

United States General Accounting Office Resources, Community, and Economic Development Division

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# Transportation and Telecommunications Issue Area

**Active Assignments** 

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# Foreword

This report was prepared primarily to inform Congressional members and key staff of ongoing assignments in the General Accounting Office's Transportation and Telecommunications issue area. This report contains assignments that were ongoing as of October 2, 1995, and presents a brief background statement and a list of key questions to be answered on each assignment. The report will be issued quarterly.

This report was compiled from information available in GAO's internal management information systems. Because the information was downloaded from computerized data bases intended for internal use, some information may appear in abbreviated form.

If you have questions or would like additional information about assignments listed, please contact John Anderson, Director, on (202) 512-8021; or Gerald Dillingham, Associate Director, on (202) 512-4803.

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#### **AVIATION SAFETY**

# TITLE: REVIEW OF FAA'S OVERSIGHT OF NEW ENTRANT AIRLINES (341437)

BACKGROUND: FAA has overall responsibility for ensuring the safety of aviation in the U.S. Over the last few years, several major airlines have gone out of business while many new entrants have come onto the scene, raising the issue of whether new airline entrants that do not have established track records are meeting safety standards.

KEY QUESTIONS : (1) Does DOT's certification process ensure that new airlines are financially fit before and after they begin operations? (2) Does the Federal Aviation Administration (FAA) have an effective program for certifying the initial operation of new airlines? (3) Once certified, is FAA ensuring that new entrant airlines continuously meet FAA's safety standards?

### TITLE: FAA'S RESPONSE TO GAO, NTSB, AND DOT/IG AVIATION SAFETY RECOMMENDATIONS (341441)

BACKGROUND: The National Transportation Safety Board (NTSB), the Department of Transportation's Inspector General (DOT/IG), and GAO make numerous recommendations to the Federal Aviation Administration (FAA) aimed at improving aviation safety. FAA must respond to the three oversight agencies with its plans for acting or not acting on the recommendations.

KEY QUESTIONS: (1) What are the major aviation safety areas where NTSB, GAO, and DOT/IG have made significant recommendations to FAA from 1990 through 1994? (2) To what extent has FAA been successful in implementing significant recommendations? (3) What are the major reasons for FAA not implementing or not fully implementing significant recommendations?

## TITLE: STATUS OF FAA'S EFFORTS TO DEVELOP NEW EXPLOSIVES AND NARCOTICS DETECTION (341459)

BACKGROUND : The World Trade Center bombing and recent threats against aviation have raised serious concerns about the security of air travel. The Congress is concerned about the status of technology developed by the Federal Aviation Administration (FAA) and others to detect explosives and question whether or not the technology can also be used to detect narcotics.

KEY QUESTIONS : (1) What is the status of FAA's efforts to develop new explosive detection technology? (2) Which FAA-sponsored technologies have potential for detecting narcotics?

## AVIATION SAFETY

# TITLE: AVIATION SAFETY: FAA'S INSPECTION PROGRAM (341461)

BACKGROUND: The Federal Aviation Administration (FAA) develops safety standards and monitors industry compliance with them. FAA's 2,300 inspectors oversee 18,000 scheduled and 184,000 general aviation aircraft; 4,800 repair stations; and 665,000 pilots. Effectiveness depends on targeting the worst safety risks, training inspectors, and correcting deficiencies found.

KEY QUESTIONS: (1) Has FAA taken steps to improve the targeting of its limited inspection resources to areas of greatest safety risks? (2) Has FAA provided inspectors the training needed to carry out their individual responsibilities for identifying safety risks? (3) When inspectors identify safety problems, does FAA ensure that these problems are corrected?

# TITLE: ANALYSIS OF SAFETY DATA FOR NEW ENTRANT AIRLINES (341468)

BACKGROUND : Since airline deregulation, the Department of Transportation (DOT) has certificated hundreds of companies to begin providing scheduled and charter passenger and cargo air service. Some experts have raised concerns about the overall impact on air safety since these "new entrants" began flying.

KEY QUESTIONS: (1) How do the safety records of new entrant air carriers compare with established carriers? (2) How has the Federal Aviation Administration (FAA) applied its policies and regulations governing safety inspections to new and established carriers?

#### TITLE: FAILING DISPLAY CHANNEL COMPLEX COMPUTER EQUIPMENT (341471)

BACKGROUND: The Federal Aviation Administration (FAA) depends on 30 year old computers to control air traffic. FAA planned to replace these computers in 1996 with the Advanced Automation System (AAS) project, but a 1994 FAA decision to restructure AAS has delayed replacement by 2 years. The aging computers are failing, causing safety concerns.

