquake of October 1989 caused extensive damage to the San Francisco-Oakland Bay Bridge. Caltrans closed the bridge. Concurrently, FHWA and Caltrans prepared a damage assessment report to obtain emergency relief funds for operating passenger ferry service between Alameda and Oakland terminals to the San Francisco Ferry Terminal Building, which was not damaged by the earthquake. This damage assessment report shows emergency relief funds were needed to provide

short-term relief, stating “Ferry service will be discontinued as an eligible item when the San Francisco-Oakland Bay Bridge is in operation.”

The ferry service carried 4,000 daily commuters until the Bay Bridge reopened to normal traffic in November 1989. After the bridge reopened, ferry ridership dropped to 850 daily commuters.

In June 1991, 19 months after the bridge reopened to normal traffic, FHWA approved \$1.4 million under project ER-1565(3) to permanently improve the San Francisco Ferry Terminal Building. This project was included in a traffic relief plan intended to alleviate the impact caused by closing the Cypress Freeway. According to the Federal-Aid Programs Group Leader, the project was delayed because of a hazardous waste issue and compliance with handicap requirements.

The project included a larger barge with improved access, sidewalk and drop-off repairs, a new waiting shelter, and new railings, furniture, phones, lighting and signage. However, neither Caltrans nor FHWA provided economic justification weighing the costs of permanent improvements against the risk of eligible recurring damage and the cost of future repair. Because of the dramatic reduction in ferry usage after the Bay Bridge reopened, FHWA should have revisited its decision to include the San Francisco Ferry Terminal Building Project in the Cypress Traffic Relief Plan.

2. Northridge Earthquake

The January 1994 Northridge Earthquake damaged highways in Los Angeles County, California. We audited 19 Northridge Earthquake projects. We found 1 of the 19 projects included an unjustified permanent improvement. Specifically, project ER-2504(3) provided \$22.3 million to shore, demolish, and reconstruct bridges but did not show how a permanent soundwall costing \$1.6 million was necessary to meet current design standards, or was economically justified to prevent future recurring damage. We did not question Caltrans’ decision to build the soundwall, but questioned the use of emergency relief funds for the soundwall.

The Federal-Aid Programs Group Leader advised us that (i) the soundwall was needed to mitigate traffic and construction noise, which can be an eligible element of an emergency relief project; and (ii) the cost of a permanent soundwall was only incrementally higher than the cost of a temporary soundwall. We agree noise mitigation may be eligible for emergency relief funds. However, project files indicate Caltrans and FHWA approved the soundwalls in response to public pressure for mitigating noise from traffic after

the bridges reopened, not to mitigate noise during construction. Caltrans correspondence states:

There are no permanent soundwalls being installed as part of the reconstruction of any bridges at this time. . . . Soundwall was promised 20 years ago. A soundwall should be built as a fair trade for the inconvenience of the construction.

Also, project files show (i) Caltrans built temporary soundwalls, beneath the south-bound bridges and adjacent to residential areas, to mitigate noise during construction; (ii) the permanent soundwalls were constructed atop the bridges, after the bridges were constructed; and (iii) the soundwalls extended well beyond bridge termini, along freeway entrance and exit ramps. Combined with the Caltrans correspondence, this evidence shows the permanent soundwalls were built to mitigate noise from traffic after the bridges were reconstructed.

Payments Exceeded the Federal Share Payable for Emergency Relief

FHWA exceeded the Federal share payable by \$13.4 million for 19 of the 82 projects audited. The \$13.4 million includes \$10.5 million for six Mount St. Helens projects. Also, it includes \$2.9 million for 13 other projects: \$1,140,000 for six Tropical Storm Alberto projects; \$771,900 for one Loma Prieta Earthquake project; \$681,800 for two Missouri floods projects; and \$315,400 for four Northridge Earthquake projects.

1. Mount St. Helens

The Mount St. Helens eruption destroyed much of State Route 504 in May 1980. The State of Washington immediately began reconstructing Route 504 to the Camp Baker area, using emergency relief funds provided by FHWA. In September 1982, FHWA approved preliminary engineering funds for a reconnaissance study to reconstruct Route 504 beyond Camp Baker to the Mount St. Helens National Volcanic Monument. However, the state could not begin reconstruction beyond Camp Baker until it completed extensive reviews, including environmental impact statements, of alternative alignments. The reviews required extensive coordination between state and Federal agencies. As a result, FHWA could not begin authorizing emergency relief funds to construct Route 504 beyond Camp Baker until December 1988.

23 CFR 668.107 identifies the Federal share payable for eligible emergency relief projects. When funding emergency relief projects, FHWA follows regulations in effect when the natural disaster or catastrophic event occurred. When Mount St. Helens erupted in May 1980, 23 CFR 668.107 limited Federal emergency relief funds to 75 percent of eligible expenses incurred to repair

serious damage on Federal-aid highways, or the sliding scale for public lands states included in 23 USC 120(a), Clause A. However, 23 CFR 668.107 permitted the Administrator to increase the Federal share for special circumstances by stating:

When special circumstances warrant, the Federal Highway Administrator may determine it to be in the public interest to increase the Federal share. State Highway agency requests for an increase over the normal pro rata share must include information to demonstrate the inability of the state and local political units to bear the usual non-Federal share of highway repairs. A determination of public interest will be based largely on the effort expended by the state and local agencies to meet the total emergency.