KEY QUESTIONS: (1) What is the status of FAA's efforts to deliver both the interim and the permanent replacement systems on time and within cost? (2) What is FAA doing to maintain a skilled workforce to service aging equipment until the installation of new equipment is completed?

#### SURFACE TRANSPORTATION SAFETY

# TITLE: EVALUATION OF DOT'S USE OF STATE SAFETY BELT DATA AND IT'S GOALS AND STRATEGIES FOR INCREASING BELT USE (342890)

BACKGROUND: The Department of Transportation (DOT) encourages states to enact safety belt mandatory use laws and to increase belt use. States report belt use ranging from 25 to 84 percent. DOT has set a goal of 75 percent belt use by 1997. Our 1992 report showed that state belt use data were not reliable, and DOT's prior goal of 70 percent belt use provided little challenge for many states.

KEY QUESTIONS: (1) Is the Department of Transportation's estimate of 66 percent nationwide belt use methodologically sound? (2) What are the most successful strategies for increasing belt use? (3) How can U.S. strategies be improved to maximize safety belt use?

### TITLE: EFFECTS OF THE NORTH AMERICAN FREE TRADE AGREEMENT (NAFTA) ON U.S. HIGHWAYS AND INFRASTRUCTURE (342906)

BACKGROUND : In December 1995, the North American Free Trade Agreement (NAFTA) could allow U.S., Canadian, and Mexican trucks to provide cross border delivery and backhaul in border states of the three countries. Major differences in trucking regulations and enforcement raise serious questions on adverse impacts on U.S. highway safety and infrastructure.

KEY QUESTIONS: (1) How adequate are border facilities and personnel for inspecting trucks entering the U.S.? (2) What are the potential adverse impacts of foreign trucks on U.S. highway safety and infrastructure?(3) What is the status of NAFTA working groups' efforts to make U.S., Mexican and Canadian trucking regulations compatible?

#### AVIATION INFRASTRUCTURE

# TITLE: REVIEW OF PRIVATIZATION OF AIRPORTS (341462)

BACKGROUND: The federal government helps fund airport development through the Airport Improvement Program (AIP)--over \$16 billion since 1982. AIP is due to be reauthorized next year. Implications of greater private sector participation in airport development and operation are being explored. HR 1907 would privatize facilities receiving federal aid, including airports.

KEY QUESTIONS: (1) To what extent does the private sector participate in airport operations in the U.S. and other countries? (2) What barriers and incentives to privatization exist? (3) What are the likely effects on the federal budget, airlines, airports, and the flying public if airports were to be privatized?

## AVIATION INFRASTRUCTURE

# TITLE: REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S STATE BLOCK GRANT PILOT PROGRAM (341467)

BACKGROUND : In 1987, Congress authorized a State Block Grant Pilot Program that allows the Federal Aviation Administration (FAA) to provide Airport Improvement Program funds directly to states, who in turn, provide funds for eligible projects at non-primary airports. In 1992, FAA expanded the pilot from three states to seven and recommended opening the program to all states.

KEY QUESTIONS: (1) What impact has the State Block Grant Program had on funds allocated and level of services available to airports; and costs to the federal government? (2) Are states controlling the cost to administer grants, and timely in approving and providing grants to airports? (3) Are states prioritizing essential airports and reasonably allocating funds among airports?

# TITLE: REFORM OF FAA'S ORGANIZATIONAL CULTURE AND ACQUISITIONS (341469)

BACKGROUND : Since 1980, the Federal Aviation Administration (FAA) has spent \$37 billion on air traffic control modernization. Many of the modernization projects have experienced significant cost overruns, schedule delays and performance problems. Numerous experts have attributed these problems to FAA's organizational culture and its effect on system acquisitions.

KEY QUESTIONS: (1) What, if any, aspect of FAA's organizational culture impair its ability to effectively acquire major air traffic control systems? (2) If there are problems with FAA's organizational culture, to what extent have FAA efforts toward acquisition reforms addressed the key problems? (3) What additional steps could FAA take to improve its acquisition processess?

TITLE: PROCUREMENT AND PERSONNEL REFORMS AT FAA (341472)

# SURFACE TRANSPORTATION INFRASTRUCTURE

# TTTLE: FORMULA FOR APPORTIONING FEDERAL-AID HIGHWAY FUNDS TO THE STATES (342883)

BACKGROUND: The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) mandated that GAO study the federal-aid highway apportionment formula (\$108 billion over 6 years). The House and Senate agreed that GAO should do this work in two phases: Phase I (this job) focusing on the apportionment formula and how it works; Phase II developing alternative formulas.

KEY QUESTIONS: (1) How does the current Federal-Aid Highway (FAH) formula apportion funds to the states? (2) How do formula distributions compare to program-related variables? (3) How does the FAH funding formula relate to attainment of program goals (both highway and broader)?

# TITLE: SURFACE TRANSPORTATION: FEDERALLY-CAPITALIZED STATE INFRASTRUCTURE BANKS (342896)

BACKGROUND : Current law permits states to lend federal funds for toll road construction, but states have not done so. The Department of Transportation has proposed expanding current law to permit states to use part of their federal highway funding to capitalize a state infrastructure bank (SIB) and create a revolving fund with which they could finance toll roads and other projects.

KEY QUESTIONS: (1) Are states likely to utilize SIBs and how might states' use of SIBs compare to their use of the loan provisions in existing law? (2) What are the benefits and risks of using SIBs in various ways? (3) What are the barriers to states using SIBs and what federal actions might increase SIBs' effectiveness?

# TITLE: METROPOLITAN PLANNING ORGANIZATIONS AND METROPOLITAN TRANSPORTATION PLANNING UNDER ISTEA (342902)

BACKGROUND: The Intermodal Surface Transportation Efficiency Act (ISTEA) significantly expanded federal requirements for metropolitan transportation planning. ISTEA further required that metropolitan planning organizations (MPOs), which had previously had a limited role in planning decisions, take a much greater role in developing transportation plans.

KEY QUESTIONS: (1) What progress have MPOs made in meeting the planning goals and requirements of ISTEA? (2) What difficulties have MPOs faced in assuming the planning authority granted them by ISTEA? (3) What, if any, options are available to address these barriers in upcoming reauthorization legislation?

### SURFACE TRANSPORTATION INFRASTRUCTURE

# TITLE: REVIEW OF DOT SURFACE TRANSPORTATION RESEARCH (342904)

BACKGROUND : The Intermodal Surface Transportation Efficiency Act provided substantial funding for surface transportation research and development. The Department of Transportation (DOT) uses this funding to conduct a variety of research to enhance safety, mobility, environmental quality, efficiency, and economic growth in the nation's transportation system.

KEY QUESTIONS: (1) How much money have the DOT modal agencies spent since 1991 on surface transportation research and who are the recipients? (2) How does DOT manage and coordinate its surface transportation R&D program? (3) Are R&D investments leading toward deployable products and knowledge about important transportation problems?

# TITLE: AMTRAK'S NORTHEAST CORRIDOR - EXPENDITURES AND USE (343875)

BACKGROUND : Amtrak funds most of the operating and maintenance costs for the Northeast Corridor's infrastructure, through revenues, federal capital grants, and reimbursements from commuter and freight railroads that use the infrastructure.

KEY QUESTIONS: (1) What were the annual expenditures for Amtrak and all other users to operate the Northeast Corridor infrastructure from 1991 to 1995? (2) What additional investments are necessary to bring the Corridor to a "state of good repair?" (3) What is the relative utilization of Corridor segments by Amtrak and other users?

TITLE: NORTHEAST CORRIDOR SERVICE ALTERNATIVES (343876)

# COMPETITION AND FINANCIAL HEALTH

# TITLE: DOT'S INTERNATIONAL AIR CARGO POLICYMAKING (341421)

BACKGROUND: U.S. air cargo carriers have been increasingly looking to the international market for new growth opportunities. The Department of Transportation (DOT) is responsible for negotiating bilateral aviation agreements for the United States. However, there is concern that DOT has focused on passenger issues to the detriment of cargo carriers in bilateral negotiations.

KEY QUESTIONS: (1) To what extent does DOT address the interests of air cargo carriers when developing international policy? (2) How well does DOT represent U.S. air cargo carriers' interests when negotiating with foreign countries? (3) How well does DOT resolve the specific problems and barriers to expansion that U.S. air cargo carriers encounter in selected international markets

# TITLE: THE IMPACT OF AIRLINE DEREGULATION ON FARES, SERVICE, AND SAFETY AT AIRPORTS SERVING SMALL AND MEDIUM-SIZED COMMUNITIES (341422)

BACKGROUND: The airline industry was deregulated in 1978, allowing airlines to set fares and service type (jet or turboprop) and quantity. In 1990, we reported that since deregulation fares declined by 9 percent at small and medium-sized community airports and by 5 percent at large airports. Other studies suggest that air service and safety to small cities have declined since 1978.