In May 1980, the Governor requested Federal assistance to cope with the Mount St. Helens eruption. The Governor's request stated:

At this time, no appropriated funds are available for the state's share of requested federal assistance. I will ask the legislature in the next regular session for an appropriation of funds, and will repay this advance as soon as funds become available.

While the Governor's request indicated a willingness to share the cost of repairing damages, the state's Secretary of Transportation requested FHWA to provide 100 percent emergency relief funds for damaged highways on the Federal-aid system. In June 1980, the Secretary of Transportation offered three reasons why the state should receive 100 percent emergency relief funds to repair damaged highways. First, the state cited a September 1976 memorandum where the Federal Highway Administrator advised FHWA regional administrators that, based on current (1976) economic conditions, it was in the public interest to cover 100 percent of serious damage resulting from future disasters. Second, the state contended, without substantiation, that reductions in driving caused by the eruption would reduce gas tax revenues by \$3 million to \$7 million through June 1981. Third, the state said reductions in gas tax revenues, which occurred prior to the eruption, forced a reduction in the 1979-81 Biennial Construction Program.

In July 1980, the Administrator agreed, without further explanation, to pay 100 percent of eligible costs associated with repairing highways damaged by the Mount St. Helens eruption. This agreement did not include either a termination date or a ceiling for 100 percent funding.

During our audit, the FHWA Federal-Aid Programs Group Leader informed us that state requests were routinely approved for 100 percent emergency relief funds. Nonetheless, this FHWA official believes the Administrator approved

100 percent funding for Mount St. Helens in accordance with discretionary authority available to him when Mount St. Helens erupted, based on information provided by the State of Washington. According to FHWA, the Administrator was not required to establish an administrative record as to why he made the decision.

We agree the Administrator had the discretion to increase the Federal share payable for emergency relief but only if, as required by regulation, the State of Washington demonstrated it could not bear its usual share of highway repairs. In our opinion, the state did not demonstrate an inability to share the cost of highway repairs, particularly long-term repairs. Without this information, the Administrator did not have a valid basis for approving the higher Federal share. To the contrary, the state did not show economic conditions in May 1980 were comparable to those existing four years prior to the Mount St. Helens eruption, or whether economic conditions could be expected to change before the state actually needed funds to reconstruct State Route 504. Further, the state's request for 100 percent funding indicated the eruption would only have a minimal, \$3 million to \$7 million, impact on state revenues.

Between December 1988 and May 1993, FHWA authorized 25 emergency relief projects for the reconstruction of Route 504 beyond Camp Baker. We audited 6 of the 25 projects, with emergency relief funds totaling \$62.4 million. FHWA's Washington Division paid the state 100 percent of eligible costs for the six projects, based on the Administrator's July 1980 agreement. Consequently, FHWA exceeded the Federal share payable under 23 CFR 668.107 by \$10.5 million for the six projects when it did not limit reimbursement to the sliding scale rate of 83.13 percent.

The FHWA Associate Administrator for Program Development and the Federal-Aid Programs Group Leader advised us that, several years after the Mount St. Helens eruption, FHWA became concerned about the cost of providing 100 percent emergency relief funding for extended periods of time. As a result, in 1987 Congress approved legislation limiting 100 percent funding to the first 90 days after a natural disaster or catastrophic event occurred.

2. Other Disasters

FHWA can no longer provide 100 percent reimbursement indefinitely for emergency relief projects. The Surface Transportation and Uniform Relocation Assistance Act of 1987 permitted 100 percent reimbursement during the first 90 days after a disaster occurred for eligible emergency repairs.

The Intermodal Surface Transportation Efficiency Act of 1991 increased this timeframe to 180 days. During these timeframes, these acts also permitted 100 percent reimbursement for permanent repairs documented as emergency repairs. For permanent repairs not documented as emergency repairs and for all repairs after these initial timeframes, reimbursement was limited to the normal pro rata share adjusted to the appropriate sliding scale rate.

Using these criteria, we determined FHWA exceeded the Federal share payable for 13 projects associated with (a) Tropical Storm Alberto, (b) the Loma Prieta Earthquake, (c) the Northridge Earthquake, and (d) Missouri floods.

a. Tropical Storm Alberto

On July 4, 1994, Tropical Storm Alberto caused extensive damage to highways in the State of Georgia. For six of the seven projects audited, we found FHWA's Georgia Division exceeded the Federal share payable for eligible expenses. The division approved these six projects to replace damaged bridges, without requiring the state to document whether the projects included permanent repairs completed as part of emergency repairs. To illustrate, in September 1994, the division authorized \$6.1 million to engineer and replace a bridge under emergency relief project ER-751(242). Then, the division paid 100 percent of project costs through December 31, 1994, without requiring the state to show whether permanent repairs totaling \$2,831,000 were completed as emergency repairs.

During our audit, the Georgia Division Transportation Manager informed us the Division did not have a clear understanding of emergency relief regulations when Tropical Storm Alberto damaged highways. As a result, staff approved 100 percent funding during the first 180 days for all projects, without determining whether the projects included permanent repairs to be funded at a lower pro rata reimbursement rate.

The Georgia Division did not identify permanent repairs as emergency repairs necessary to restore essential traffic. As a result, staff should have limited reimbursement to FHWA's normal pro rata share, 80 percent, for costs incurred through December 31. Because the division did not limit payments during this timeframe, FHWA exceeded the Federal share payable by \$566,200 for project ER-751(242). In total, FHWA exceeded the Federal share payable by \$1,140,000 million for the six projects.

b. Loma Prieta Earthquake

The October 17, 1989, Loma Prieta Earthquake damaged the Central Viaduct, a segment of State Route 101 in San Francisco. FHWA's California Division approved emergency relief under project ER-1411(1) to permanently repair and retrofit the viaduct between Mission Street and Turk Street. This project did not involve emergency repairs.

FHWA's California Division reimbursed Caltrans for 95 percent of eligible project costs, believing this rate was appropriate because State Route 101 was designated a priority primary highway. However, we found 23 CFR 668.107 limited reimbursement to the sliding scale rate for state routes in California. The division could not provide us with criteria permitting a higher rate for priority primary highways and agreed that reimbursement should have been limited to the sliding scale rate of 85.66 percent, which entitles FHWA to a credit of \$771,938.

c. Missouri Floods

During June 1993, extensive flooding damaged highways throughout the State of Missouri. FHWA exceeded the Federal share payable for two of the five projects we audited. For the first project, ER-595(5), FHWA's Missouri Division reimbursed the state for 100 percent of expenses incurred during the first 180 days, without requiring the state to document permanent repairs as emergency repairs. Consequently, the division did not require the state to pay its share (\$64,200) of an asphalt overlay identified as permanent restoration work in FHWA's damage assessment report for project ER-595(5). For the second project, ER-931(12), the division did not detect an improper state billing. Consequently, the division reimbursed the state 100 percent for expenses incurred for nearly 2 months after the 180-day cutoff period, resulting in a \$617,600 overpayment. FHWA agreed to adjust reimbursement to recover \$681,800 for the two projects.

d. Northridge Earthquake

FHWA exceeded the Federal share payable for 4 of the 19 Northridge Earthquake projects we audited. For the four projects, FHWA's California Division properly paid Caltrans for 100 percent of eligible project expenses during the first 180 days. However, Caltrans did not reduce billings to sliding scale rates after 180 days for projects ER-2502(3), 2519(3), 2559(3), and 2571(3). Consequently, the division paid Caltrans \$315,400 more than permitted under 23 CFR 668.107. FHWA agreed to recover the overpayments.

Emergency Relief Duplicated Assistance Available Under Other Federal Programs.

23 CFR 668.105 includes policy for the Emergency Relief Program. This regulation states:

Emergency relief funds are not intended to supplant other funds for correction of pre-existing, nondisaster related deficiencies. . . . Emergency relief funds shall not duplicate assistance available under another Federal program or compensation from insurance or any other source.

23 CFR 668.109 identifies work eligible for emergency relief funds. According to this regulation, emergency relief funds may not participate in:

Permanent repair or replacement of deficient bridges scheduled for replacement with other funds. Scheduled means included in the approved Federal-aid program, the current or next fiscal year's Highway Bridge Replacement and Rehabilitation Program or included in contract plans being prepared.

Emergency relief duplicated assistance, \$28.0 million, available under other Federal programs for 5 of the 82 projects audited. The \$28.0 million includes (1) \$20.1 million for a November 1990 flood project in Washington; (2) \$4.6 million for a March 1995 flood project in California; (3) \$2.9 million for a January 1995 flood project in California; (4) \$179,800 for a Northridge Earthquake project; and (5) \$153,000 for a March 1989 flood project in Washington.

1. November 1990 Washington Floods

During November 1990, severe winds and flooding extensively damaged highways and bridges in Western Washington. We audited three projects and found a portion (\$20.1 million) of one project, the Murrow Floating Bridge, duplicated assistance available under another program.

The State of Washington was renovating the Murrow Floating Bridge across Lake Washington on Interstate 90 in November 1990, when heavy rains and high winds sank its center section. FHWA initially authorized \$44 million for the bridge renovation: \$38.9 million Interstate discretionary funds and \$5.1 million Interstate apportionment funds. After the bridge sank, FHWA's Washington Division revised the renovation project to exclude the bridge's sunken center section. The revised project was expected to cost \$23.3 million, leaving \$20.7 million Interstate discretionary funds for other highway projects.

In October 1991, Congress approved legislation, Public Law 102-143, to provide emergency relief funds for the Murrow Floating Bridge. Referring to the bridge, Public Law 102-143 stated:

The Secretary shall advance emergency relief funds to the State of Washington for the replacement of a bridge on the interstate system damaged by November 1990 storms notwithstanding the provision of section 125, title 23 United States Code. . . .

FHWA believes, and we agree, this special legislation identifies Congressional intent to provide emergency relief funds for the Murrow Floating Bridge. We do not, however, agree the legislation permitted FHWA to use emergency relief funds for work previously scheduled under the renovation project. In our opinion, the legislation was necessary because the bridge replacement project caused FHWA to exceed annual spending limits for the Emergency Relief Program. The legislation did not exempt FHWA from regulations prohibiting emergency relief from duplicating assistance available under another Federal program, i.e., the \$20.7 million that became available under the renovation project when the bridge sank.