KEY QUESTIONS: (1) What have been the trends in fares at airports serving small and medium-sized communities compared to airports serving large communities since deregulation? (2) What have been the trends in the quantity and quality of airline service at the above airports since deregulation? (3) What have been the trends in safety statistics for each airport grouping since deregulation?

# TITLE: THE FEDERAL EMPLOYERS' LIABILITY ACT: AN ASSESSMENT OF ALTERNATIVES (343871)

BACKGROUND: The Federal Employers' Liability Act (FELA) is based on an injured railroad worker suing his or her employer to recover medical, indemnity, and pain & suffering costs.

KEY QUESTIONS: (1) What are the alternatives for increasing the efficiency and cost-effectiveness of the current system governing railroad worker injury compensation? (2) How will reforming FELA affect railroad costs and the level of compensation to railroad workers? (3) What is the availability of FELA insurance for smaller railroads?

# COAST GUARD AND MARITIME ADMINSTRATION

# TITLE: REVIEW OF COAST GUARD STAFFING PRACTICES FOR THE MARINE SAFETY PROGRAM (344494)

BACKGROUND : Since FY 1991 the Congress has provided the Coast Guard funding for over 600 additional billets in its Marine Safety Office Program. Concerns have been raised as to whether the Coast Guard has expended these funds in the manner and for the purposes that the Congress has mandated.

KEY QUESTIONS: (1) What has been the extent of vacancies, vacancy durations, and grade-level mismatches for staffing Coast Guard positions in its major programs? (2) Has the Coast Guard increased the number of marine safety positions with the additional funds the Congress provided for that purpose since FY 1991? (3) Are marine safety positions filled with qualified individuals?

# TITLE: SURVEY ON ALTERNATIVE FUNDING OPTIONS FOR COAST GUARD VTS SYSTEMS (344498)

BACKGROUND : Vessel Traffic Service (VTS) systems are information centers created to monitor vessel traffic and provide information to help avert collisions or groundings. The Coast Guard plans to place VTS systems in 15 U.S. ports through an effort called VTS 2000. The estimated costs of VTS 2000 are \$260 - \$310 million to build, with annual operating costs of \$56 million.

KEY QUESTIONS: (1) To what extend does the marine industry, port authorities, and/or states have interest in developing and funding VTS systems? (2) What barriers (e.g., legal, regulatory, or other) restrict the establishment of alternatively funded VTS systems?

# **TELECOM COMPETITION/REGULATION**

### TITLE: TELECOMMUNICATIONS: REVIEW OF IMPEDIMENTS TO DOING BUSINESS ABROAD (348015)

BACKGROUND : Congress plans hearings to identify regulations and policies which impede the provision of telecommunications services abroad. Companies face many kinds of problems such as licensing requirements and procedures, a lack of standards and intellectual property protection, and foreign investment limits. Telecommunications is a key growth sector for the U.S.

KEY QUESTIONS: (1) What kinds of problems, if any, have some U.S. businesses encountered when trying to provide telecommunications services abroad? (2) What are some solutions which can be undertaken by federal agencies, by the Congress, and/or through international agreements and institutions?

# TELECOM COMPETITION/REGULATION

# TITLE: LESSONS LEARNED FROM STATE EFFORTS TO DEVELOP THE NATIONAL INFORMATION INFRASTRUCTURE (NII) (348016)

BACKGROUND : Congressional action on a national information infrastructure has been delayed, partly due to questions about private investment and universal service. Several states have begun projects to improve their own information infrastructures and have developed strategies for encouraging private investment and defining universal service for advanced telecommunications.

KEY QUESTIONS: (1) How have selected states applied the concept of universal service to their telecommunications modernization projects? (2) How have states encouraged private investment in information infrastructure modernization? (3) What factors facilitated or hindered state efforts to address these two issues?

### TITLE: FACTORS AFFECTING COMPETITIVENESS IN THE MOBILE TELECOMMUNICATIONS INDUSTRY (348017)

BACKGROUND : In each geographic market, cellular telephone service is provided by two companies, which sell service at both the wholesale and retail levels. Cellular resellers, who buy service wholesale for resale to consumers, have proposed that they be allowed to connect their own switches to existing cellular systems, as a way to better compete with cellular carriers.

KEY QUESTIONS: (1) How will the availability of mobile telecommunications services from new providers affect the competitiveness of the cellular telephone industry? (2) What are the likely implications of the proposal to add reseller switches to the cellular system?

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