Further, Public Law 102-143 reinforces Congressional intent to minimize the use of emergency relief funds. To illustrate, in reference to third party liability, Public Law 102-143 states “. . . Washington shall repay such advances to the extent that a final court judgment declares that damage to such bridges was a result of human error.” In accordance with this directive, FHWA and the State of Washington offset a \$19 million insurance recovery against emergency relief funds.

In November 1991, FHWA authorized emergency relief funds under project ER-9011(1) to replace the Murrow Floating Bridge's sunken center section. FHWA subsequently transferred \$600,000 of the \$20.7 million excess Interstate discretionary funds available under the renovation project to emergency relief project ER-9011(1). In our opinion, this transfer complied with emergency relief regulations. For the remaining \$20.1 million, FHWA transferred (i) \$11.5 million to its central program for Interstate discretionary funds, and (ii) \$8.6 million to several unrelated State of Washington highway projects. Like the \$600,000 transfer, these funds should have been used in lieu of emergency relief funds.

In our opinion, regulations limit emergency relief to additional costs incurred as the result of disasters. For example, if a project expected to cost \$20 million increases to \$50 million because of a disaster, FHWA should

limit emergency relief funds to \$30 million, i.e., the additional costs resulting from the disaster.

2. March and April 1995 California Floods

During March and April 1995, flooding caused extensive damage to highways and bridges throughout California. Prior to the floods, Caltrans intended to use Federal highway bridge replacement funds to replace the functionally obsolete Carmel River Bridge in 1997 as part of the Hatton Canyon Project. However, when the floods collapsed three of the bridge's spans, Caltrans initiated action to reconstruct the bridge sooner than planned and FHWA provided emergency relief totaling \$4.6 million under project ER-2902(2).

The FHWA Federal-Aid Programs Group Leader believes FHWA made the appropriate funding decision for this project because, when the disaster occurred in 1995, the bridge was not scheduled for construction in the current or next fiscal year's Highway Bridge Replacement Plan. We do not agree with FHWA's funding decision for two reasons. First, the State Transportation Improvement Program approved by FHWA in April 1993, 2 years before the floods, for fiscal years 1992/93 to 1994/95 included approximately \$13.4 million in programming for preliminary engineering and right-of-way acquisition in connection with the Hatton Canyon Project. Second, the State Transportation Improvement Program for fiscal year 1996/97 included funds to acquire additional rights-of-way and construct the Hatton Canyon Project, even though construction was not scheduled to begin until sometime in 1997.

Until the disaster occurred, Caltrans clearly intended to use funds available under another Federal program to replace the Carmel River Bridge. Accordingly, FHWA should have limited emergency relief to the \$75,000 needed to erect a temporary bridge.

3. January and February 1995 California Floods

During January and February 1995, flooding damaged highways and bridges in California. We found emergency relief duplicated \$2.9 million available under another program for one, Malibu Lagoon Bridge, of the eight projects audited, as follows.

The Malibu Lagoon Bridge on the Pacific Coast Highway in Los Angeles County, California, was built in 1925 and widened in 1935 and 1948. When rain storms scoured the bridge's footings in February 1980, upstream development had increased the channel's flow three-fold. Caltrans repaired

the bridge. However, bridge footings continued to settle, and the original structure began to separate from the widened structure. Consequently, in 1985, Caltrans included a project to replace the bridge in the state's Transportation Improvement Program. Caltrans concluded the project was "urgent" because of the bridge's susceptibility to future storm damage. Caltrans originally planned to begin the project during fiscal years 1989 and 1990. However, the project did not begin as scheduled.

Caltrans awarded a contract during June 1994, to replace the Malibu Lagoon Bridge with FHWA highway bridge replacement funds. However, Caltrans suspended this contract due to the discovery of an endangered species. After resolving this problem, Caltrans planned to readvertise the project in early 1995, with construction expected to begin in May 1995. Because of the environmental issue, Caltrans estimated it would take 3 years to complete the project.

The January 1995 floods damaged the Malibu Lagoon Bridge. As a result, Caltrans closed two of the bridge's four lanes. Caltrans decided to accelerate the bridge replacement project to restore traffic to four lanes within 100 days.

FHWA believes it would have been appropriate to repair the bridge using emergency relief funds. Because Caltrans chose not to repair the bridge, FHWA agreed to provide emergency relief funds equal to the incremental costs of the compressed construction schedule. Accordingly, FHWA obligated \$9.9 million for the project. This total includes \$7.0 million highway bridge replacement funds and \$2.9 million emergency relief funds under project ER-2712(1).

We do not agree with FHWA's decision to provide emergency relief for the Malibu Lagoon Bridge. The bridge was scheduled for immediate replacement under another Federal program, and neither Caltrans nor FHWA showed project costs increased because of the flooding. Rather, project files show costs increased because of the accelerated construction schedule Caltrans approved to minimize inconvenience to public traffic. The use of emergency relief funds to mitigate inconvenience is not consistent with FHWA's Emergency Relief Manual, which states:

State and local highway agencies must expect additional expenditures, changes in project priorities, and some inconvenience to traffic as a result of emergency conditions.

Further, project files show the Malibu Lagoon Bridge had a long history of deficient conditions. By delaying the project since 1985, these deficiencies

may have increased bridge damage in 1995. We found no evidence showing FHWA considered this, even though regulations preclude emergency relief funds from participating in repair or reconstruction of facilities affected by long-term, pre-existing conditions or predictable developing situations such as flooding in basin areas or slow moving slides.

4. Northridge Earthquake

Emergency relief duplicated assistance available under another Federal program for 1 of the 19 Northridge Earthquake projects we audited. Project ER-2545(3) provided funds to restore bridges and approaches. This project was completed concurrently with a seismic retrofit project being funded from the Interstate Maintenance Program. Caltrans inadvertently coded four change orders totaling \$179,800 for seismic retrofit work as emergency relief work. FHWA agreed to adjust reimbursement for this project to recover the overpayments.

5. March 1989 Washington Floods

March 1989 flooding extensively damaged highways and bridges in Eastern Washington. We audited three projects. In our opinion, part of one project, Bridgeport Hill Road, duplicated assistance available under another program.

Bridgeport Hill Road had a history of flash floods and washouts prior to March 1989. As a result, FHWA approved highway apportionment funds to reconstruct the horizontal and vertical alignment of Bridgeport Hill Road between mileposts 7.82 and 11.36. The state planned on using about \$1.1 million of its FY 1989 Federal highway apportionment funds for this project. However, before construction could begin, the March 1989 floods washed out a drainage facility at milepost 9.7 and damaged roadway and guardrails between mileposts 10.36 and 11.36.

After the floods, FHWA revised the Bridgeport Hill Road reconstruction project, deleting the drainage facility and some roadway/guardrails. The revised project required apportionment funds totaling about \$900,000. As a result, apportionment funds totaling about \$153,000 were available for other highway projects.

Concurrent with revising the reconstruction project, FHWA approved emergency relief totaling nearly \$1.3 million under project ER-8903(4), which included work previously planned under the reconstruction project. However, FHWA did not offset the \$153,000 excess apportionment funds against emergency relief funds. In our opinion, FHWA should have limited

emergency relief funds to the additional costs incurred as a result of the disaster.

Project Not Proceeding Timely to Construction.

The Emergency Relief Program is aimed at helping states quickly repair damage to Federal-aid highways resulting from disasters. 23 CFR 668.105 emphasizes the importance of timely completing emergency relief projects. It states:

Emergency relief projects shall be promptly constructed. Any project that has not advanced to the construction obligation stage by the end of the second fiscal year following the disaster occurrence will not be advanced unless suitable justification to warrant retention is furnished to the FHWA.

FHWA's Emergency Relief Manual also emphasizes the importance of timely completing emergency relief projects. The Manual states:

It is expected that, after approval of programs and allotment of funds, all projects will be completed promptly. Delay in the advancement of an approved emergency relief project to construction and completion within a reasonable period of time could result in withholding of funding for that project. . . . Delays not directly attributable to the emergency, such as for legal actions, or other administrative problems, may not be considered appropriate justification for delay of emergency relief work.

Following the Loma Prieta Earthquake in October 1989, FHWA approved emergency relief project ER-1403(1) for repairs on non-Interstate routes throughout a 10 county area. At the beginning of our review, emergency relief obligations totaled \$87.5 million for this project. By the end of our review, FHWA had reduced the obligations to \$12.0 million, and had transferred the remaining \$75.5 million to other emergency relief projects. One transfer provided \$16.0 million for the Cypress Replacement Project; other transfers provided \$59.5 million to rebuild structures on the Embarcadero Freeway, which Caltrans demolished because of damage sustained during the Loma Prieta Earthquake.

At the time of our audit and nearly 7 years after the earthquake, neither Caltrans nor the City of San Francisco had decided how to restore the Embarcadero Freeway. In our opinion, the project no longer qualified for emergency relief since the situation had persisted without corrective action for such an extended period of time. It was no longer reasonable to classify the project as a disaster related emergency, but rather as a long-term need to be funded with regular Federal-aid. Accordingly, we recommended Caltrans make the \$59.5 million emergency relief available for other projects.

The FHWA Associate Administrator for Program Development and the Federal-Aid Programs Group Leader informed us there are no hard-and-fast rules for determining when emergency relief funding eligibility should be terminated because projects are not advancing. In their view, the decision making process requires FHWA to exercise judgment and weigh factors such as the nature of the damaged facility, the complexity of the proposed repair or replacement project, and the effort put forth by state and/or local highway officials to advance the project.

We agree this project had significant community and environmental impacts. However, the process for finding corrective action has been extraordinarily long, considering other equally significant emergency relief projects. To illustrate, Caltrans completed the environmental impact study for the Cypress Replacement Project in September 1991, 2 years after the same earthquake that damaged the Embarcadero Freeway.

After our audit, Caltrans completed an environmental impact study of alternatives to construct a new Embarcadero Freeway. On April 15, 1997, FHWA approved Caltrans' preferred alternative for replacing the Embarcadero Freeway. FHWA has agreed to limit emergency relief funds to the Federal share of the cost to repair and seismically retrofit the original structure. Currently, FHWA, Caltrans, and the City of San Francisco are evaluating which project elements are eligible for emergency relief funds.

To maximize the use of emergency relief funds, FHWA needs to closely monitor progress towards advancing this project to the construction obligation stage. If the project does not advance in accordance with emergency relief regulations, FHWA should reprogram the \$59.5 million set aside for the Embarcadero Freeway.

Monetary Impact

FHWA agreed to recover \$1,948,972 for 8 of the 37 projects with questionable costs. Because states acted in good faith based on FHWA advice for the remaining 29 projects, we are not recommending any additional monetary recoveries. However, the Administrator needs to improve program controls to ensure the best possible use of future emergency relief funds.

Recommendations

We recommend the Acting Administrator, Federal Highway Administration:

1. Direct Headquarters and field staff to (i) critically review emergency relief guidance; (ii) identify areas in the guidance needing revision, such as the effect of environmental reviews on project eligibility and costs; and (iii) update the guidance to ensure it is consistent with regulations and clearly defines what costs can be funded through the Emergency Relief Program.
2. Direct Headquarters staff to regularly monitor and consult with field staff to effectively manage the Emergency Relief Program.
3. Followup to ensure division offices have recovered \$1,948,972 for the Emergency Relief Program. This total includes \$771,938 for project 1411(1) with the Loma Prieta Earthquake; \$495,232 for projects 2502(3), 2519(3), 2545 (3), 2559(3), and 2571(3) with the Northridge Earthquake; and \$681,802 for projects 0931(12) and 595(5) with Missouri floods.
4. Direct Headquarters and California Division staff to closely monitor progress towards advancing the Embarcadero Freeway Replacement Project to construction, and reprogram the \$59.5 million emergency relief funds set aside for the project if it does not advance promptly.

Management Response

The FHWA Associate Administrator for Administration originally responded to our February 18, 1997, draft report on May 19, 1997. As a result of a June 5, 1997, meeting with the FHWA Associate Administrator for Program Development and other officials, we revised the draft report to include additional information concerning FHWA's position on several issues. FHWA's revised response of July 7, 1997, agrees with our recommendations, while not fully agreeing with findings for some individual emergency relief projects. The revised response is included as an appendix to this report.

For the first recommendation, FHWA Headquarters is working with its field offices to update the Emergency Relief Manual by March 1998. FHWA expects the update, which may identify a need for regulatory revisions, to (i) provide emergency relief funding on a consistent basis among the states, (ii) clarify eligibility matters such as those encountered with the Cypress Replacement Project, and (iii) improve administration of the Emergency Relief Program.

In response to the second recommendation, FHWA confirmed it began and expects to continue regional workshops to discuss regulations and guidance with FHWA, state, and local agency field personnel involved in the Emergency Relief Program. Also, FHWA plans to develop a training course on the Emergency Relief Program by the end of fiscal year 1998.

Regarding the third recommendation, FHWA will recover questionable emergency relief payments totaling more than \$1.9 million by the end of fiscal year 1997.

For the fourth recommendation, FHWA agreed to monitor the Embarcadero Freeway Replacement Project to ensure it is progressing sufficiently. According to FHWA, future time extensions will hinge on continued progress for the project.

Audit Comments

The actions taken or planned by FHWA are responsive to the audit recommendations. With these actions, FHWA can better control highway funds and assure they are put to their best possible use. We consider the recommendations resolved and no further FHWA response is required.

**EMERGENCY RELIEF OBLIGATIONS
10/1/88 to 6/30/95**

Rank	State/Territory	No. Projects	Amount (thousands)	Percent
1	California	938	1,819,277	66.21
2	Washington	305	253,457	9.22
3	Florida	97	92,779	3.38
4	Missouri	166	86,960	3.16
	Georgia	213	69,002	2.51
	Subtotals	1,719	\$2,321,475	84.48
6	Arizona	167	47,080	1.71
7	South Carolina	37	46,870	1.71
8	Alabama	226	44,204	1.61
9	Illinois	280	33,153	1.21
10	Alaska	16	22,270	0.81
11	Texas	293	21,391	0.78
12	Iowa	28	21,014	0.76
13	Puerto Rico	54	18,330	0.67
14	Guam	27	17,962	0.65
15	Oklahoma	198	17,789	0.65
16	Kansas	177	16,499	0.60
17	American Samoa	22	13,044	0.47
18	Idaho	1	11,303	0.41
19	New Jersey	20	9,873	0.36
20	Oregon	8	9,660	0.35
21	Utah	9	9,273	0.34
22	Tennessee	13	8,220	0.30
23	North Carolina	4	7,177	0.26
24	Nebraska	141	6,842	0.25
25	Connecticut	26	4,408	0.16
26	North Dakota	78	4,257	0.15
27	Colorado	2	3,820	0.14
28	Louisiana	3	3,092	0.11
29	Hawaii	8	2,936	0.11
30	South Dakota	140	2,860	0.10
31	Wisconsin	61	2,813	0.10
32	Maine	10	2,810	0.10
33	Virgin Islands	12	2,710	0.10
34	Minnesota	41	2,644	0.10
35	Massachusetts	5	2,568	0.09
36	Kentucky	74	2,238	0.08
37	Arkansas	35	1,980	0.07
38	New York	11	1,626	0.06
39	Indiana	21	1,306	0.05
40	Delaware	7	1,082	0.04
41	Pennsylvania	3	789	0.03
42	Ohio	2	523	0.02
43	West Virginia	4	39	0.00
44	Michigan	2	9	0.00
	Totals	3,985	\$2,747,939	100.00

- States reviewed.

PROJECTS AUDITED

	Disaster No.	Project No.	State	County	\$ Obligated
1	CA-90-1	1577-002	California	San Francisco	1,281,914
2	CA-90-1	1565-003	California	San Francisco	1,449,273
3	CA-90-1	1575-001	California	San Francisco	4,138,964
4	CA-90-1	1518-001	California	Alameda	5,379,737
5	CA-90-1	1411-001	California	San Francisco	7,851,623
6	CA-90-1	1518-003	California	Alameda	8,371,321
7	CA-90-1	1506-003	California	Alameda	18,828,709
8	CA-90-1	1507-003	California	Alameda	33,759,082
9	CA-90-1	1509-003	California	Alameda	158,312,407
10	CA-90-1	1403-001	California	Sacramento	87,473,191
11	CA-90-1	1504-003	California	Alameda	96,437,392
12	CA-90-1	1404-001	California	Alameda	115,782,118
13	CA-90-1	1505-003	California	Alameda	121,179,868
14	CA-90-1	1508-003	California	Alameda	141,295,377
15	CA-90-1	1510-002	California	Alameda	179,902,757
	Subtotal				\$981,443,733
1	CA-92-1	1801-006	California	Los Angeles	11,599
2	CA-92-1	1801-011	California	Los Angeles	67,807
3	CA-92-1	1801-008	California	Los Angeles	555,704
	Subtotal				\$635,110
1	CA-93-1	2400-011	California	Humboldt	2,676
2	CA-93-1	2360-001	California	Humboldt	55,332
3	CA-93-1	2321-001	California	Los Angeles	64,862
4	CA-93-1	2427-001	California	Riverside	85,769
5	CA-93-1	2352-001	California	Los Angeles	965,907
6	CA-93-1	2472-001	California	Los Angeles	1,737,694
7	CA-93-1	2457-001	California	Orange	2,750,332
	Subtotal				\$5,662,572
1	CA-94-1	2602-002	California	Los Angeles	152,891
2	CA-94-1	2586-003	California	Los Angeles	193,747
3	CA-94-1	2602-001	California	Los Angeles	242,483
4	CA-94-1	2559-003	California	Los Angeles	550,537
5	CA-94-1	2524-003	California	Los Angeles	742,941
6	CA-94-1	2568-003	California	Los Angeles	814,269
7	CA-94-1	2505-002	California	Los Angeles	1,000,000
8	CA-94-1	2569-003	California	Los Angeles	1,020,725
9	CA-94-1	2544-003	California	Los Angeles	1,259,457
10	CA-94-1	2571-003	California	Los Angeles	1,278,040
11	CA-94-1	2537-003	California	Los Angeles	1,570,345
12	CA-94-1	2526-003	California	Los Angeles	1,626,406
13	CA-94-1	2519-003	California	Los Angeles	2,409,889
14	CA-94-1	2545-003	California	Los Angeles	3,794,213
15	CA-94-1	2508-003	California	Los Angeles	6,231,327
16	CA-94-1	2500-002	California	Los Angeles	9,310,000
17	CA-94-1	2504-003	California	Los Angeles	22,355,919
18	CA-94-1	2520-003	California	Los Angeles	31,069,524
19	CA-94-1	2502-003	California	Los Angeles	43,737,918
	Subtotal				\$129,360,631
1	CA-95-1	2735-001	California	Contra Costa	200,000
2	CA-95-1	2720-001	California	Kern	200,000
3	CA-95-1	2834-002	California	Placer	273,247
4	CA-95-1	2709-001	California	Orange	1,000,000
5	CA-95-1	2710-001	California	Shasta	1,000,000
6	CA-95-1	2706-002	California	Sonoma	1,619,657
7	CA-95-1	2712-001	California	Los Angeles	2,928,798
8	CA-95-1	2700-001	California	Los Angeles	3,000,000
	Subtotal				\$10,221,702
1	CA-95-2	2902-002	California	Monterey	4,708,000
	Subtotal				\$4,708,000

	Disaster No.	Project No.	State	County	\$ Obligated
1	WA-80-1	0805-152	Washington	Cowlitz	52,000
2	WA-80-1	0805-160	Washington	Cowlitz	1,755,683
3	WA-80-1	0805-143	Washington	Cowlitz	8,352,099
4	WA-80-1	0805-129	Washington	Cowlitz	10,081,093
5	WA-80-1	0805-133	Washington	Cowlitz	15,899,323
6	WA-80-1	0805-163	Washington	Cowlitz	26,269,144
	Subtotal				\$62,409,342
1	WA-89-1	8903-008	Washington	Douglas	4,469
2	WA-89-1	8903-100	Washington	Douglas	49,346
3	WA-89-1	8903-004	Washington	Douglas	1,741,167
	Subtotal				\$1,794,982
1	WA-90-1	9001-610	Washington	Pierce	3,306
	Subtotal				\$3,306
1	WA-91-1	9011-050	Washington	King	1,182
	Subtotal				\$1,182
1	WA-91-2	9011-202	Washington	Snohomish	1,144,147
2	WA-91-2	9011-002	Washington	King	7,838,456
3	WA-91-2	9011-001	Washington	King	89,061,666
	Subtotal				\$98,044,269
1	FL-92-1	0921-093	Florida	Dade	1,833,997
2	FL-92-1	0921-090	Florida	Dade	2,444,406
3	FL-92-1	0921-040	Florida	Dade	20,632,850
	Subtotal				\$24,911,253
1	MO-93-1	0673-063	Missouri	St Charles	19,090
2	MO-93-1	0595-005	Missouri	Cole	339,765
3	MO-93-1	0101-056	Missouri	Ray	1,604,210
4	MO-93-1	0931-021	Missouri	Various	1,700,000
5	MO-93-1	0931-012	Missouri	Various	9,984,073
	Subtotal				\$13,647,138
1	GA-94-1	1662-007	Georgia	Terrell	63,200
2	GA-94-1	0749-004	Georgia	Spaulding	157,894
3	GA-94-1	0291-034	Georgia	Sumter	485,000
4	GA-94-1	0301-019	Georgia	Webster	526,560
5	GA-94-1	2001-004	Georgia	Henry	696,150
6	GA-94-1	0371-022	Georgia	Monroe	1,517,726
7	GA-94-1	0751-242	Georgia	Houston	6,140,745
	Subtotal				\$9,587,275
82	Total				\$1,342,430,495

Disaster Details:

CA-90-1: California Loma Prieta Earthquake on October 17, 1989.
CA-92-1: California Floods from February 9 - 16, 1992.
CA-93-1: California Floods from January 5 - March 20, 1993.
CA-94-1: California Northridge Earthquake on January 17, 1994.
CA-95-1: California Floods from January 5 - February 10, 1995.
CA-95-2: California Floods from March 8 - April 19, 1995.
WA-80-1: Washington State Volcanic Eruption of Mt. St. Helens from May 18 - June 13, 1980.
WA-89-1: Washington State Floods from March 9 - 17, 1989.
WA-90-1: Washington State Floods from January 6 - 14, 1990.
WA-91-1: Washington State Floods from November 9 - 14, 1990.
WA-91-2: Washington State Floods from November 22 - 30, 1990.
FL-92-1: Florida Hurricane Andrew on August 24, 1992.
MO-93-1: Missouri Midwest Floods on June 10, 1993.
GA-94-1: Georgia Tropical Storm Alberto from July 4 - 7, 1994.

QUESTIONED EMERGENCY RELIEF FUNDS (\$)

Disaster		Project No.	Ineligible Improvement	Exceeded Federal Share Payable	Duplicated Federal Assistance	Funds Not Used Timely	Subtotals
California: 1989 Loma Prieta Earthquake	1	1565-003	1,449,273				
	2	1403-001				59,488,138	
	3	1411-001		771,938			
		Subtotals	\$1,449,273	\$771,938		\$59,488,138	\$61,709,349
California: 1994 Northridge Earthquake	1	2559-003		9,635			
	2	2571-003		97,454			
	3	2519-003		30,080			
	4	2545-003			179,801		
	5	2504-003	1,555,191				
	6	2502-003		178,262			
		Subtotals	\$1,555,191	\$315,431	\$179,801		\$2,050,423
California: January - February 1995 Floods	1	2712-001			2,908,798		
		Subtotals			\$2,908,798		\$2,908,798
California: March - April 1995 Floods	1	2902-002			4,633,000		
		Subtotals			\$4,633,000		\$4,633,000
Washington State: 1980 Volcanic Eruption of Mount St. Helens	1	0805-152		297			
	2	0805-160		296,184			
	3	0805-143		1,408,999			
	4	0805-129		1,700,680			
	5	0805-133		2,682,216			
	6	0805-163		4,431,605			
		Subtotals		\$10,519,981			\$10,519,981
Washington State: March 1989 Floods	1	8903-004			153,000		
		Subtotals			\$153,000		\$153,000
Washington State: November 1990 Floods	1	9011-001			20,136,000		
		Subtotals			\$20,136,000		\$20,136,000
Missouri: 1993 Midwest Floods	1	0595-005		64,194			
	2	0931-012		617,608			
		Subtotals		\$681,802			\$681,802
Georgia: 1994 Tropical Storm Alberto	1	0749-004		27,389			
	2	0291-034		97,000			
	3	0301-019		75,264			
	4	2001-004		118,219			
	5	0371-022		255,658			
	6	0751-242		566,206			
		Subtotals		\$1,139,736			\$1,139,736
Totals	27		\$3,004,464	\$13,428,888	\$28,010,599	\$59,488,138	\$103,932,089

MAJOR CONTRIBUTORS TO THE REPORT

These individuals were major contributors to the report on the Federal Highway Administration's Emergency Relief Program.

Ronald W. Hambrick	Regional Manager
James H. Diecker	Project Manager
Petra Rose	Statistician
Raymond Larpenteur	Auditor-In-Charge
Greggory S. Bond	Auditor
Diane R. Brattain	Auditor
Michael P. Dunn	Auditor
Kirk A. Gillett	Auditor
Earl G. Kindley	Auditor